ANNEXES

Annex 1: Statistical Tables and Figures

This annex includes all the tables that provide data for the figures included in the report. It also includes some additional tables and figures that were not included but could be useful for further analysis. The order of the tables and figures in this Annex follow the Report. In each case, the number of the corresponding Table or Figure in the Report is indicated in parentheses.

Table A1: Population by age for EAP Countries (except China and Indonesia), 2008 (Table 1)

<table>
<thead>
<tr>
<th>Country</th>
<th>Population (thousands),</th>
<th>18 years and more</th>
<th>Under 18 years</th>
<th>5 to 17 years</th>
<th>Under 5 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cambodia</td>
<td>14562</td>
<td>8500</td>
<td>6062</td>
<td>4451</td>
<td>1611</td>
</tr>
<tr>
<td>Cook Islands</td>
<td>20</td>
<td>12</td>
<td>8</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>Korea, D.P.R. of</td>
<td>23819</td>
<td>17323</td>
<td>6496</td>
<td>4921</td>
<td>1575</td>
</tr>
<tr>
<td>Fiji</td>
<td>844</td>
<td>525</td>
<td>319</td>
<td>232</td>
<td>87</td>
</tr>
<tr>
<td>Kiribati</td>
<td>97</td>
<td>61</td>
<td>36</td>
<td>26</td>
<td>10</td>
</tr>
<tr>
<td>Lao PDR</td>
<td>6205</td>
<td>3383</td>
<td>2822</td>
<td>2046</td>
<td>776</td>
</tr>
<tr>
<td>Malaysia</td>
<td>27014</td>
<td>17342</td>
<td>9672</td>
<td>6940</td>
<td>2732</td>
</tr>
<tr>
<td>Marshall Islands</td>
<td>61</td>
<td>39</td>
<td>22</td>
<td>16</td>
<td>6</td>
</tr>
<tr>
<td>Micronesia</td>
<td>110</td>
<td>61</td>
<td>49</td>
<td>35</td>
<td>14</td>
</tr>
<tr>
<td>Mongolia</td>
<td>2641</td>
<td>1765</td>
<td>876</td>
<td>647</td>
<td>229</td>
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<tr>
<td>Myanmar</td>
<td>49563</td>
<td>33402</td>
<td>16161</td>
<td>11532</td>
<td>4629</td>
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<tr>
<td>Nauru</td>
<td>10</td>
<td>6</td>
<td>4</td>
<td>3</td>
<td>1</td>
</tr>
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<td>Niue</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Palau</td>
<td>20</td>
<td>13</td>
<td>7</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Papua New Guinea</td>
<td>6577</td>
<td>3521</td>
<td>3056</td>
<td>2106</td>
<td>950</td>
</tr>
<tr>
<td>Philippines</td>
<td>90348</td>
<td>53555</td>
<td>36793</td>
<td>26092</td>
<td>10701</td>
</tr>
<tr>
<td>Samoa</td>
<td>179</td>
<td>94</td>
<td>85</td>
<td>63</td>
<td>22</td>
</tr>
<tr>
<td>Solomon Islands</td>
<td>511</td>
<td>276</td>
<td>235</td>
<td>162</td>
<td>73</td>
</tr>
<tr>
<td>Thailand</td>
<td>67386</td>
<td>49379</td>
<td>18007</td>
<td>13164</td>
<td>4843</td>
</tr>
<tr>
<td>Timor-Leste</td>
<td>1098</td>
<td>526</td>
<td>572</td>
<td>387</td>
<td>185</td>
</tr>
<tr>
<td>Tonga</td>
<td>104</td>
<td>59</td>
<td>45</td>
<td>31</td>
<td>14</td>
</tr>
<tr>
<td>Tuvalu</td>
<td>10</td>
<td>6</td>
<td>4</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Vanuatu</td>
<td>234</td>
<td>127</td>
<td>107</td>
<td>74</td>
<td>33</td>
</tr>
<tr>
<td>Viet Nam</td>
<td>87096</td>
<td>58443</td>
<td>28653</td>
<td>21337</td>
<td>7316</td>
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<tr>
<td>EAP without China and Indonesia</td>
<td>378511</td>
<td>248419</td>
<td>130092</td>
<td>94280</td>
<td>35812</td>
</tr>
</tbody>
</table>

Note: Grey indicates countries included in the Report.
Table A2: Demographic characteristics, EAP countries included in the report, 2008 (Table 1)

<table>
<thead>
<tr>
<th>Country</th>
<th>Population (thousands)</th>
<th>Population Under 18 years (%)</th>
<th>Population annual growth rate (%)</th>
<th>Crude birth rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Under 18</td>
<td>18-50</td>
<td>5-17 years</td>
</tr>
<tr>
<td>Cambodia</td>
<td>14,562</td>
<td>5,082</td>
<td>41.6</td>
<td>30.8</td>
</tr>
<tr>
<td>Lao PDR</td>
<td>6,205</td>
<td>2,822</td>
<td>45.5</td>
<td>33.0</td>
</tr>
<tr>
<td>Mongolia</td>
<td>2,641</td>
<td>876</td>
<td>33.2</td>
<td>24.5</td>
</tr>
<tr>
<td>Viet Nam</td>
<td>87,096</td>
<td>28,653</td>
<td>32.9</td>
<td>24.5</td>
</tr>
<tr>
<td>Vanuatu</td>
<td>234</td>
<td>167</td>
<td>45.7</td>
<td>31.6</td>
</tr>
<tr>
<td>Philippines</td>
<td>90,348</td>
<td>36,793</td>
<td>40.7</td>
<td>28.0</td>
</tr>
<tr>
<td>Thailand</td>
<td>67,366</td>
<td>18,607</td>
<td>26.7</td>
<td>19.5</td>
</tr>
</tbody>
</table>


Figure A1: Population, GNI per capita PPP and GDP growth by Country, 2000-2006 (Table 1)

Note: Size indicated population.
Figure A2: Inequality and income poverty, 2006 (Table 2)


Figure A3: Inequality and income poverty, 2000 and 2006 (Table 2)

Table A3: Countries, sources and years, ca.2000 - ca.2006 (Tables 3 & 4)

<table>
<thead>
<tr>
<th>Country</th>
<th>2000</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cambodia</td>
<td>DHS 2000</td>
<td>DHS 2005</td>
</tr>
<tr>
<td>Lao PDR</td>
<td>MICS 2000</td>
<td>MICS 2006</td>
</tr>
<tr>
<td>Mongolia</td>
<td>MICS 2000</td>
<td>MICS 2005</td>
</tr>
<tr>
<td>Myanmar</td>
<td>MICS 2000</td>
<td></td>
</tr>
<tr>
<td>Philippines</td>
<td>DHS 1998</td>
<td>DHS 2006/7</td>
</tr>
<tr>
<td>Thailand</td>
<td>MICS 2006</td>
<td></td>
</tr>
<tr>
<td>Vanuatu</td>
<td>MICS 2007</td>
<td></td>
</tr>
<tr>
<td>Viet Nam</td>
<td>MICS 2000</td>
<td>MICS 2006</td>
</tr>
</tbody>
</table>

Table A4: Dimensions in which children are severely deprived, by Country and Subregion, 2000-2006 (Figure 3)

<table>
<thead>
<tr>
<th>Country</th>
<th>Domain</th>
<th>ca.2000 (%)</th>
<th>ca.2006 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cambodia</td>
<td>Sanitation</td>
<td>80.8</td>
<td>74.4</td>
</tr>
<tr>
<td></td>
<td>Water</td>
<td>59.1</td>
<td>14.3</td>
</tr>
<tr>
<td></td>
<td>Information</td>
<td>11.0</td>
<td>7.1</td>
</tr>
<tr>
<td></td>
<td>Food</td>
<td>12.2</td>
<td>15.6</td>
</tr>
<tr>
<td></td>
<td>Education</td>
<td>17.3</td>
<td>8.1</td>
</tr>
<tr>
<td>Lao PDR</td>
<td>Sanitation</td>
<td>67.3</td>
<td>55.4</td>
</tr>
<tr>
<td></td>
<td>Water</td>
<td>27.9</td>
<td>25.9</td>
</tr>
<tr>
<td></td>
<td>Food</td>
<td>25.1</td>
<td>18.6</td>
</tr>
<tr>
<td></td>
<td>Education</td>
<td>19.5</td>
<td>14.2</td>
</tr>
<tr>
<td>Mongolia</td>
<td>Sanitation</td>
<td>20.6</td>
<td>14.0</td>
</tr>
<tr>
<td></td>
<td>Water</td>
<td>38.7</td>
<td>29.0</td>
</tr>
<tr>
<td></td>
<td>Information</td>
<td>13.4</td>
<td>7.0</td>
</tr>
<tr>
<td></td>
<td>Food</td>
<td>10.6</td>
<td>7.0</td>
</tr>
<tr>
<td></td>
<td>Education</td>
<td>14.2</td>
<td>3.0</td>
</tr>
<tr>
<td>Viet Nam</td>
<td>Sanitation</td>
<td>21.9</td>
<td>16.0</td>
</tr>
<tr>
<td></td>
<td>Water</td>
<td>16.3</td>
<td>8.0</td>
</tr>
<tr>
<td></td>
<td>Information</td>
<td>22.4</td>
<td>11.0</td>
</tr>
<tr>
<td></td>
<td>Education</td>
<td>3.4</td>
<td>2.0</td>
</tr>
<tr>
<td>Philippines</td>
<td>Sanitation</td>
<td>15.6</td>
<td>11.0</td>
</tr>
<tr>
<td></td>
<td>Water</td>
<td>18.7</td>
<td>7.0</td>
</tr>
<tr>
<td></td>
<td>Information</td>
<td>3.1</td>
<td>3.0</td>
</tr>
<tr>
<td></td>
<td>Education</td>
<td>2.7</td>
<td>2.0</td>
</tr>
<tr>
<td>Subregion</td>
<td>Sanitation</td>
<td>24.1</td>
<td>16.1</td>
</tr>
<tr>
<td></td>
<td>Water</td>
<td>21.1</td>
<td>7.6</td>
</tr>
<tr>
<td></td>
<td>Information</td>
<td>13.6</td>
<td>6.1</td>
</tr>
<tr>
<td></td>
<td>Food</td>
<td>14.9</td>
<td>7.5</td>
</tr>
<tr>
<td></td>
<td>Education</td>
<td>5.6</td>
<td>2.6</td>
</tr>
</tbody>
</table>

Note: Includes only comparable deprivations.
Sources: Own elaboration from Bristol (2003) and UNICEF Global Study on Child Poverty and Disparity 2007-2008 (Table 2.1.4).
Table A5: Severe deprivation and multiple severe deprivation in the highest and the lowest incidence national subregion, Thailand and Lao PDR, 2006 (Section 2.2)

<table>
<thead>
<tr>
<th>Country</th>
<th>National subregion</th>
<th>Severe Deprivation (1 or more deprivations) (%)</th>
<th>Multiple Severe Deprivation (2 or more deprivations) (%)</th>
<th>Population under 18 years (% of country)</th>
<th>Population under 18 years living in rural areas (% of region)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thailand</td>
<td>Total</td>
<td>16.0</td>
<td>2.0</td>
<td>100</td>
<td>73.0</td>
</tr>
<tr>
<td></td>
<td>Lowest incidence (Central, including BKK)</td>
<td>15.0</td>
<td>0.9</td>
<td>29.3</td>
<td>50.7</td>
</tr>
<tr>
<td></td>
<td>Highest incidence (South)</td>
<td>22.9</td>
<td>3.8</td>
<td>15.5</td>
<td>76.9</td>
</tr>
<tr>
<td></td>
<td>Ratio (Highest/Lowest)</td>
<td><strong>1.5</strong></td>
<td><strong>4.1</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lao PDR</td>
<td>Total</td>
<td>75.2</td>
<td>51.1</td>
<td>100</td>
<td>78.9</td>
</tr>
<tr>
<td></td>
<td>Lowest incidence (Centre)</td>
<td>66.4</td>
<td>41.2</td>
<td>43.8</td>
<td>70.9</td>
</tr>
<tr>
<td></td>
<td>Highest incidence (South)</td>
<td>86.5</td>
<td>59.8</td>
<td>22.2</td>
<td>86.0</td>
</tr>
<tr>
<td></td>
<td>Ratio (Highest/Lowest)</td>
<td><strong>1.3</strong></td>
<td><strong>1.5</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sources: UNICEF Global Study on Child Poverty and Disparity 2007-2008 (Table 2.1.4).

Figure A4(a): Severe deprivation by domain, Relative distance from the subregional average by Cluster, 2006 (Table 6)

Sources: Own elaboration from UNICEF Global Study on Child Poverty and Disparity 2007-2008 (Table 2.1.4).
Figure A4(b): Severe deprivation by domain. Relative distance from the subregional average, Cluster A (Cambodia, Lao PDR and Mongolia), 2006 (Table 6)

Source: Own elaboration from UNICEF Global Study on Child Poverty and Disparity 2007-2008 (Table 2.1.4).

Figure A4(c): Severe deprivation by domain. Relative distance from the subregional average, Cluster B (Viet Nam, Vanuatu, Philippines and Thailand), 2006 (Table 6)

Sources: Own elaboration from UNICEF Global Study on Child Poverty and Disparity 2007-2008 (Table 2.1.4).

Table A6: Less severe deprivation. Relative distance from the subregional average by Country, 2006 (Table 7)

<table>
<thead>
<tr>
<th>Deprivations</th>
<th>Cambodia</th>
<th>Lao</th>
<th>Mongolia</th>
<th>Viet Nam</th>
<th>Vanuatu</th>
<th>Philippines</th>
<th>Thailand</th>
<th>CA</th>
<th>CB</th>
<th>Subregion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Severely Deprived (1 or more deprivations)</td>
<td>176</td>
<td>175</td>
<td>147</td>
<td>105</td>
<td>129</td>
<td>80</td>
<td>98</td>
<td>98</td>
<td>91</td>
<td>100</td>
</tr>
<tr>
<td>Absolute Poverty (2 or more deprivations)</td>
<td>315</td>
<td>300</td>
<td>190</td>
<td>115</td>
<td>156</td>
<td>62</td>
<td>45</td>
<td>299</td>
<td>77</td>
<td>100</td>
</tr>
<tr>
<td>Shelter</td>
<td>384</td>
<td>192</td>
<td>249</td>
<td>117</td>
<td>156</td>
<td>50</td>
<td>85</td>
<td>267</td>
<td>81</td>
<td>100</td>
</tr>
<tr>
<td>Sanitation</td>
<td>345</td>
<td>275</td>
<td>111</td>
<td>124</td>
<td>175</td>
<td>74</td>
<td>5</td>
<td>304</td>
<td>76</td>
<td>100</td>
</tr>
<tr>
<td>Water</td>
<td>138</td>
<td>282</td>
<td>182</td>
<td>62</td>
<td>77</td>
<td>86</td>
<td>144</td>
<td>184</td>
<td>90</td>
<td>100</td>
</tr>
<tr>
<td>Information</td>
<td>111</td>
<td>407</td>
<td>104</td>
<td>183</td>
<td></td>
<td>*</td>
<td>59</td>
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<td>196</td>
<td>89</td>
</tr>
<tr>
<td>Food</td>
<td>165</td>
<td>317</td>
<td>90</td>
<td>57</td>
<td>255</td>
<td>67</td>
<td>11</td>
<td>214</td>
<td>87</td>
<td>100</td>
</tr>
<tr>
<td>Education</td>
<td>134</td>
<td>255</td>
<td>55</td>
<td>196</td>
<td>253</td>
<td>110</td>
<td>35</td>
<td>183</td>
<td>93</td>
<td>100</td>
</tr>
</tbody>
</table>

* No data.
Sources: UNICEF Global Study on Child Poverty and Disparity 2007-2008 (Table 2.1.4), with own estimation for subregion and clusters.
Figure A5: Incidence of at least two severe or less severe deprivations by country, 2006 (Figure 5)

Box A1: Child Poverty Index (Table 8 and Figure 7)

A Child Poverty Index (CPI) makes it possible to summarize the incidence of the deprivation in all domains. CPI 'Severe' and CPI 'Less Severe' were each calculated as the sum of the squared domain scores divided by the total number of domains. Either measure has limitations however: CPI 'Severe' does not take into account 'Less Severe' deprivation; CPI 'Less Severe' incorporates less severe deprivation but all deprivations (severe or less severe) have the same weight. Another measure, CPI 'Combined', is proposed to overcome these limitations in measurement. CPI 'Combined' is a summary measure of both types of deprivations and was calculated as follows: CPI 'severe' + (sum of the squared domain scores resulting from the subtraction of the rate of severe deprivation to the rate of 'less severe' deprivation, divided by the total number of domains) / 2.

<table>
<thead>
<tr>
<th>CPI</th>
<th>Cambodia</th>
<th>Lao</th>
<th>Mongolia</th>
<th>Viet Nam</th>
<th>Vanuatu</th>
<th>Philippines</th>
<th>Thailand</th>
<th>CA</th>
<th>CB</th>
<th>Subregion</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPI - 'Severe'</td>
<td>Value</td>
<td>1652</td>
<td>1183</td>
<td>559</td>
<td>178</td>
<td>114</td>
<td>111</td>
<td>30</td>
<td>1285</td>
<td>88</td>
</tr>
<tr>
<td>CPI - 'Less severe'</td>
<td>Value</td>
<td>2489</td>
<td>2595</td>
<td>1115</td>
<td>506</td>
<td>1500</td>
<td>269</td>
<td>275</td>
<td>2254</td>
<td>309</td>
</tr>
<tr>
<td>CPI - 'Combined'</td>
<td>Value</td>
<td>1751</td>
<td>1397</td>
<td>620</td>
<td>243</td>
<td>506</td>
<td>135</td>
<td>115</td>
<td>1439</td>
<td>143</td>
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</tbody>
</table>
Table A7: Children by number of severe deprivations by country, 2006 (Figure 8)

<table>
<thead>
<tr>
<th>Number of Deprivations</th>
<th>Cambodia</th>
<th>Lao</th>
<th>Mongolia</th>
<th>Viet Nam</th>
<th>Vanuatu</th>
<th>Philippi</th>
<th>Thailand</th>
<th>CA</th>
<th>CB</th>
<th>EAPSR</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>9.9</td>
<td>24.8</td>
<td>36.0</td>
<td>61.0</td>
<td>74.8</td>
<td>69.0</td>
<td>84.0</td>
<td>16.6</td>
<td>69.5</td>
<td>64.0</td>
</tr>
<tr>
<td>1</td>
<td>26.6</td>
<td>24.1</td>
<td>35.0</td>
<td>24.0</td>
<td>20.3</td>
<td>23.0</td>
<td>14.0</td>
<td>26.6</td>
<td>21.4</td>
<td>21.9</td>
</tr>
<tr>
<td>2</td>
<td>44.2</td>
<td>23.1</td>
<td>18.0</td>
<td>10.0</td>
<td>4.3</td>
<td>7.0</td>
<td>2.0</td>
<td>35.7</td>
<td>6.9</td>
<td>10.0</td>
</tr>
<tr>
<td>3</td>
<td>16.2</td>
<td>17.8</td>
<td>9.0</td>
<td>4.0</td>
<td>0.6</td>
<td>1.0</td>
<td>0.0</td>
<td>16.0</td>
<td>1.8</td>
<td>3.3</td>
</tr>
<tr>
<td>4</td>
<td>2.8</td>
<td>8.0</td>
<td>2.0</td>
<td>1.0</td>
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<td>0.0</td>
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</table>

Sources: UNICEF Global Study on Child Poverty and Disparity 2007-2008 (Table 2.1.4), with own estimation for subregion and clusters.

Table A8: Children by number of less severe deprivations by country, 2006 (Figure 8)

<table>
<thead>
<tr>
<th>Number of Deprivations</th>
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<th>Mongolia</th>
<th>Viet Nam</th>
<th>Vanuatu</th>
<th>Philippi</th>
<th>Thailand</th>
<th>CA</th>
<th>CB</th>
<th>EAPSR</th>
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<td>10.9</td>
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Sources: UNICEF Global Study on Child Poverty and Disparity 2007-2008 (Table 2.1.4), with own estimation for subregion and clusters.

Figure A6: Multiplicity of Deprivation: Cumulative percentage of households with children suffering multiple ‘less severe’ deprivations, 2006 (Figure 8)

Sources: UNICEF Global Study on Child Poverty and Disparity 2007-2008 (Table 2.1.4)
Table A9: Depth and severity of severe deprivation among all children, children with at least one deprivation and child with at least two deprivations, by Country, 2006 (Table 9)

<table>
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<tr>
<th>Population SubGroup</th>
<th>Country</th>
<th>Cambodia</th>
<th>Lao PDR</th>
<th>Mongolia</th>
<th>Viet Nam</th>
<th>Vanuatu</th>
<th>Philippines</th>
<th>Thailand</th>
<th>CA</th>
<th>CB</th>
<th>EAPSR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Among all children</td>
<td>Depth</td>
<td>1.77</td>
<td>1.67</td>
<td>1.06</td>
<td>0.60</td>
<td>0.31</td>
<td>0.40</td>
<td>0.18</td>
<td>1.67</td>
<td>0.42</td>
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<tr>
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<td>Severity (confidence interval)</td>
<td>2.71</td>
<td>3.04</td>
<td>2.08</td>
<td>1.48</td>
<td>0.87</td>
<td>1.05</td>
<td>0.60</td>
<td>2.78</td>
<td>1.14</td>
<td>1.41</td>
</tr>
<tr>
<td>Among children with at least one deprivation</td>
<td>Depth</td>
<td>1.96</td>
<td>2.22</td>
<td>1.66</td>
<td>1.54</td>
<td>1.22</td>
<td>1.29</td>
<td>1.13</td>
<td>2.01</td>
<td>1.38</td>
<td>1.53</td>
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<tr>
<td></td>
<td>Severity (confidence interval)</td>
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<td>3.47</td>
<td>2.65</td>
<td>2.73</td>
<td>2.21</td>
<td>2.29</td>
<td>2.10</td>
<td>2.96</td>
<td>2.51</td>
<td>2.75</td>
</tr>
<tr>
<td>Among children with at least two deprivations</td>
<td>Depth</td>
<td>2.36</td>
<td>2.79</td>
<td>2.45</td>
<td>2.40</td>
<td>2.12</td>
<td>2.13</td>
<td>2.00</td>
<td>2.48</td>
<td>2.27</td>
<td>2.36</td>
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<tr>
<td></td>
<td>Severity (confidence interval)</td>
<td>3.17</td>
<td>4.24</td>
<td>3.92</td>
<td>4.25</td>
<td>3.89</td>
<td>3.81</td>
<td>3.70</td>
<td>3.54</td>
<td>4.14</td>
<td>4.23</td>
</tr>
</tbody>
</table>

Note: Depth was defined as average of deprivations. Severity was defined as the standard deviation of the multiple deprivation distribution. Giving that the square of the distance to the average or depth of deprivations is used, the situation of children that suffer from simultaneous deprivations is stressed (Minujin A and Delamonica E, 2005). The combination of those two measures, depth and severity provides a sort of 'confidence interval' (CI), which assists in the analysis of concentrated deprivation.

Sources: Own elaboration from UNICEF Global Study on Child Poverty and Disparity 2007-2008 (Table 2.1.4).

Table A10: Depth and severity of child 'less severe' deprivation among all children, children with at least one deprivation and child with at least two deprivations by country, 2006 (Table 9)

<table>
<thead>
<tr>
<th>Population SubGroup</th>
<th>Country</th>
<th>Cambodia</th>
<th>Lao PDR</th>
<th>Mongolia</th>
<th>Viet Nam</th>
<th>Vanuatu</th>
<th>Philippines</th>
<th>Thailand</th>
<th>CA</th>
<th>CB</th>
<th>EAPSR</th>
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</thead>
<tbody>
<tr>
<td>Among all children</td>
<td>Depth</td>
<td>2.20</td>
<td>2.46</td>
<td>1.55</td>
<td>0.99</td>
<td>1.22</td>
<td>0.63</td>
<td>0.62</td>
<td>2.22</td>
<td>0.75</td>
<td>0.91</td>
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<tr>
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<td>Severity (confidence interval)</td>
<td>3.29</td>
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<td>2.08</td>
<td>2.25</td>
<td>1.48</td>
<td>1.30</td>
<td>3.47</td>
<td>1.68</td>
<td>1.97</td>
</tr>
<tr>
<td>Among children with at least one deprivation</td>
<td>Depth</td>
<td>2.34</td>
<td>2.63</td>
<td>1.96</td>
<td>1.77</td>
<td>1.76</td>
<td>1.47</td>
<td>1.24</td>
<td>2.39</td>
<td>1.53</td>
<td>1.69</td>
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<td>Severity (confidence interval)</td>
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<td>3.05</td>
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<td>1.98</td>
<td>3.53</td>
<td>2.61</td>
<td>2.87</td>
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<tr>
<td>Among children with at least two deprivations</td>
<td>Depth</td>
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<td>3.10</td>
<td>2.65</td>
<td>2.54</td>
<td>2.39</td>
<td>2.33</td>
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<td>2.78</td>
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<td>Severity (confidence interval)</td>
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<td>4.09</td>
<td>3.50</td>
<td>3.89</td>
<td>4.13</td>
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Sources: Sources: Own elaboration from UNICEF Global Study on Child Poverty and Disparity 2007-2008 (Table 2.1.4).
### Table A11(a): Equity and disparity in child poverty incidence, 2006 (Figure 11)

<table>
<thead>
<tr>
<th>Country</th>
<th>Variable</th>
<th>Type of area of residence</th>
<th>Household size</th>
<th>Education of household head</th>
</tr>
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<td>Number of deprivations</td>
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<td>Rural</td>
<td>Urban</td>
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<td>68.2</td>
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<td>84.5</td>
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<td>64.1</td>
<td>84.1</td>
<td>46.6</td>
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<td>52.7</td>
<td>9.2</td>
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<td>45.4</td>
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<td>18.3</td>
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Note: Vanuatu ratio in household size was calculated among 7+ and 3-4 members, and ratio in education of household head among primary and secondary.

Sources: Own elaboration from UNICEF Global Study on Child Poverty and Disparity 2007-2008 (Table 2.1.4).
Table A11(b): Equity and disparity of child poverty incidence, 2006 (Figure 11)

<table>
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</table>

* No are data for this variable in the country.
**Ratio among lowest and national average (gap among lowest and highest is higher than 50).
Sources: Own elaboration from UNICEF Global Study on Child Poverty and Disparity 2007-2008 (Table 2.1.4)
Table A12(a): Disparity ratios of severe deprivation by dimension (Shelter, Sanitation, Water, Information), 2006 (Figures 12 & 13)

<table>
<thead>
<tr>
<th>Country</th>
<th>Variable</th>
<th>Deprivations</th>
<th>Type of area of residence</th>
<th>Household size</th>
<th>Education of household head</th>
<th>Region</th>
<th>Ethnicity</th>
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<tbody>
<tr>
<td></td>
<td></td>
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* No are data for this variable in the country.

**Ratio among lowest and national average (ratio among lowest and highest is higher than 50).

Sources: Own elaboration from UNICEF Global Study on Child Poverty and Disparity 2007-2008 (Table 2.1.2)
### Table A12(b): Disparity ratios of severe deprivation by dimension (Food, Education, Health), 2006 (Figures 12 & 13)

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<th>Household size</th>
<th>Education of household head</th>
<th>Region</th>
<th>Ethnicity</th>
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<td>Rural / Urban</td>
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<td>Up to primary / Secondary+</td>
<td>Highest / Lowest incidence</td>
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* No are data for this variable in the country.

**Ratio among lowest and national average (ratio among lowest and highest is higher than 50).

Sources: Own elaboration from UNICEF Global Study on Child Poverty and Disparity 2007-2008 (Table 2.1.2)
Figure A7: Disparity ratios on severe deprivations, 2006 (Tables A12(a) & A12(b))

*Ethnicity: ratio among lowest and national average (gap among lowest and highest is higher than 50).
Sources: Own elaboration from UNICEF Global Study on Child Poverty and Disparity 2007-2008 (Table 1.1.2)
### Table A13: Number of severe deprivations by wealth quintile (Figures 14(a) & 14(b))

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<th>Number of deprivations (%)</th>
<th>Country</th>
<th>Wealth quintile (HH)</th>
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<td>Vanuatu</td>
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Sources: Own elaboration from UNICEF Global Study on Child Poverty and Disparity 2007-2008 (Table 2.1.6).
Figure A8(a): Number of severe deprivations by wealth quintile, Mongolia, Lao PDR and Cambodia, 2006 (Figure 14(a))

Source: UNICEF Global Study on Child Poverty and Disparity 2007-2008 (Table 2.1.6).

Figure A8(b): Number of severe deprivations by wealth quintile, Thailand, Philippines, Vanuatu and Viet Nam, 2006 (Figure 14(b))

Sources: UNICEF Global Study on Child Poverty and Disparity 2007-2008 (Table 2.1.6).
Figure A9: Severe deprivation and multiple severe deprivation by country, 2006 (Figure 15)

Source: Own elaboration UNICEF Global Study on Child Poverty and Disparity 2007-2008 (Table 2.1.6).
Figure A10: Deprivation as distinct from income poverty, Viet Nam 2006 (Figure 15)

Source: Viet Nam Child poverty Report, (page 74)
Table A14: Child characteristics by wealth ratio, 2006 (Figure 16)

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<th>Country</th>
<th>Wealth quintile</th>
<th>Food severe deprivation (%)</th>
<th>Education severe deprivation (%)</th>
<th>Health severe deprivation (%)</th>
<th>Working child in household (%)</th>
<th>Birth not registered (%)</th>
<th>Country</th>
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<th>Food severe deprivation (%)</th>
<th>Education severe deprivation (%)</th>
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<td></td>
<td>Ratio 1Q/5Q</td>
<td>12.9</td>
<td>3.7</td>
<td>2.9</td>
<td>8.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ratio 3Q/5Q</td>
<td>1.9</td>
<td>2.2</td>
<td>1.9</td>
<td>*</td>
<td>1.6</td>
<td></td>
<td>Ratio 3Q/5Q</td>
<td>3.1</td>
<td>1.9</td>
<td>2.6</td>
<td>2.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lao PDR</td>
<td>Total</td>
<td>18.6</td>
<td>14.0</td>
<td>46.4</td>
<td>28.0</td>
<td>84.7</td>
<td>Philippines</td>
<td>Total</td>
<td>*</td>
<td>2.2</td>
<td>16.6</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>1Q</td>
<td>27.2</td>
<td>33.4</td>
<td>51.7</td>
<td>28.8</td>
<td>85.0</td>
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<td>*</td>
<td>6.4</td>
<td>29.2</td>
<td>*</td>
<td>*</td>
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<tr>
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<td>21.8</td>
<td>56.2</td>
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<td>89.8</td>
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<td>*</td>
<td>1.9</td>
<td>17.5</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
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<td>3Q</td>
<td>16.7</td>
<td>10.2</td>
<td>40.6</td>
<td>31.9</td>
<td>84.7</td>
<td></td>
<td>3Q</td>
<td>*</td>
<td>1.1</td>
<td>11.4</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>4Q</td>
<td>10.5</td>
<td>3.1</td>
<td>37.0</td>
<td>28.3</td>
<td>83.8</td>
<td></td>
<td>4Q</td>
<td>*</td>
<td>0.6</td>
<td>9.3</td>
<td>*</td>
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</tr>
<tr>
<td></td>
<td>5Q</td>
<td>7.1</td>
<td>1.0</td>
<td>34.8</td>
<td>13.9</td>
<td>74.1</td>
<td></td>
<td>5Q</td>
<td>*</td>
<td>0.5</td>
<td>7.0</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Ratio 1Q/5Q</td>
<td>3.8</td>
<td>34.1</td>
<td>1.5</td>
<td>2.1</td>
<td>1.1</td>
<td></td>
<td>Ratio 1Q/5Q</td>
<td>13.7</td>
<td>4.2</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Ratio 3Q/5Q</td>
<td>2.3</td>
<td>10.4</td>
<td>1.2</td>
<td>2.3</td>
<td>1.1</td>
<td></td>
<td>Ratio 3Q/5Q</td>
<td>2.4</td>
<td>1.6</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Mongolia</td>
<td>Total</td>
<td>6.8</td>
<td>2.4</td>
<td>8.1</td>
<td>58.6</td>
<td>2.1</td>
<td>Thailand</td>
<td>Total</td>
<td>2.7</td>
<td>0.6</td>
<td>6.9</td>
<td>12.3</td>
<td>1.5</td>
</tr>
<tr>
<td></td>
<td>1Q</td>
<td>9.1</td>
<td>6.0</td>
<td>11.0</td>
<td>61.3</td>
<td>1.6</td>
<td></td>
<td>1Q</td>
<td>2.8</td>
<td>1.4</td>
<td>8.8</td>
<td>17.6</td>
<td>2.8</td>
</tr>
<tr>
<td></td>
<td>2Q</td>
<td>8.8</td>
<td>3.0</td>
<td>9.0</td>
<td>62.9</td>
<td>2.4</td>
<td></td>
<td>2Q</td>
<td>3.1</td>
<td>0.7</td>
<td>5.3</td>
<td>13.6</td>
<td>1.8</td>
</tr>
<tr>
<td></td>
<td>3Q</td>
<td>6.4</td>
<td>1.5</td>
<td>7.2</td>
<td>61.7</td>
<td>2.7</td>
<td></td>
<td>3Q</td>
<td>3.7</td>
<td>0.6</td>
<td>7.6</td>
<td>13.2</td>
<td>1.5</td>
</tr>
<tr>
<td></td>
<td>4Q</td>
<td>4.7</td>
<td>0.8</td>
<td>5.0</td>
<td>58.5</td>
<td>1.9</td>
<td></td>
<td>4Q</td>
<td>2.3</td>
<td>0.4</td>
<td>7.4</td>
<td>9.8</td>
<td>0.8</td>
</tr>
<tr>
<td></td>
<td>5Q</td>
<td>3.6</td>
<td>0.4</td>
<td>6.9</td>
<td>43.5</td>
<td>2.1</td>
<td></td>
<td>5Q</td>
<td>1.5</td>
<td>0.2</td>
<td>5.2</td>
<td>8.2</td>
<td>0.7</td>
</tr>
<tr>
<td>Ratio 1Q/5Q</td>
<td>2.6</td>
<td>17.2</td>
<td>1.6</td>
<td>1.4</td>
<td>0.7</td>
<td></td>
<td>Ratio 1Q/5Q</td>
<td>1.9</td>
<td>6.9</td>
<td>1.7</td>
<td>2.1</td>
<td>3.7</td>
<td></td>
</tr>
<tr>
<td>Ratio 3Q/5Q</td>
<td>1.8</td>
<td>4.2</td>
<td>1.1</td>
<td>1.4</td>
<td>1.3</td>
<td></td>
<td>Ratio 3Q/5Q</td>
<td>2.5</td>
<td>3.1</td>
<td>1.5</td>
<td>1.6</td>
<td>2.0</td>
<td></td>
</tr>
</tbody>
</table>

* No data.

Source: UNICEF Global Study on Child Poverty and Disparity 2007-2008 (Table 2.1.2)
Figure A11: Severe deprivation disparity ratio of wealth (Q1/Q5), rural/urban and education of the household head, 2006 (Section 2.7)

Note: Size indicated severely deprived incidence (national value). Vanuatu ratio in education of household head was calculated among primary and secondary.
Source: UNICEF Global Study on Child Poverty and Disparity 2007-2008 (Table 2.1.6).

Figure A12: Education and health severe deprivation by Q1/Q5 disparity ratio, 2006 (Section 2.7)

Note: Size indicated severely deprived incidence (national value).
Source: UNICEF Global Study on Child Poverty and Disparity 2007-2008 (Tables 1.1.2 & 2.1.6).
Annex 2: Methodologies for Own Estimations and Other Calculations

A. Estimations for Cluster A, Cluster B and Subregion, including examples

The estimation of Cluster A, Cluster B and Subregion (integrated by the seven countries included in this report) results from a weighted average of children living with severe deprivation and with multiple severe deprivation in each country.

The weighted average was calculated using the following different age groups in concordance with the age group considered in each deprivation dimension (see Box 1):

- Children under 18 years old: Shelter, Water, and Sanitation.
- Children 3 to 17 years old: Information.
- Children 7 to 17 years old: Education.
- Children under 5 years old: Food, Health.

The incidence of severe deprivation on each of the deprivation dimension was estimated separately using the appropriate age group and the weights presented in the table below for ca. 2006. The head count or total incidence of deprivation was estimated as a weighted average of the incidence in each country.

For ca. 2000, population data was taken from the 2002 SOWC Report, and refers to 2000. For ca. 2006, population data is taken from UNICEF Statistics, and refers to 2008.

Table A13. Participation in total population EAP countries included in the report, 2008 (%)

<table>
<thead>
<tr>
<th>Country</th>
<th>Total</th>
<th>18 years and more</th>
<th>Under 18 years</th>
<th>5 to 17 years</th>
<th>Under 5 years</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Subregion</td>
<td>Cluster</td>
<td>Subregion</td>
<td>Cluster</td>
<td>Subregion</td>
</tr>
<tr>
<td>Cambodia</td>
<td>5.4</td>
<td>62.2</td>
<td>4.9</td>
<td>62.3</td>
<td>6.5</td>
</tr>
<tr>
<td>Lao PDR</td>
<td>2.3</td>
<td>26.5</td>
<td>1.9</td>
<td>24.8</td>
<td>3.0</td>
</tr>
<tr>
<td>Mongolia</td>
<td>1.0</td>
<td>11.3</td>
<td>1.0</td>
<td>12.9</td>
<td>0.9</td>
</tr>
<tr>
<td>Cluster A</td>
<td>8.7</td>
<td>100.0</td>
<td>7.8</td>
<td>100.0</td>
<td>10.5</td>
</tr>
<tr>
<td>Viet Nam</td>
<td>32.4</td>
<td>35.5</td>
<td>33.4</td>
<td>36.2</td>
<td>30.7</td>
</tr>
<tr>
<td>Vanatu</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td>Philippines</td>
<td>33.7</td>
<td>36.9</td>
<td>30.6</td>
<td>33.2</td>
<td>39.4</td>
</tr>
<tr>
<td>Thailand</td>
<td>25.1</td>
<td>27.5</td>
<td>28.2</td>
<td>30.6</td>
<td>19.3</td>
</tr>
<tr>
<td>Cluster B</td>
<td>91.3</td>
<td>100.0</td>
<td>92.2</td>
<td>100.0</td>
<td>89.5</td>
</tr>
<tr>
<td>Subregion</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>


32 In the case of the estimation ca. 2006 the age group used for education was 5 to 17 years old.

33 In case of working with micro data, and not macro data as in our case, each household with children under 18 is classified as sever deprived or multiple severe deprived according with the situation of the children in the house. The incidence of severe deprivation and multiple severe deprivations is applied to the population under 18.
Some examples of own estimations/elaborations for clusters and subregions:

### Estimation of Severe Deprivation in the Water dimension

Water severe deprivation (Table 5): Cambodia 14.3%, Lao 25.9%, Mongolia 29.0%, Viet Nam 8.0%, Vanuatu 7.5%, Philippines 7.0%, Thailand 2.0%.

Weights: Population under 18 years old in each country (Table A15, column five for Subregion and column six for clusters)

Water severe deprivation **Cluster A** (Cambodia, Lao, Mongolia) = 14.3 x 0.621 + 25.9 x 0.289 + 29.0 x 0.09 = **19.0%**.

Water severe deprivation **Cluster B** (Viet Nam, Vanuatu, Philippines, Thailand) = **6.3%**.

Water severe deprivation **Subregion** = 7.6%.

### Estimation of Severe Deprivation in the Food dimension

Food severe deprivation (Table 5): Cambodia 15.6%, Lao 18.6%, Mongolia 7.0%, Vanuatu 9.9%, Thailand 3.0%.

Weights: Population under 5 years old in each country (Table A15, column nine for Subregion and ten for clusters)

Food severe deprivation **Cluster A** (Cambodia, Lao, Mongolia) = **15.7%**.

Food severe deprivation **Cluster B** (Vanuatu, Thailand) = **3.0%**.

Food severe deprivation **Subregion** = 7.5%.

Note: Viet Nam and Philippines no data.

### B. Calculation of Disparity Ratios – Some Examples

#### Viet Nam Severe Deprivation: Ethnicity Ratio

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>At least one severe deprivation (%)</th>
<th>Lowest Incidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kinh</td>
<td>31.6</td>
<td></td>
</tr>
<tr>
<td>Muong</td>
<td>46.5</td>
<td></td>
</tr>
<tr>
<td>Tay</td>
<td>47.8</td>
<td></td>
</tr>
<tr>
<td>Thai</td>
<td>77.6</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>81.6</td>
<td></td>
</tr>
<tr>
<td>H Mong</td>
<td>99.5</td>
<td>Highest Incidence</td>
</tr>
</tbody>
</table>

**Ratio**: H Mong (99.5%) / Kinh (31.6%) = **3.1**.

Source: MICS and DHS for EAFRO Child Poverty Study Countries (Table 21.6)

#### Severe deprivation: Rural / Urban Ratio

Severe deprivation Ratios (Table A11(a)): Cambodia 1.3, Lao 2.1, Mongolia 1.8, Viet Nam 2.8, Vanuatu 2.6, Philippines 2.3, Thailand 1.6.

Weights: Population under 18 years old in each country (Table A15, column five)

**Severe deprivation Ratio Subregion** = **2.3**.
### C. Calculation of the Child Poverty Indices – An Example

<table>
<thead>
<tr>
<th>Domain</th>
<th>Deprived or not</th>
<th>Place of residence</th>
<th>Rural</th>
<th>Urban</th>
<th>Rural / Urban Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shelter</td>
<td>Not deprived</td>
<td>15,370</td>
<td>15,755</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Deprived</td>
<td>3,380</td>
<td>1,742</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Deprived (%)</strong></td>
<td><strong>18.0%</strong></td>
<td><strong>10.0%</strong></td>
<td></td>
<td><strong>1.8</strong></td>
</tr>
<tr>
<td>Sanitation</td>
<td>Not deprived</td>
<td>14,957</td>
<td>16,363</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Deprived</td>
<td>3,200</td>
<td>849</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Deprived (%)</strong></td>
<td><strong>17.6%</strong></td>
<td><strong>4.9%</strong></td>
<td></td>
<td><strong>3.6</strong></td>
</tr>
<tr>
<td>Water</td>
<td>Not deprived</td>
<td>16,586</td>
<td>17,138</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Deprived</td>
<td>2,164</td>
<td>359</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Deprived (%)</strong></td>
<td><strong>11.5%</strong></td>
<td><strong>2.0%</strong></td>
<td></td>
<td><strong>5.6</strong></td>
</tr>
<tr>
<td>Information</td>
<td>Not deprived</td>
<td>17,906</td>
<td>17,268</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Deprived</td>
<td>844</td>
<td>228</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Deprived (%)</strong></td>
<td><strong>4.5%</strong></td>
<td><strong>1.3%</strong></td>
<td></td>
<td><strong>3.4</strong></td>
</tr>
<tr>
<td>Food</td>
<td>No data</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>Not deprived</td>
<td>10,716</td>
<td>10,036</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Deprived</td>
<td>343</td>
<td>135</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Deprived (%)</strong></td>
<td><strong>3.1%</strong></td>
<td><strong>1.3%</strong></td>
<td></td>
<td><strong>2.3</strong></td>
</tr>
<tr>
<td>Health</td>
<td>Not deprived</td>
<td>3,880</td>
<td>4,297</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Deprived</td>
<td>1,051</td>
<td>575</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Deprived (%)</strong></td>
<td><strong>21.3%</strong></td>
<td><strong>11.8%</strong></td>
<td></td>
<td><strong>1.8</strong></td>
</tr>
</tbody>
</table>

Source: MICS and DHS for EAPRO Child Poverty Study Countries (Table 1.1.2 weighted to pop)

CPI 'Severe Deprivation':
\[
\frac{(69.9)^2 + (74.4)^2 + (14.3)^2 + (7.1)^2 + (15.6)^2 + (8.1)^2 + (21)^2}{7} = 1632
\]

CPI 'Less Severe Deprivation':
\[
\frac{(85.5)^2 + (74.9)^2 + (28.9)^2 + (7.5)^2 + (46.7)^2 + (16.5)^2 + (34)^2}{7} = 2489
\]
Annex 3: Sample Tables – UNICEF Global Study on Child Poverty and Disparity

Sample Tables 2.1.4 & 2.1.6, Lao PDR

A. Table 2.1.4 – Child poverty as multiple deprivations (most recent MICS/DHS survey)

<table>
<thead>
<tr>
<th>Country</th>
<th>Number of children in relevant age cohort, (estimates in 1,000s)</th>
<th>Of which experiencing ‘severe’ deprivations, %</th>
<th>Of which experiencing ‘less severe’ deprivation, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Shelter</td>
<td>15,746</td>
<td>34.1</td>
<td>54.1</td>
</tr>
<tr>
<td>2. Sanitation</td>
<td>15,746</td>
<td>55.4</td>
<td>59.7</td>
</tr>
<tr>
<td>3. Water</td>
<td>15,746</td>
<td>25.9</td>
<td>58.9</td>
</tr>
<tr>
<td>4. Information</td>
<td>15,746</td>
<td>26.0</td>
<td>27.4</td>
</tr>
<tr>
<td>5. Food</td>
<td>4,030</td>
<td>18.6</td>
<td>49.4</td>
</tr>
<tr>
<td>6. Education</td>
<td>9,688</td>
<td>14.2</td>
<td>28.3</td>
</tr>
<tr>
<td>7. Health</td>
<td>4,030</td>
<td>46.4</td>
<td>64.9</td>
</tr>
<tr>
<td>Total</td>
<td>15,746</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

b) The incidence of the most frequent combinations of deprivations

| The most frequent case of any deprivation*  | Sanitation                   | 55.4                                       |
| Two most frequent combinations*           | Sanitation/Health            | 32.6                                       |
| Two second most frequent combinations*    | Sanitation/Shelter           | 24.2                                       |
| Three most frequent combinations*         | Sanitation and Health        |                                             |
| Three second most frequent combinations*  | Sanitation                   | 14.3                                       |
| The most frequent associate of education* | Sanitation                   | 11.5                                       |
| The most frequent associate of health*    | Sanitation                   | 32.6                                       |

C) The incidence of multiple deprivations

| No deprivations                           | 24.8                          | 6.5                                         |
| Only one (any) deprivation                | 24.1                          | 20.7                                        |
| Two of any deprivations                   | 23.1                          | 24.8                                        |
| Three of any deprivations                 | 17.8                          | 23.9                                        |
| Four of any deprivations                  | 8.0                           | 17.1                                        |
| Five of any deprivations                  | 2.0                           | 6.2                                         |
| Six of any deprivations                   | 0.1                           | 0.8                                         |
| Seven of any deprivations                 | 0.0                           | 0.0                                         |

B. Table 2.1.6 – Correlates of severe deprivations (by individual, households and geographic dimensions; in 2005 or last available year)

<table>
<thead>
<tr>
<th>Age group by sex</th>
<th>At least one severe deprivation</th>
<th>At least two severe deprivations</th>
<th>Number of Children in sample</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>%</td>
<td>Number</td>
</tr>
<tr>
<td>Male, 0-2 years</td>
<td>1,039</td>
<td>83.8</td>
<td>779</td>
</tr>
<tr>
<td>Male, 3-4 years</td>
<td>713</td>
<td>86.7</td>
<td>539</td>
</tr>
<tr>
<td>Male, 5-9 years</td>
<td>1,862</td>
<td>77.6</td>
<td>1,306</td>
</tr>
<tr>
<td>Male, 10-14 years</td>
<td>1,625</td>
<td>70.0</td>
<td>1,014</td>
</tr>
<tr>
<td>Male, 15-17 years</td>
<td>821</td>
<td>65.6</td>
<td>497</td>
</tr>
<tr>
<td>Female, 0-2 years</td>
<td>1,015</td>
<td>84.2</td>
<td>710</td>
</tr>
<tr>
<td>Female, 3-4 years</td>
<td>661</td>
<td>86.8</td>
<td>525</td>
</tr>
<tr>
<td>Female, 5-9 years</td>
<td>1,791</td>
<td>78.0</td>
<td>1,215</td>
</tr>
<tr>
<td>Female, 10-14 years</td>
<td>1,681</td>
<td>70.1</td>
<td>1,066</td>
</tr>
<tr>
<td>Female, 15-17 years</td>
<td>626</td>
<td>59.8</td>
<td>379</td>
</tr>
<tr>
<td>Household size</td>
<td>At least one severe deprivation</td>
<td>At least two severe deprivations</td>
<td>Number of Children in sample</td>
</tr>
<tr>
<td>----------------</td>
<td>--------------------------------</td>
<td>---------------------------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td></td>
<td>Number</td>
<td>%</td>
<td>Number</td>
</tr>
<tr>
<td>&lt; 3 members</td>
<td>37</td>
<td>75.9</td>
<td>27</td>
</tr>
<tr>
<td>3-4 members</td>
<td>1,501</td>
<td>60.7</td>
<td>836</td>
</tr>
<tr>
<td>5-6 members</td>
<td>3,838</td>
<td>71.6</td>
<td>2,457</td>
</tr>
<tr>
<td>7+</td>
<td>6,460</td>
<td>82.2</td>
<td>4,685</td>
</tr>
<tr>
<td>Education level of Head of Household</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No education</td>
<td>3,531</td>
<td>90.0</td>
<td>2,776</td>
</tr>
<tr>
<td>Primary</td>
<td>5,889</td>
<td>79.6</td>
<td>4,036</td>
</tr>
<tr>
<td>Secondary</td>
<td>2,221</td>
<td>53.2</td>
<td>1,050</td>
</tr>
<tr>
<td>Non-standard</td>
<td>154</td>
<td>76.4</td>
<td>115</td>
</tr>
<tr>
<td>Sex of Head of Household</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>11,095</td>
<td>75.7</td>
<td>7,617</td>
</tr>
<tr>
<td>Female</td>
<td>741</td>
<td>67.4</td>
<td>427</td>
</tr>
<tr>
<td>Household wealth quintile</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poorest</td>
<td>3,580</td>
<td>98.5</td>
<td>3,274</td>
</tr>
<tr>
<td>Second</td>
<td>3,323</td>
<td>94.3</td>
<td>2,643</td>
</tr>
<tr>
<td>Middle</td>
<td>2,691</td>
<td>82.4</td>
<td>1,469</td>
</tr>
<tr>
<td>Fourth</td>
<td>1,759</td>
<td>60.1</td>
<td>622</td>
</tr>
<tr>
<td>Richest</td>
<td>496</td>
<td>20.4</td>
<td>49</td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lao</td>
<td>5,336</td>
<td>62.2</td>
<td>2,857</td>
</tr>
<tr>
<td>Khmu</td>
<td>1,826</td>
<td>87.0</td>
<td>1,341</td>
</tr>
<tr>
<td>Mong</td>
<td>1,855</td>
<td>93.8</td>
<td>1,605</td>
</tr>
<tr>
<td>Other ethnic group</td>
<td>2,765</td>
<td>91.1</td>
<td>2,238</td>
</tr>
<tr>
<td>Missing</td>
<td>13</td>
<td>100.0</td>
<td>9</td>
</tr>
<tr>
<td>Religion</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Buddhist</td>
<td>5,709</td>
<td>63.8</td>
<td>3,083</td>
</tr>
<tr>
<td>Christianity</td>
<td>260</td>
<td>74.5</td>
<td>152</td>
</tr>
<tr>
<td>Islam</td>
<td>16</td>
<td>100.0</td>
<td>16</td>
</tr>
<tr>
<td>Language</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lao</td>
<td>5,815</td>
<td>62.9</td>
<td>3,157</td>
</tr>
<tr>
<td>Khmu</td>
<td>1,763</td>
<td>87.7</td>
<td>1,292</td>
</tr>
<tr>
<td>Mong</td>
<td>1,908</td>
<td>93.9</td>
<td>1,621</td>
</tr>
<tr>
<td>Other language</td>
<td>2,340</td>
<td>95.4</td>
<td>1,970</td>
</tr>
<tr>
<td>Adult of primary working age in household</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>113</td>
<td>76.7</td>
<td>68</td>
</tr>
<tr>
<td>Working child in household</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>11,723</td>
<td>75.2</td>
<td>7,977</td>
</tr>
<tr>
<td>No</td>
<td>7,638</td>
<td>74.5</td>
<td>5,227</td>
</tr>
<tr>
<td>Adult(s) with chronic illness in household</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>3,191</td>
<td>79.8</td>
<td>2,209</td>
</tr>
<tr>
<td>No data</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disabled child in household</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>5,216</td>
<td>80.1</td>
<td>3,729</td>
</tr>
<tr>
<td>Single parent (adult) in household</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>11,527</td>
<td>75.1</td>
<td>7,849</td>
</tr>
<tr>
<td>Yes</td>
<td>309</td>
<td>77.0</td>
<td>196</td>
</tr>
<tr>
<td>Orphan child in household</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>10,568</td>
<td>75.3</td>
<td>7,176</td>
</tr>
<tr>
<td>High dependency ratio (4+ children per adult)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>11,578</td>
<td>74.8</td>
<td>7,823</td>
</tr>
<tr>
<td>Yes</td>
<td>261</td>
<td>95.4</td>
<td>221</td>
</tr>
<tr>
<td>Elder person (70+) in household</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>10,527</td>
<td>75.0</td>
<td>7,172</td>
</tr>
<tr>
<td>Yes</td>
<td>1,928</td>
<td>76.3</td>
<td>872</td>
</tr>
<tr>
<td>Region</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>North</td>
<td>4,239</td>
<td>79.0</td>
<td>3,113</td>
</tr>
<tr>
<td>Centre</td>
<td>4,574</td>
<td>66.3</td>
<td>2,838</td>
</tr>
<tr>
<td>South</td>
<td>3,031</td>
<td>86.5</td>
<td>2,056</td>
</tr>
<tr>
<td>Place of residence</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>1,319</td>
<td>40.0</td>
<td>489</td>
</tr>
<tr>
<td>Rural</td>
<td>10,517</td>
<td>84.5</td>
<td>7,555</td>
</tr>
<tr>
<td>Total</td>
<td>11,836</td>
<td>75.7</td>
<td>8,044</td>
</tr>
</tbody>
</table>

Definitions: Orphan children are considered those for whom one or both biological parents are dead.
Strengthening Community Based Social Protection Practices for Child Protection

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Abstract:

Much attention is paid to social protection at macro-level, using a variety of centralized instruments to deliver a range of benefits to poor and vulnerable people. However, less attention has been paid to the role of communities in social protection, and in particular the role of traditional systems. Such mechanisms are known to exist in Myanmar, but to date few studies have documented their range, impact and potential utility for social protection. Data was collected by community volunteers from volunteers from 39 villages representing eight of the 14 States and Regions of Myanmar. All communities studied had evidence of community led social protection systems, and the average fund distributed per year amounted to $2,650 per village. Community based programmes to enable poor children to access to primary education were practiced in all eight respective States/ Regions funded by primarily by the contributions of the community. These typically delivered a cash grant to children of school age in poor households. In terms of health, several villages had schemes to enable access to vaccination and health care for poor children, providing either a cash grant or volunteer help. Community based systems are estimated to meet around 30% of reported social protection needs for children. Community systems were limited in approach, and by relatively small capital funds. Limited data exists to demonstrate the evidence of efficacy of scaling up of community led systems.


2 ActionAid “Thadar Consortium” project documentation. Internal
Keywords: Child protection, Community based social protection

Research objective: to analyse existing traditionally rooted social protection mechanisms which can be strengthened to facilitate social protection for children using a sustainable and inclusive approach

Literature review: Social protection is often defined as 'a sub-set of public actions that help address risk, vulnerability and chronic poverty'\(^3\). Much attention is paid to social protection at macro-level, using a variety of centralized instruments to deliver a range of benefits to poor and vulnerable people. However, less attention has been paid to the role of communities in social protection, and in particular the role of traditional systems\(^4\). Despite this, much evidence exists validating the efficacy and efficiency of community based, community led social protection mechanisms\(^5\). Such mechanisms reside in a contextual framework, and rely on local resources, and are shaped to deliver locally appropriate solutions in the community setting. Analysis of child-sensitive social protection programmes highlight the need for greater synergy, and for a more robust evidence base for social protection programmes. Despite noting the difficulties in implementing comprehensive social protection systems, a recent UNICEF analysis of social protection failed to sufficiently consider the potential role of communities in social protection\(^6\). Sector-specific community based mechanisms, such as Community Based Health Organizations, have been shown to be effective in reducing out-of-pocket payments and improving access to health\(^7\), although evidence on outcomes is still limited\(^8\). Such schemes are recommended to be a complement to, not as a substitute for, strong government involvement in health care financing and risk management related to the cost of illness.\(^9\) Analysis from the World Bank identified a number of reasons for considering community based approaches, including Good development outcomes, cost-effectiveness (where ‘decentralizing responsibility to communities can be an effective way of delivering social services because the community resources that supplement the external resources help make the services more affordable..and... Community participation can also help reduce “leakages” and ensure more efficient use of resources”, flexibility and contextual appropriateness (where “A community-based approach helps to ensure that services are appropriate for the local context and suit local preferences.”) increased effectiveness of targeting vulnerable groups, and increased ability to respond to growing demand for services.\(^10\) Based on existing research, there appear to be three main modes of community-based social protection. Firstly, there are schemes where the community is essentially the implementing mechanisms for a

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\(^7\) http://tric.tomsk.gov.ru/files/2006/01/18/CD-Rom%20Content/pdfs/Papers/English/0503.pdf cited 04/07/2013


regional or national social protection programme, either a multi-faceted programme, or more typically, a single component programme such as community based health insurance schemes. Secondly, there are schemes whereby communities are given funds for activities such as economic development, infrastructure and village development. Examples of this include the ‘One million baht’ scheme in Thailand, which mainly focussed on providing a village-administered capital fund for micro-credit, and a post-conflict project in Sri Lanka which provided funds for infrastructure and livelihoods for vulnerable persons. Less common are the third category, where communities have access to funds which allow the community to effectively take on a range of social protection duties using approaches and schemes which are designed by, operated by and administered by the community. One concern for this third category is the recognition that the technical demands of a community based social protection project are more demanding than for an infrastructure or micro-lending project, and hence considerable input is required to ensure and sustain adequate technical capacity and support.

Although open discussion of social protection is only a recent development in Myanmar, the existence of traditional, community based approaches to addressing vulnerability is well known. Although typically ignored in most policy analyses, preliminary research identified a number of different approaches in different communities; however, there is little detailed evidence of the types and mechanisms of social protection at community level, how they are administered, how they are funded and how beneficiaries are selected. Such evidence can usefully inform efforts to strengthen community based systems. With the readily acknowledged challenges of building a comprehensive, nationally administered social protection system in a context of chronic underinvestment in public services, an inefficient and as yet non-transparent taxation system and significant regional variations in vulnerability, the suitability of community based approaches needs to be considered. Research institutions have conducted detailed analysis of vulnerabilities in Myanmar, including dimensions and causes of child poverty. Additionally, new tools to assist communities in mapping community vulnerability have been developed, providing more robust measures to determine eligibility and measure outcomes. Hence, research is needed to analyse the current form and effectiveness of existing traditional social protection mechanisms, and to explore the potential impact of strengthening these systems on overall social protection programmes.

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11 See examples from Brazil & Benin (WHO) in McLeod et al
15 Ref comment from U Myint at Social Protection Conference, Nay Pyi Taw, June 2012
17 ActionAid “Thadar Consortium” project documentation. Internal
Methodology

The overall research question is ‘what are the prevalence, modus operandi, efficiency and effectiveness of community based social protection mechanisms?’ The application of this research question is ‘In what way could strengthening/up scaling of community based social protection systems contribute to wider social protection programmes?’ Following this question, the research methodology was designed to elicit the following:

- Prevalence and types of different community based social protection mechanisms
- Beneficiary types, eligibility/selection criteria for beneficiaries
- Type of assistance (financial or other), degree of assistance, coverage
- Size and sources of funding, fund management approach
- Evidence of benefits of up-scaling of fund size on efficiency and effectiveness
- Examples of ‘good practice’ which could serve as model for future programmes

The overall methodology was based eliciting quantitative data on typology and characteristics of community based social protection programmes, together with demographic information from the community. However, the research design framed a series of open questions, which allowed for respondents to give context-specific details rather than selecting a response form pre-set answers. Participatory focus group discussions were conducted by 49 community volunteers representing 8 respective States/Regions as a pilot test for upcoming widespread data collection for community based social protection mechanisms. Analysis was made to identify the existence, coverage and spread of community based traditional social protection mechanisms. Focus Group discussions methods with guided Questionnaires were mainly used for the research and descriptive analysis were applied. The initial findings were collated to present an initial impression, which will be further analysed with detailed, village based questionnaires in 50 villages.

Method

Research was planned and undertaken by the Social Policy and Poverty Research Group, which is a consortium of three non-government organizations and one government department. The group has a specific focus on research to assist the development of evidence based social policy, particularly in the area of social protection for vulnerable groups. The research was conducted together with ActionAid Myanmar, who have an extensive network of village volunteers (called village fellows) who are trained as community animators for a variety of social and poverty reduction related activities. Villages were selected from five of the 14 States and Regions of Myanmar, designed to adequately represent the different regions (central, Delta, coastal, hilly tract). Villages were selected which had an active village volunteer, but which had not had significant input from outside organizations in the area of social protection. Training of fifty enumerators was conducted in February 2013, both in questionnaire use and in research methods. A number of the enumerators had previously undertaken research tasks with SPPRG. The questionnaire format required responses by a representative group from each selected village, including village authorities, older persons, women and persons with disabilities. The questionnaire was developed, printed and administered in Burmese language, with translation by the enumerators in cases where the villagers did not speak Burmese language, and is available as appendix A. The questionnaire recorded all the participants in the interview process. The

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20 http://www.spprg.org/content/about-us cited 04/07/2013
questionnaire then allowed participants to describe the various social protection schemes at community level, together with the characteristic, aspects of funding, distribution and criteria. Through these discussions, different categories of traditional social protection were identified, along with their associated rules, regulations, funding mechanisms and efficacy. The findings were then categorized by type of beneficiary (e.g. General welfare, children, women, older persons, person with disabilities, youth, disaster response, maternal health etc.) to further to demonstrate a heterogeneous result.

**Findings and analysis:**

**Profile of sample**

Completed questionnaires from 50 villagers were analyzed, and of these, data was completed for 39 villages. The remaining questionnaires did not include sufficiently complete data for analysis, and so were excluded from the study. In all cases, the main reason for exclusion was omission of data on household numbers in the village and types of social protection schemes. All incomplete villages reported some social protection schemes, but did not provide sufficient detail for analysis. Hence, incomplete questionnaires were not regarded as negative responses (no social protection schemes) but as null responses, meaning that the data was excluded in entirety. The typical household number for the sample villages 111, slightly lower than the national average of 126 households per village/ward. This reflects the more rural composition of the sample, which included only two peri-urban villages. The strengths and weaknesses of the sample and method will be discussed in the next section.

**Overall social protection programme profile**

In total, 159 social protection schemes were administered, delivering benefits to 2792 beneficiaries, disbursing a total of K88,809,600 (US$103,000), an average of K 2,277,169 per village (US$2,650). There were no villages which had no schemes, and a village typically would have 4 social protection schemes-general social welfare, a health scheme, an education scheme and a scheme based around religious ceremonies, including funerals. The mean benefit amount was K31,800 (US$37). Around half of the benefits were delivered in cash, with the remainder being delivered by a mixture of cash and labour (20%), cash, labour and food (11%), labour or service (9%) or food/materials (6%) or cash plus food (4%). The main categories of social protection schemes were for general social welfare (31%), health (25%), education (11%), religious affairs (7.5%) and emergency support (7.5%). Most programmes had no specific targeting criteria, but of the group-specific programmes, those for women (12.6%) and children (13.8%) were the most frequent. Interestingly, over half the programmes were available to ‘any reported case in the village’ even if the person was not a native of that village, refuting the notion that village based social protection programmes tend to be exclusive to long-term village residents. In fact, several villages had well-organized programmes to provide emergency assistance to neighbouring villages in times of difficulty. In terms of funding, the majority of schemes (82%) relied on systematic contributions from villagers in some form, with only 18% of schemes drawing mainly from private donors. Only three schemes had contributions from government sources, and 29 (18%) reported some involvement or funding from an NGO. There is some evidence that NGO funding resulted in increased ability to deliver adequate benefits to beneficiaries. Community based programmes to enable poor children to access to primary Education were practiced in all eight respective States/ Regions driven by the major contributions of the community and NGOs (100%). These typically delivered a cash grant to children of school age in poor households. In terms of health, several villages had schemes to enable access to vaccination and health care for poor children, providing either a cash grant or volunteer help. Many villages practiced schemes to
help poor children attain novitiation into the Buddhist monastery, as an essential rite of passage. One State also reported support to mothers of newborn children, providing volunteer help and a cash grant, adjusted according to poverty and needs.

Administration of the programmes was almost exclusively by village committees. The only exceptions were programmes operated by private donors, but even in these cases committee management was more common than individual disbursement. Typically, a committee would established the type of benefit, the eligibility criteria and the fundraising mechanism. The procedure for formation of committees was not recorded, so it was not possible to establish the extent to which committees were representative, democratic or transparent. There were no legal frameworks for the functioning of the committees, as laws for forming associations are rarely implicated at individual community level. This is not to describe the practice as illegal; more as ‘non-formal’ in that practices are nor governed by any particular statute.

### Child orientated social protection programmes

In terms of social protection programmes specific to children, 22 such schemes were operated in 16 villages, and were primarily orientated towards education, health and religious participation. There were 43 villages without any programme specifically orientated to social protection for children. However, there were 49 programmes which were described as ‘general social welfare’ and these included children as potential beneficiaries for a range of benefits such as nutrition, emergency assistance and healthcare. Hence, child social protection at community level comprises a mix of child specific programmes and programmes which include children as beneficiaries, but which are not exclusively targeting children.

<table>
<thead>
<tr>
<th>Target</th>
<th>Social Protection Program</th>
<th>Sub-Categories</th>
<th>States/ Regions</th>
<th>Benefits (Type) per Beneficiaries</th>
<th>Eligibility Criteria</th>
<th>Types of Donor</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHILDREN</td>
<td>Education (18)</td>
<td>Access to Education (Primary &amp; Secondary)</td>
<td>Kachin, Kayah, Kayin, Mon, Rakhine, Magway, Ayeyarwaddy, Mandalay</td>
<td>Cash (MMK)</td>
<td>Reported poor school aged children of the community</td>
<td>Village/ NGOs/ Individuals</td>
</tr>
<tr>
<td>WOMEN</td>
<td>Maternal Health (1)</td>
<td>Financial Support on Childbirth</td>
<td>Kayah</td>
<td>Labor Support+ Cash (MMK)</td>
<td>All reported poor pregnant women of the community</td>
<td>Village</td>
</tr>
</tbody>
</table>

When comparing child-orientated schemes to other beneficiary schemes, the typical number of beneficiaries, average fund size and average value of benefits were all higher for child-orientated schemes than for other beneficiaries, and were more likely to be funded by village donations. When considering the likely coverage of community based schemes, we can estimate that 3.5% of all children would receive benefits from a community based scheme, or around 6% of all
households with children. Survey data from Myanmar indicates that 30% of households with children report unmet needs for health, education or social welfare for children in the household suggesting that community based schemes address around 20% of the need at community level. However, as indicated before, many non-specific schemes also include children as potential beneficiaries, and so the likely coverage may be higher.

Table 2: Comparison of child-orientated and other social protection schemes

<table>
<thead>
<tr>
<th>Beneficiary</th>
<th>Villages with programmes</th>
<th>Average beneficiary number per scheme</th>
<th>Average beneficiary number per 100 households</th>
<th>Average fund size</th>
<th>Average value of benefit</th>
<th>Typical donor profile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children</td>
<td>16</td>
<td>17</td>
<td>14.5</td>
<td>K631,614 (US$ 732.5)</td>
<td>K56,486 (US$65.5)</td>
<td>Village donation</td>
</tr>
<tr>
<td>Other</td>
<td>35</td>
<td>10</td>
<td>8.5</td>
<td>K543,899 (US$ 631)</td>
<td>K49,347 (US$57.2)</td>
<td>Village donation, private donors, village youth funds</td>
</tr>
</tbody>
</table>

Table 3: Summary of types of support for child-orientated social protection schemes

<table>
<thead>
<tr>
<th>Scheme</th>
<th>Type of support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td>Stationary support (6), School building renovation (4) Student awards (3) Support for teachers costs (2) Out-of-school study (2) Early child education (1)</td>
</tr>
<tr>
<td>Health</td>
<td>Nutrition (1) vaccination &amp; child health (3)</td>
</tr>
</tbody>
</table>

When considering the role of community schemes in the wider provision of essential education, health and social services for children, expenditure through community based schemes may in fact exceed central government spending, particularly in social welfare and social protection.

Policy Implications:

Community based social protection schemes are already playing a major role in overall social welfare & social protection services

The presence of community based social protection schemes in all the villages sampled confirms earlier reports of the near ubiquitous nature of community led mechanisms in Myanmar. Furthermore, the scale of delivery of benefits through community led systems confirms the significant role played by community systems in overall social protection. If these findings are representative of provision of community based social protection related services in Myanmar, the projected value of annual expenditure by community based schemes is US$211 million, approximately 0.31% of annual GDP. When compared with combined government spending on health, education and social welfare combined (2.24%), community based schemes spend approximately one dollar for every eight dollars spent by government. When this is narrowed to social welfare related benefits only, community based schemes spend three dollars on social welfare for every dollar spent by central government, where social welfare spending represents 0.02% of GDP. Where the social protection system in Myanmar is still in the early stages of development, the role of community based systems, many pre-dating the more formal,
government led systems, needs to be formally acknowledged, and consideration needs to be given as to how to better integrated community based systems in wider social protection. Child related issues represent a significant financial challenge to households. Out-of-pocket spending for education is conservatively estimated at 30% of overall expenditure, with school fees amounting to up to 6% of annual household income21. A study of causes of dropouts in rural communities revealed that 53% of families of children who had discontinued school cited poverty as the main reason. This relates not only to inability to pay school fees, but also the pressure on children to work to supplement the household income. This will be explored below.

A recent review of healthcare financing in Myanmar found that out-of-pocket expenditure on health accounts for 87% of overall expenditure22, with 28.6% of households experiencing catastrophic health payments (often resulting in unsustainable debt). Healthcare costs amounted to 40% of non-food expenditure. A survey of 6,000 rural households in the Dry Zone found that healthcare accounted for 14% of ALL household expenditure23, and that high proportions of healthcare expenditure were associated with high levels of ‘high-risk’ debt24. The 2010 Integrated Household Living Conditions Analysis estimated average healthcare spending per household at around $32 per year, with expenditure in urban areas nearly twice that of rural areas25.

Community based social protection systems demonstrate a high level of contextual appropriateness

Community based systems demonstrate a wide range of approaches to child social protection issues, covering nutrition, education, social development and healthcare needs. Most appear to have developed based either on community need, or in some cases, the availability of a donor willing to support a certain activity. However, careful study of reported needs of families with children indicate that the main priorities for children are education, health and nutrition26. A public opinion survey conducted in 2012 to determine public priorities for government spending on social welfare issues identified children’s education as the number one priority overall, and education and health were the two main priorities for child-orientated social welfare spending27. Hence, it is encouraging to observe that community based systems are working to address needs which are given high priority by the public, suggesting that most schemes do in fact emerge as a response to felt and articulated needs by communities. This further reinforces findings from other studies that community based systems offer a significant advantage to centrally administered schemes by their ability to adapt to local needs and preferences.

The majority of community based programmes had inclusive criteria

Despite concerns that community based schemes would operate on an exclusive basis, with restrictive eligibility criteria, the majority of schemes studied demonstrated broadly inclusive criteria, including anyone resident in the village who had a reported need which was covered by

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21 U Tin Nyo (2011) Educational and Vocational Training Issues and Strategies, Yangon
22 Countdown 2015 and WHO Health Account Series
24 Debt owed to money lenders, at high interest.
the scheme. Only a small percentage (11%) limited provision to those who were ‘native’ to that village, and only 1% of schemes required membership of a village association to be eligible. However, this data was based on reported eligibility criteria, and there was no data on whether these criteria were applied in an equitable and non-discriminatory way.

**Community based schemes have limited effectiveness due to small operating capital**

When compared with reported need, and the usual amounts of reported needs, community based systems appear at best to be able to address the needs or between 20 and 30% of those who have need, and the size of benefit in many cases is insufficient for need. For example, the typical cost of education per year is 65,000 kyat (depending on grade) and yet the typical benefit for education from the schemes studied was 56,000 kyat. Healthcare costs vary more significantly, and so are more difficult to estimate. However, when estimating the size of capital and operating expenditures, coverage and effective coverage appear to be significantly limited by the lack of funding. Programmes were typically funded by one main source. Government funding was identified in only one of the 139 schemes.

**Limited evidence exists for the benefits of up scaling programmes**

One community scheme reported having assistance from an NGO, which included training, a seed fund and additional support to develop eligibility criteria, and this village reported an increase in both the number of beneficiaries and the value of the benefits provided. However, data on outcomes was not available. The village reported that the additional support had enabled their programme to be more effective.

**What are the weaknesses and limitations of community based systems in overall social protection for children?**

When considering the overall scope of social protection for children, elements of human rights (child rights) child development and specific child welfare and benefits all form a matrix of social protection components. When evaluating the community led programmes, few if any make explicit reference to child rights, or indeed any statutory right. Likewise, most schemes are designed to address very specific needs (such as nutrition, need for school fees etc.) rather than as a mechanisms for wider child development. Thus, schemes can best be described as non-formal social welfare or social assistance, some directed towards child development, but without any clear framework. Likewise, few schemes made any reference to other schemes (such as government health or education assistance schemes), but rather tended to operate independently. There was no evidence of formal evaluation or monitoring of schemes for appropriateness or effectiveness, although informal discussions took place from time to time. Thus, the role of community based systems is limited in its current form by a lack of orientation towards child rights, a lack of correlation with a more comprehensive framework for child development and a lack of co-ordination or integration with other child-orientated social services. Thus, although community based systems can effectively and efficiently provide a number of services, more complex, demanding and sensitive issues such as child abuse, child trafficking and child labour may not be addressed through these systems. A lack of accountability could also lead to inequalities, lack of efficiency and innapropriate services, although the current data does not indicate that this is widespread. Another major weakness identified was a lack of understanding of issues relating to disability, and specifically children with disabilities. Whilst most communities would be expected to have at least one school aged child with a disability, none of the villages mentioned specific interventions for child-related disability, and only one programme mentioned
any activities relating to disability, and that was a welfare, rather than rehabilitation or development orientated scheme.

What is the potential role of community based systems in overall social protection for children?

Based on the above analysis, we can see on one hand that the strengths of community based systems lie in their contextual relevance, self-sustainability and efficiency. The role of community based systems, therefore, is determined by three things:

- The existence and role of other (non-community) systems
- Political will to invest in up-scaling of community systems
- Ability of community systems to adapt and broaden their scope and approach

Where there is a well-developed central or regional social protection system, the community role may be determined in a complementary way, either providing services on behalf of a central programme, providing services jointly or receiving assistance to implement services locally. However, in each case, the existence and relative efficiently of other systems will have an impact on the role of community base systems. Furthermore, accepting the above limitations on community systems, a second factor determining the role of community systems is the degree to which a central authority (typically a central or regional government) is willing to delegate authority, provide training and upscale capacity, and then the extent to which the community itself is willing and able to work within a different operational paradigm. Where a community does take on an expanded role, issues of equity, efficiency, data management, reporting and accountability would all need to be addressed, as well as the community’s ability to work within a more rights-based, statutory framework.

How can community based systems be strengthened to play a stronger role?

In order to enable communities to play a stronger role in social protection for children, the limitations of community based systems would need to be addressed. As indicated above, this would include embarking on awareness raising and capacity build to orientate communities to a more rights-based approach, as well as building stronger links with existing social welfare and social protection services outside the community (e.g. local child rights committee, local disability resource centres). Additionally, capacity building would be needed to address issues of equity, efficiency and accountability. Depending on the level of assistance and delegated authority by central or regional government, community schemes would also need to be assisted with reporting and providing accounts of activity and expenditure. Community schemes would also need some form of output and outcome monitoring to provide information on effectiveness and efficiently. Finally, depending on the degree of proposed responsibility, community schemes would need to have access to increased funding, either as initial capital or additional operating funds. A proposed mechanism for scaling up of community based systems is described below, under ‘Policy Recommendations’, detailing the principles of the ‘Community Led Action for Social Protection (CLASP)’ approach.

Limitations of this study

Although providing representation of eight of the 14 States and Regions in Myanmar, and capturing different areas (coastal, central, hilly and delta) the sample size was still relatively small, and predominantly rural, thus not fully reflecting the Myanmar situation, which is 30% urban or
peri-urban. The existence of community based social protection mechanisms in urban areas is known, but has not been extensively studied, and this study draws on predominantly rural data. Hence, the findings cannot be considered to be truly representative of Myanmar, and indeed, question remain as to the existence, nature and effectiveness of community based systems in urban areas. The incomplete data from 11 of 50 samples further weakened the study, and although the remaining data was robust, sampling errors due to incomplete data cannot be fully excluded. This study also did not include any indicators of relative coverage, effectiveness or impact of community systems, and so only the form, activities and operating budget of schemes can be reported. Likewise this study did not include any confidential reporting on actual delivery, so we rely on the community respondent to accurately report what was delivered to beneficiaries, without any corroborating evidence from beneficiaries that this is what they actually received.

**Policy recommendations:**

**Further study into the outputs and impact of community based systems can determine effectiveness and efficiency**

Following the limitations of this study, it is clear that further study, in particular evaluating the outputs and impacts of community based systems, would provide more robust evidence as to the efficacy of community systems. Such as study could either be done as a longitudinal ‘Action Research’ type study, or a comparative study of social protection indicators in villages where community based systems were and were not in place. However, given the near ubiquitous presence of community based systems, a genuine case-control study would be difficult.

**Pilot programmes to assess the requirements and potential benefits of up scaling of community based programmes should be undertaken**

Pilot programmes can be established to assess the needs, approaches and likely impacts of scaled-up community systems. One such scale-up approach is the Community Led Action for Social Protection (CLASP) approach, which aims to awareness of the community of wider, rights based and statutory social protection, to increase the responsiveness of local government and CSO to provide support for social protection o communities and to increase the ability of the community itself to address social protection issues in a more comprehensive, effective, efficient and transparent way.

*Figure 4: schematic representation of CLASP approach*
The model starts with a visit to each village/ward to explain the project activities, and form a responsible village committee (or delegate responsibility to an existing village development committee if appropriate. The project will then collaborate with the village to establish a ‘community learning centre’ which will act as a hub for information, co-ordination, meetings, self-help groups and training for social protection issues. This will build, where possible, on existing structures and systems where these are amenable to such an approach. Through an iterative process, research will be conducted into existing social protection systems, and initial capacity building will be done at community level to facilitate the first stage of development of community social protection plans. Community plans may draw on a decision matrix (see Table 5) which describes different approaches to social protection. Community plans would not be limited to the matrix choices, but available budgetary support would be limited for each community. Hence, for example, a community may choose to invest the majority of funds into a health insurance scheme, or, conversely, spend those funds on educational assistance, establishment of a rice bank, mass immunization of children, etc. The plans would be developed in collaboration with the consortium, and each plan would be approved for a 2 year trial, with close review at the community learning centre. In parallel to the capacity building at community level, capacity building of CBOs, NGOs, INGOs and local government staff who are in a position (in terms of proximity, capacity and mandate) to provide support to the community social protection plans. For example, if a community decided to focus on formation of non-formal education as part of their plan, an NGO or INGO would then be called upon to provide the training. Likewise, if referral for assistance for children with disabilities was required by the community plan, local providers would need to be given capacity building to respond to this. Selected organizations would be given a general training on social protection as well as targeted training relevant to their area of input. In the same manner, local government staff whose role and mandate would also be relevant to social protection would also be given capacity building. This would include educational, administrative, health, social welfare and judiciary staff. In terms of the community-led social protection planning, the process will initially identify (through research) existing systems and strengths, and then, in discussion with the project staff, the committee will draw up a social protection plan to pilot. Funding for the pilot will be allocated from the project, with a maximum value of US$2,500 per village, adjustable according to population. Although not restricted to these categories, villages may develop plans according to a ‘basket’ of policy options, as listed below:

**Table 5: ‘basket’ of options for community led child orientated social protection**

<table>
<thead>
<tr>
<th>Children</th>
<th>Conditional Cash Transfer</th>
<th>Systems strengthening</th>
<th>Capacity &amp; awareness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>Free basic healthcare</td>
<td>Specific disease screen &amp; treat</td>
<td>Early childhood development training</td>
</tr>
<tr>
<td>Education</td>
<td>Abolition of all user fees</td>
<td>After-school programmes</td>
<td>Teacher education enhancement</td>
</tr>
<tr>
<td>Social protection</td>
<td>Nutrition support</td>
<td>Reporting of child abuse &amp; child labour</td>
<td>Family based training to prevent child abuse</td>
</tr>
<tr>
<td>Economic/livelihoods</td>
<td>CCT for children attending school (reduce child labour)</td>
<td>Family support to reduce child labour</td>
<td></td>
</tr>
<tr>
<td>Legal</td>
<td>-</td>
<td>Community mechanism</td>
<td>Training on child labour &amp; anti-trafficking</td>
</tr>
<tr>
<td>Children with disabilities</td>
<td>CCT</td>
<td>Systems</td>
<td>Capacity &amp; awareness</td>
</tr>
<tr>
<td>Health</td>
<td>Cash transfer for general health</td>
<td>Access to rehab</td>
<td>Health professional &amp; PHC training</td>
</tr>
<tr>
<td>Education</td>
<td>Additional grants for education access</td>
<td>School modification</td>
<td>Teacher &amp; community training</td>
</tr>
<tr>
<td>Social protection</td>
<td>Income protection</td>
<td>SHG</td>
<td>SHG &amp; CBR group training</td>
</tr>
</tbody>
</table>

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These options could be included in a way which builds on existing systems and incorporates new elements, as well as linking to assistance provided by NGOs and CBOs. Likewise, some aspects would require greater collaboration with local government. The village plan would be funded from the grant, in co-operation with the project staff, and staff would then support the village to enact the plan through monthly meetings at the community learning centre. Lessons learned would need to be collated, centralized and analysed to effectively inform broader policy development.

**Community based systems need to be designed to have stronger links with existing programmes, and to work in a complementary way**

Following the above proposal, stronger emphasis needs to be placed on determining the role of community based systems, and how those will complement existing services. This requires a planning process where communities are fully included, and a willingness of central and regional authorities to delegate powers, provide funding and technical support to communities to ensure that communities have sufficient resources to undertake delegated roles. This could entail the establishment of regional and local social protection committees, where communities are represented. The process of integration of community based systems can further be strengthened by regional (sometimes referred to as territorial planning) planning for social protection, which allows regional governments (as opposed to central governments) to identify locally relevant priorities and to draw more on local resources, approaches and innovations to address issues in a more contextually appropriate and relevant manner. Regional planning can more effectively define and clarify the role of community based systems.

**An evidence based approach is need to assist planning process**

Frequently, planning is based on political priorities rather than actual needs. Where community groups have the access to, and frequently the mechanisms to collect localized data, the potential for using and evidence based approach to planning of community based social protection is significant. Key to this process is a way to collect data in a uniform way to allow for analysis, and the ability to use evidence to set policy priorities in a way which is transparent and which allows for participation by communities in decision making.
4 Social protection and child protection: two sides of the same coin?

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- do not quote without author’s approval -

1. Introduction

There is widespread recognition that children are a particularly vulnerable group; they have different basic needs than adults do, they are dependent on others for the fulfilment of their needs and the denial of those needs can have far-reaching and long-term adverse consequences (Roelen and Sabates-Wheeler 2012, White, Leavy, and Masters 2003, Sabates-Wheeler, Devereux, and Hodges 2009). The policy areas of social protection and child protection are part and parcel of the response to children and their vulnerabilities. Nevertheless, both policy areas have largely developed in silos (Roelen, Long, and Edström 2012). This holds in both academic and policy terms. Whilst issues of child protection are mostly dealt with in disciplines of child psychology and childhood studies, social protection is largely appropriated by economists and social scientists. Similarly, national governments, international organisations and NGOs often deal with issues of child protection and social protection in different departments and through distinct sectoral policies. It is increasingly recognised that this dichotomy is artificial (Shibuya and Taylor 2013), and that it compromises the effectiveness of the response to the wide set of needs of vulnerable children.

The issue of poverty is a case in point to demonstrate the blurry boundaries of the fields of social protection and child protection. Poverty and economic vulnerability in and of itself can be considered a violation of children’s rights and their protection. In addition, it is an important factor in causing or reinforcing other types of child protection violations, including child labour, trafficking, abuse and neglect (Jones 2011, Barrientos et al. 2013). Given social protection’s remit in terms of protecting people against and lifting them out of poverty, it can play both a direct and indirect role in preventing child protection violations. Linkages between social protection and child protection are further exemplified when considering the response to such violations. Social protection programmes have the potential to play an important role in responding to child protection violations, both in terms of ameliorating its effects as well as supporting recovery and redress. The potential for linkages between social protection and social protection is also evident when exploring response mechanisms on the ground and at community level, particularly in resource-constrained contexts. The frontline response to issues of poverty, vulnerability as well as child protection concerns is often provided by community members, and increasingly so by volunteers. An integration of efforts makes sense; at household level, a strong delineation between issues of child protection and social protection is not relevant.
This paper explores the potential for synergies and linkages between the policy areas of social protection and child protection, and examines entry points for providing a more comprehensive response to vulnerable children. Firstly, it establishes a framework that sets out the causes and consequences of child protection violations and the role that social protection can play in preventing or mitigating the impact of such violations. Against the backdrop of this framework, it then challenges a number of assumptions underlying the design and delivery of social protection programmes and their foreseen impacts in terms of child protection, most notably the aspects of conditions and receipt of cash. Next, this paper considers issues of implementation in working towards a more comprehensive and coordinated response to vulnerable children building on synergies in implementation and delivery. In particular, it will address questions around the appropriate role of community volunteers in the provision of services at household level. Finally, this paper provides a critical reflection and concludes that opportunities for synergies and linkages are plentiful, and should be taken advantage of to their full potential, but that design, implementation and delivery of social protection programmes need to be subjected to due scrutiny and a healthy dose of realism rather than romanticism.

2. Social protection and child protection – a conceptual framework

Several papers have considered the link between social protection and child protection, both in terms of the issues it aims to address as well as the policies or programmes to respond to such issues.

Jones (2011) considers the drivers of child protection violations in Nigeria and how social protection interacts with those drivers, thereby seeking to identify different pathways through which social protection can prevent such violations. The main violations include child trafficking, harmful forms of child labour and domestic abuse, with key drivers being poverty and economic vulnerability, health shocks and chronic illness, socio-cultural attitudes and practices and institutional weaknesses. A number of different entry points for existing social protection policies in Nigeria were identified that could lead to a more coherent response to these various violations, ranging from reducing child labour through higher income to cross-referral to other services using the community-based mechanisms employed in health insurance schemes (Jones 2011).

A concept note by Roelen and Delap (2012) considers the causes and consequences of loss of parental care for children and the role of social protection in preventing and responding to the loss of such care. Loss of parental care can have far-reaching adverse consequences for children: “Children without parental care find themselves at greater risk of discrimination, inadequate care, abuse and exploitation. Inadequate care can also impair children’s education, emotional and physical development and health.” (Roelen and Delap 2012). Poverty and economic vulnerability play an important role in the loss of parental care but also has an effect on alternative care choices for children and the quality of care provided by parents or other carers. Social protection was considered key in preventing the loss of parental care as well as in supporting preferred care solutions for children without parental care, such as kinship or foster care, through reducing levels of poverty and vulnerability. Barrientos et al. (2013) find that social transfers can indeed prevent family separation by avoiding involuntary migration.

The acknowledgement that social protection can play a role in protecting and addressing the needs of vulnerable children is not new. In policy debates around the response to Orphans and Vulnerable Children (OVC), social protection and cash transfers are widely considered to be an appropriate policy measure (ULICA 2009 in Shibuya and Taylor (2013)). The adverse impacts of poverty and vulnerability on child protection outcomes have been widely documented. Richter and Naicker (2013) point out how the resultant stress can seriously undermine parent-child and
carer-child relationships, particularly in HIV/AIDS contexts. Cash transfers have been considered a suitable and preferred social protection mechanism to help HIV-affected households to cope with poverty and vulnerability as a result of being affected by HIV and AIDS; they are fairly easy to implement and administer, faster to scale up and more effective in reaching large parts of the population than other programmes may be (Adato and Bassett 2012). This potential role of social protection in terms of preventing or mitigating the effects of child protection violations holds beyond the specific context of HIV and AIDS.

Barrientos et al. (2013) provide a useful overview of the link between social transfers and child protection and consider the potential impact of social protection at three different levels: (1) direct effects; (2) indirect effects; and (3) implementation effects. Whilst the direct effect refers to elements of social protection programmes explicitly designed to address a certain child protection issue (such as the requirement for birth registration or rules on child labour in public works programmes), the indirect effect pertains to unintended outcomes of transfers and services delivered through programmes (such as a reduced risk of family separation due to lower levels of poverty). The implementation effect refers to how particular elements of implementation and delivery may have unintended consequences for child protection, either positive or negative (such as the potential of greater harmonisation with other services through cross-referral but also school drop-out amongst girls given increased care responsibilities due to lack of care facilities at public works sites). Evidence on these different effects of social protection programmes is thin; this is largely due to the outcome variables – birth registration, child marriage, domestic violence, child labour – and the pathways for reaching such outcomes not being part of programmes’ theories of change and therefore not being included in impact evaluations. The evidence that is available points to mixed results. Certain programmes – conditional and unconditional cash transfers in particular, have been shown to increase school attendance and reduce child labour as well as child marriage. By the same token, the increased burden of conditionality in conditional cash transfers has led children to do more informal and domestic work at the expense of leisure time (Barrientos et al. 2013, Sanfilippo, De Neubourg, and Martorano 2012).

Against the backdrop of existing studies, the proposed framework in this paper explores the potential of social protection in preventing and responding to child protection violations. The framework is illustrated in Figure 1. The diagram illustrates that social protection has various entry points into the field of child protection when considering child protection violations in terms of its manifestation as well as causes and consequences. Social protection can be thought of having different functions, as outlined by Devereux and Sabates-Wheeler (2004). These consist of i) preventive, ii) protective, iii) promotive, and iv) transformative roles. Although most commonly understood in terms of social protection’s impact on poverty and livelihoods, thinking along the lines of these functions is also helpful when considering the potential impact of social protection on child protection. Social protection can play a preventive role by impacting on factors that increase the risk to child protection violations, including most notably poverty and vulnerability. This fits the widely recognised need for a greater focus on prevention of child protection violations (Forbes et al. 2011). The protective role refers to the potential of social protection interventions to ameliorate the effects of child protection violations. School feeding programmes present one example as they ensure that children receive adequate nutrition despite neglect at home. Finally, social protection’s promotive role refers to interventions that help overcome the consequences of child protection violations, such as loss of care or psychological harm. One example is the potential for social protection to incentivise or support alternative care

73 Devereux et al. (forthcoming) provide a more general critique of conventional impact evaluations of social protection programmes and argue for an alternative framework that takes closer account of pathways leading to impact that are outside of programmes’ theories of change, including programme processes and social dynamics.
solutions for children after family separation (Roelen and Delap 2012). The transformative function is overarching and pertains to the effect that social protection may have on people’s overall attitudes towards child protection, which could be addressed through awareness programmes linked to conditional cash transfer programmes or child transfers, for example.

**Figure 1 Framework Child Protection and Social Protection**

Social protection can perform these various functions through its particular programmes as well as through the particular implementation, delivery and administration structures underpinning such programmes. The provision of transfers or food vouchers, for example, can address the factors causing child protection violations and respond to physical harm that result from such violations. The way in which these transfers or vouchers are delivered will also have an effect in terms of child protection; a transparent registry may make it easier to link to other services, for example.

The remainder of this paper explores those programmatic effects and implementation synergies in more detail. It points towards the potential benefits of particular programmatic and implementation considerations but also provides a critical reflection of commonly held assumptions about what works best for children and the response to their needs.

**3. Programmatic effects - challenging assumptions**

The framework illustrates the potential role that social protection can play in preventing and responding to child protection violations. That said, little evidence is available about the extent to which different programmes can promote positive outcomes for children and about the pathways towards such outcomes (Barrientos et al. 2013). We discuss programmatic effects two different programme design elements – conditions and delivery - to illustrate the potential impact that social protection can have in terms of child protection and to refute assumptions about what works best. Programme design (including imposing conditions on receipt of transfers) and delivery
(giving cash to women/female caregivers or children directly) might create perverse incentives or side effects that need more consideration.

3.1. Conditions

Conditional cash transfer (CCT) programmes are widely applauded for their positive effects on a range of different outcomes, ranging from poverty reduction to improved school attendance and better nutritional status for children. CCT programmes are based on the premise that poverty presents people with financial barriers to make investments in human capital and require the monetary (or in-kind) support to overcome such barriers as well as an incentive to ensure it is being invested in human capital, as opposed to being spent on other items to meet more short-term needs (Browne 2013). Evidence for positive impacts of CCT programmes is most widespread in Latin America but can also be found in Asia and Africa. A conditional cash transfer programme in Pakistan led to improvements in school enrolment rates for girls and a food for education scheme in Bangladesh resulted in greater attendance rates for participating schools (Sanfilippo, De Neubourg, and Martorano 2012), for example.

Despite their positive effects, the imposition of conditions can also lead to unforeseen perverse incentives or negative side-effects that have repercussions in terms of child protection. Perverse incentives refer to adverse outcomes due to the programme having the opposite effect on the outcome that it is trying to influence. Examples include experiences with CCT programmes that aimed to improve nutritional status for children but achieved rather the opposite due to how conditions were perceived and interpreted. The requirement for children to be underweight in order to qualify for Brazil’s Bolsa Alimentacao programme, for example, led to negative perverse effects as children were kept underweight in order to remain on the programme (Morris et al. 2004). By the same token, the requirement for children to gain enough weight between check-ups as part of a CCT programme in Nicaragua resulted in children being overfed prior to such check-up to guarantee the receipt of transfers (Adato 2008). A study on a food voucher programme in Dabaab refugee camp in Kenya, where the receipt of benefits depended on the number of children in the household being malnourished, highlighted the risk of associating the receipt of benefits with negative outcomes for children (i.e. having your child to be classified as malnourished) (Dunn 2009).

Side effects of programmes, either positive or negative, are usually more difficult to capture than the extent to which programmes lead to (perverse) incentives; the realm of potential side effects is large and many of the domains in which these occur may not be part of programme evaluation’s remit (Barrientos et al. 2013). Nonetheless, evidence on a number of programmes give rise to concerns with respect to child protection outcomes when attaching conditions to programme participation. Public works programmes offer a useful insight into how the attachment of conditions can result in both positive and negative side effects for children.74

Public works programmes have grown increasingly popular in recent years and wide range of evidence is now available confirming increased school enrolment and attendance rates as well as reduced number of hours in paid and unpaid work (Barrientos et al. 2013, Sanfilippo, De Neubourg, and Martorano 2012, Hoddinott, Gilligan, and Taffesse 2010). Despite these positive effects, studies also point towards a large substitution effects that lead to concerns when it comes to child protection outcomes. Firstly, the work requirement in public works leads to children, and especially girls, substituting for the work in and around the house (including caring for other

74Although not generally considered a CCT programme, public work programmes can be considered the ultimate conditional programme as the receipt of cash is tied to work. This work requirement can have quite distinctive positive and negative effects for children that merit a more detailed discussion.
involved patterns house Another explicit provisions can have reinforce within the transfer of cash or food to women will lead to greater autonomy and reduce intra-household inequalities (Soares Veras and Silva 2010). It is also often assumed that such direct transfers will be to the benefit of the household as a whole and children in particular as women are.

more likely to spend the cash on food or other items for children (Sabates-Wheeler and Roelen 2011). However, the extent to which a direct delivery of transfers to women actually addresses patterns of gender inequality is questionable (Molyneux 2006), and dependent on context at best. As Jones and Holmes (2011) point out, many programmes target women in their role as mothers and primary caregivers, thereby reinforcing and perpetuating patterns of gender inequality rather than lessening their levels of vulnerability. Indeed, very few social protection programmes make explicit provisions for informal care, with even fewer programmes addressing engendered patterns of care (Chopra, Wanjiku Kelbert, and Iyer 2013). In some programmes, such as in Mexico, a direct transfer of cash to women was found to increase domestic violence, leading to transfer being complemented with awareness campaigns and involvement of social workers. Other evidence has also shown that cash in and of itself cannot change the power dynamics within a household or change traditional gender patterns (Holmes and Jones 2013). An evaluation of the Child Support Grant (CSG) in South Africa, for example, has shown that although the receipt of the transfer by women works empowering, the entrenched gender patterns prevent any alleviation of women’s care burden or improvement of income-earning activities outside of the house (Patel, Hochfeld, and Moodley 2013). An evaluation of Indonesia’s Program Keluarga Harapan (PKH) concluded that husbands and male household members need to be more closely involved as, after two years of implementation, the programme had been proven ineffective in changing intra-household gender patterns or the relative position of women within the household (Arif et al. 2013).

Another vulnerable group often directly targeted by social protection programmes are children. Often these benefits are provided to (female) caregivers as opposed to children themselves, such as in the case of the Child Support Grant (CSG) in South Africa. In other contexts these are delivered directly to eligible children, including in Botswana’s Orphan Care Programme. Although
such a direct delivery ensures that children themselves actually receive the benefits, it can also have repercussions in terms of intra-household dynamics and create perverse incentives with respect to adults’ motivations to care for children. A study in Botswana found that especially adolescents are very aware of their position as direct programme beneficiaries and that this ‘status’ can cause tensions between carers and children as well as between biological children (who are not programme beneficiaries) and programme recipients.

In contexts with high rates of single or double orphans, most notably in Sub-Saharan Africa, the use of cash transfers is also increasingly considered as a policy option to incentivise kinship or foster care (Roelen and Delap 2012). Although this could provide an important alternative to the eroding traditional support mechanisms provided by extended families, one should also be wary of perverse incentives. Care for orphans or other vulnerable children being accompanied by a substantial transfer may lead to the ‘commodification of children’ (Roelen et al. 2011). The provision of care to children being motivated by monetary considerations may result in worse rather than better quality of care and even put a child at a higher risk of abuse and neglect. Generally, the more closely related children are to their kin, the better the quality of care is (Barrientos et al. 2013).

4. Implementation synergies – limits of volunteerism

An integration of efforts in the implementation of social protection and child protection policies makes sense; at household level, a strong delineation between issues of child protection and social protection does not exist. As pointed out in reference to children affected by HIV/AIDS, it is the cumulative risk and multiplicity of shocks that does the greatest harm (Long and Bunkers 2013). Experience, and particularly evidence of that experience, trying to link implementation of social protection and child protection programmes is thin on the ground. Implementation synergies that are practised often entail social protection programmes aiming to ensure access to services that are important for child protection, including training and information and birth registration. Addressing the problem of child vulnerability also opens up opportunities for a more integrated frontline response, whereby the identification and assessment of needs and referral to appropriate services is harmonised (Barrientos et al. 2013).

Countries in Latin America hold most experience in streamlining services by integrating information systems and harmonising eligibility criteria. A single registry system in Brazil – CadUnico, and similar mechanisms in Colombia, Chile and also India allow for great improvements in a coherent response to vulnerable children and their needs (Barrientos et al. 2013). Zimbabwe provides one of the practical examples in Sub-Saharan Africa where implementation of social protection and child protection policies has been integrated. Following evaluation findings of National Action Plan I for Orphans and Vulnerable Children suggesting that the provision of material support successfully tackles material hardship but is less effective in addressing other violations of child protection, National Action Plan II combines the provision of material support with facilitating access to child protection services (Long and Bunkers 2013).

An important requirement for such a comprehensive response is to have a clear focal point that can identify and assess the problems at hand, respond to problems, make appropriate referrals when necessary and provide follow-up (Roelen and Long 2012). This requires knowledge of and linkages to the various different services available to vulnerable children, including social protection and child protection but also education and health. Community-based mechanisms and the engagement of community volunteers present an appealing option in resource- and capacity-constrained contexts for the implementation and delivery of services in a coordinated manner given the fairly low level of required resources and the close links to individual children.
and families. Communities also form the interface between government and civil society (Wessels 2009). The importance of community support structures is compounded in contexts where traditional coping mechanisms, such as provision of care by extended families, has been eroded due to for example HIV and AIDS (Germann et al. 2009).

Community-based schemes have a long tradition in providing health services to rural and remote areas (Chandang'oma and Kakoma 2008) and have played a crucial role in the response to HIV/AIDS (Krivelyova et al. 2013), both as a result of organic organisation of Community Based Organisations (CBOs) (Cook and Seymour 2013) and donor-funded mechanisms (Rodriguez-Garcia et al. 2013). Community-based schemes are now increasingly being used in implementation of social protection and child protection programmes and sometimes a combination of such programmes, such as in Zimbabwe’s National Action Plan II for Orphans and Vulnerable Children (Long and Bunkers 2013). Bottom-up involvement through community involvement is often claimed to increase ownership of programmes at community level and can create social cohesion as well as social inclusion and solidarity (Chandang’oma and Kakoma 2008). In addition, community members themselves can be said to be at the forefront of issues faced by those most vulnerable in the communities and thus most able to respond in an adequate and timely manner (Roelen et al. 2011). The fact that the involvement of community structures considerably lowers the cost of implementation is undoubtedly another important reason for their popularity. A cross-country evaluation of community responses to HIV/AIDS illustrates the significant contribution that community volunteers make in monetary terms; the value of unpaid volunteers’ time ranges from 40 to 69 percent of CBO and NGO budgets in respectively Kenya and Zimbabwe (Rodriguez-Garcia et al. 2013). A review of different care models for children without parental care – institutional care, home based care and support, and community-based care with micro-income generation – in Nepal showed that community-based care models are most cost-effective (Pradhan, Bhatta, and Bam 2012).

Community volunteering indeed holds many benefits for the community, those benefiting from the services and the volunteers themselves. Members of the Areas Coordinating Committees (ACCs) and the Community Welfare Assistance Committees (CWACs) in Zambia, who play important roles in implementing the Social Cash Transfer (SCT) programme and other services, pointed towards increased popularity with and respect from community members, greater involvement in community issues and being perceived as more trustworthy by the community as personal benefits. The provision of support to the poorest and most vulnerable in the community and capacity building were seen as community-wide benefits (Chandang’oma and Kakoma 2008). Members of the Community Care Coalitions (CCC) in Tigray, Ethiopia also pointed towards the personal fulfilment that acting as a volunteer brings and the benefits of helping the most vulnerable in the community (Berhane et al. 2012). Child Protection Community Committee (CPCC) members in Mozambique stressed the importance of knowledge within the community about who the most vulnerable in the community and how the use of community volunteers allows for using that knowledge to its full potential (Roelen 2011). The proximity to orphans and vulnerable children in their communities was part of the rationale behind the development of World Vision’s CCCs in various countries (Germann et al. 2009). In many countries where a qualified social work force is unavailable, community volunteers can play an important role in filling the gap. In other cases, they can relieve social workers of their increased work burden, such as in Botswana and South Africa. Resulting from an extension of their tasks and responsibilities, such as the implementation and administration of social protection, and greater demand for such services, social workers have come under increased pressure (Jamieson 2013, Roelen et al. 2011).

Notwithstanding the positive contribution that community volunteers can make, relatively little attention has been paid to the limits of volunteerism in fulfilling these different roles. Little is
known about underlying motives to act as a volunteer, and the pressures that volunteerism brings to individual volunteers and their families in terms of community pressure and lack of time for income-generating or other activities. Members of Community Care Coalitions (CCCs) in Tigray, Ethiopia, for example, indicated that their involvement in the implementation of the Social Cash Transfer Pilot Programme (SCTPP) interferes with their own daily activities. This proved not only a problem for the community volunteers themselves; social workers in charge of programme administration reported that cooperation with volunteers was complicated by the lack of dedicated time (Berhane et al. 2012). The absence of clear incentives also gives rise to questions over the effectiveness and quality of their work (Chandang’oma and Kakoma 2008). There is little knowledge about the pathways between community engagement and impact (Cook and Seymour 2013). In addition, it is uncertain to what extent committees are actually able to provide the wide range of (complementary) services given lack of required resources (transport, supplies), human capacity and training (literacy) and weak supply of statutory services. Research on Community Child Protection Committees (CPRCs) in Mozambique showed that despite the best of efforts, their support hardly moves beyond the provision of basic needs such as food and clothing. Illiteracy, resource constraints, lack of awareness and weak statutory services were identified as main obstacles (Roelen 2011). A review of World Vision’s Community Care Coalitions (CCCs) confirms such capacity constraints and highlights the need for better training and more solid knowledge base and set of skills to be able to provide an adequate response (Germann et al. 2009).

Finally, the role of community-based mechanisms is also subject to concerns over sustainability. Many community-based committees, coalitions or groups struggle to perform their activities once no longer supported by the NGO or donor that was instrumental in their establishment (Germann et al. 2009, Wessels 2009). Funding dries up and capacity levels is often too low to be successful at acquisition of funds. These insecurities consequently lead to concerns over sustainability of programmes relying heavily on community involvement, and volunteerism in particular. A rethink of funding modalities and of capacity building efforts is required, both of individual volunteers and CBOs and NGOs as a whole (Rodriguez-García et al. 2013). There also needs to be greater recognition of the context-specificity and the ways in which community-based engagement can lead to both positive and negative effects depending on place, problem and type of policy under consideration; there is no one-size-fits-all solution. Finally, community-based efforts should be firmly placed within the wider landscape of policies so that it becomes part of a coherent response rather than a parallel mechanism (Campbell et al. 2013).

An important step towards such a coherent response would be the establishment of a case management and referral mechanism, with one focal point that holds responsibility and oversight of service provision to children. (Roelen, Long, and Edstrom 2012). Current ongoing initiatives, such as the community-managed case management system in Zimbabwe (Long and Bunkers 2013) may offer valuable lessons learned or best practices. Lessons can also be learned from experiences with the development of a workforce that sits between a statutory social workforce and community volunteers. One such example is the Isibindi model in South Africa. The increased need for service provision for children, largely as a result of the HIV/AIDS epidemic, has instigated the development of the Isibindi model and establishment of the Child and Youth Care Worker (CYCW) workforce (Jamieson 2013). This model presents a hybrid form of service provision with a workforce that operates at the community level but has a degree and receives remuneration. This alternative form of responding to children’s needs can provide a solution where demand for services is high but resources are limited whilst ensuring an adequate and appropriate response. It has to be noted that the establishment of such an alternative workforce is not without problems; there are large discrepancies in the levels of pay that CYWCs working in the public sector receive versus those working for NGOs, and the new model has also led to tensions with the statutory social workers (Jamieson 2013). Nonetheless, an exploration of how communities
can be involved in the provision of services is vital for a sustainable and adequate response to children’s vulnerabilities and needs. In many countries this will not require the wheel to be reinvented, but rather the re-integration of indigenous knowledge and community practice that has been largely lost in the formalisation of social work (Davis 2009).

5. Discussion and conclusion

This paper aimed to explore entry points for social protection into the field of child protection and critically discussing programmatic effects and implementation synergies. It provides a framework for considering such entry points, conceptualising the role of social protection in reference to its preventive, protective, promotive and transformative functions. The framework illustrates how social protection can perform such functions through its programmes directly as well through the mechanisms of implementation, delivery and administration. A review of experiences on the ground (albeit limited) leads to a critical reflection of commonly held assumptions about the role of social protection in child protection outcomes.

Social protection has the potential to positively impact on children in terms of preventing and mitigating the effects of child protection violations. Programme design can reinforce or counteract such positive effects. The imposition of conditions on the receipt of transfers can result in the desired behaviour (such as sending children to school or providing with adequate nutritional intake) to prevent child protection violations. However, it can also create perverse incentives and perpetuate or compound children’s vulnerable situations. Examples from CCT and public works programmes indicate how conditions resulted in children being under- or overfed and substituting adult work with their own leisure time. Similarly, whilst a direct delivery of transfers to the targeted vulnerable groups – such as women and children, can help towards counteracting patters of vulnerability and inequality, they can also reinforce those. Whilst many women indicate that being the direct beneficiary of a cash transfers makes them feel empowered and allows them to spend the money to the benefit of the children and family as a whole, findings show that it may increase domestic violence and intra-household tensions. The latter also holds when making children direct beneficiaries of a transfer, potentially undermining the benefit of such a transfer. These examples highlight that choices about design of social protection programmes should be subject to due scrutiny and not be guided by assumptions. Context is crucial with particular programmatic elements leading to the desired effect in one area or for one group, but resulting in adverse consequences elsewhere.

A consideration of implementation synergies, and particularly the role of community volunteers therein, emphasises that community-based mechanisms have great potential in being part of a comprehensive response to children’s risks and vulnerabilities. They operate at the forefront and have the potential to identify, assess and respond to problems in an efficient and effective manner, thereby encompassing the policy areas of social protection and child protection. That said, the involvement on community organisations, and particularly on volunteers, should not be guided by misplaced idealism but by constructive realism that addresses concerns of responsibility, feasibility and sustainability. Despite the widespread willingness at community level to care for and support the most vulnerable in their midst, there are limits to volunteerism. Many volunteers live in poor circumstances themselves and the time spent on community volunteering may go at the expense of their own income generating activities. Capacity constraints are widespread and volunteers often lack the appropriate training and thereby knowledge and skills base, particularly in relation to more complex child protection matters. Weak availability of and links to government services concurrently undermines their ability to respond to problems. Finally, there are issues of sustainability. As pointed out by Wessels (2009) and Germann et al. (2009), many community-based mechanisms struggle without the continued support of NGOs or
donors. As such, there is a need for critical reflection on the appropriate role of communities vis-à-vis the role of government and other stakeholders. The role of volunteers needs to be revisited in terms of their appropriate levels of responsibility and activities, calling for more creative solutions in terms of linkages to the social workforce and statutory services. As indicated above, above all an integrated response to children requires a focal point that is able to link across services and sectors and can be held accountable for making such linkages. Government is not only the most appropriate actor for facilitating or taking on the role of such a focal point, it is also ultimately responsible for the protection and wellbeing of its population and children (Wessels 2009).

Despite the entry points and synergies identified in the framework and discussion above, this paper does not imply that the policy areas of child protection and social protection can be fully integrated or absorbed by one another. Although there are areas of considerable overlap and a strong rationale for joining efforts, both policy areas have components that are outside the remit of the other. Definitions of these two different fields illustrate the overlap and discrepancies.

*Child protection* can be considered as:

““the set of laws, policies, regulations and services needed across all social sectors – especially social welfare, education, health, security and justice – to support prevention and responses to protection-related risks” for children”

(UNICEF, 2008a and 2008b in (Shibuya and Taylor 2013))

*Social protection* can be defined as:

“all public and private initiatives that provide income or consumption transfers to the poor, protect the vulnerable against livelihood risks, and enhance the social status and rights of the marginalised; with the overall objective of reducing the economic and social vulnerability of poor, vulnerable and marginalised groups”

(Devereux and Sabates-Wheeler 2004).

Despite these definitions of child protection and social protection being broad and pointing to a wide remit of both policy areas, it is also evident that they do not fully overlap or that one does not entirely encompass the other. Whilst both point towards the realm of rights, policies and services to promote welfare and reduce risk and vulnerability, child protection incorporates the very particular issues of justice for and security of children. In more narrow terms, Barrientos et al. (2013) refer to child protection outcomes as “a) the negative outcomes or damaging exposure of children to violence, exploitation, abuse and neglect, and b) improved outcomes or reduction in exposure to these phenomena.” Social protection has a wider remit in terms of the population it aims to cover – poor, vulnerable and marginal groups, but a narrower focus in that it does not focus directly on reducing risks to violence, exploitation, abuse and neglect. Increased levels of funding for social protection in recent years illustrate both the opportunities and the tensions that the linkages between social protection and child protection offer; whilst such new resources can provide a new source of funding to tap into for child protection related services (Roelen, Long, and Edstrom 2012), it can also crowd out child protection interventions (Davis 2009). Stronger linkages between social protection and child protection policies have often been called for under the heading of ‘child-sensitive social protection’. Although child-sensitive social protection seeks to maximise the potential benefits and minimise the potential negative effects for and on children (Roelen and Sabates-Wheeler 2012), it does not advocate for integration of both policy areas.

In sum, the identification of synergies and linkages between the areas of child protection and social protection should thus seek to maximize potential areas of overlap and congruence of
policy impact, but not intend to conflate both policy areas into one. In doing so, it should build on the opportunities available but not lose sight of practice and experience on the ground and be informed by realism rather than romanticism.

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Notulensi Policy Discussion:

Moderator: Fiona Howell (AusAID)
Discussant: Prof. Irwanto, Ph.D (Puskapa UI)
Rapporteur: Deswanto Marbun (UNICEF)

Presenter 1:
Name: Ari Perdana (replacing Dr. Widianto)
Title: How Can Indonesia’s Social Assistance Programs Be More Child Sensitive?

Highlights of Conclusions and Recommendations:

- So far poverty level keeps declining. However, Gini coefficient increases. The pace of poverty reduction is not as big as in the past
- Child dependency ratio among the poor is still high, most of the youth are vulnerable when they move into labor force because finding job is quite hard
- Two big issues regarding child poverty: 1) health - stunting rate is still high, and 2) education - there are > 23 million children in the three lowest deciles
- We almost achieve a perfect enrollment of the first 6 years of education. After 6 years (from 6th to 7th grade, especially) enrollment rate decreases, and the problem comes from children from the lowest quintile
- We have numbers of scattered programs administered by different entities, but how effective are they in tackling poverty issues? It calls for integration.
- 1st reform: targeting of social protection through creation of Unified Database Social Protection Program as a single database for program targeting.
- The biggest issue of PKH: 1) to cover children who are out of school, 2) how to reach children outside family system, 3) how to expand the coverage for all households in the 1st deciles and in Eastern provinces
- The biggest challenge for BSM: 1) how to improve targeting mechanism, 2) how this program can address children not coming from household/family system
- Next stages of reform: at the moment we already have a good building blocks, but how can each program synergize each other so that each building block can be a strong house?
- KPS is the first attempt to integrate different social assistance programs, it is a way to initiating the reform
**Highlights of Conclusions and Recommendations:**

- To draw some trends and lesson from the condition of child poverty in the region
- It is necessary to look beyond monetary dimension of poverty for children
- Macroeconomic growth alone is not enough to support children’s well-being
- The methodology used captures both the multidimensional aspect of poverty and also the depth of poverty. Limitation: social protection is not incorporated
- The numbers in the cell indicate percentage of children living in deprivation, and the color of the cell indicates position with the regional average
- Multiple deprivation approach and monetary approach are different, but complementary and must be applied altogether
- Overlap between children who suffer from severe deprivation and children who belong to the poorest quintile (especially in Cluster A, but not so much in Cluster B)
- Budget analysis is a weakness in many of the countries studied, as there are imbalances between budget allocation and child poverty condition.

**Highlights of Conclusions and Recommendations:**

- 'One size doesn't fit all' - How community-led social protection mechanisms can be effective?
- Since 1960s in Myanmar there has been centralized government social security scheme which was not available for everybody in the country. Traditionally, community-based social protection is rooted in every region in the country
- Mapping of community-based social protection systems in 42 communities (not 39)
- In most programs there is no specific targeting criteria, but of the group-specific programs, mostly are for women and children
- Mean benefit per person is about $62, and the benefit can be delivered in cash, cash + labor, and cash + food
- There is no area that doesn’t have any social protection scheme led by community
- A village typically would have 4 social protection schemes
- So far, they found that annual expenditure by community-based schemes is approximately 0.31% of Myanmar’s annual GDP
• Community schemes do not operate from a rights-based framework, and they are limited by lack of technical capacity and funds
• Recommendations: pilot programs, integration of community-based social system.

**Highlight of Conclusions and Recommendations:**
• How social protection can be linked to child protection?
• What actually belongs to social protection and what belongs to child protection are not easy to identify, as there is overlapping relationship
• Social protection can prevent causes of child protection violations, and it could also protect children even if they are already experiencing child protection violations. Social protection can promote through alternative care given that consequences of child protection violations are already in effect
• Social protection program has documented positive effects on child's condition, but there are problems of perverse incentives, adverse consequences, and power transfer
• We need to increase synergy between social protection and child protection
• Linking social protection and child protection requires critical thinking about the impact of social protection on child protection
• Comprehensive approach for children is needed
• Social protection is not for children only, it is for vulnerable groups
• That being said, social protection is not equal to child protection.

**Discussant’s comments:**
Name : Prof. Irwanto, Ph.D (Puskapa UI)

• The term 'children' is strongly linked to a group of population with specific age and characteristic. But 'children' also refers to a dependent member of the family that in many aspects are not able to control their lives
• We see a slow reduction of poverty, as we gain better understanding poverty among children. What is actually happening? 3 assumptions:
  o maybe we have reached the core of poverty which must be dealt with more creativity & innovation; children are not just poor but they are impoverished by the system (family, state). The problem is like peeling an onion: we have layers inside layers of problems
  o some educated people are working in areas with special characteristic which do not conform to what they read in university. We face diversity in formulation of public policy and social protection.
• little did we understand about marginalization, as some children are not allowed to go to school, some children are forced to get married, etc. Child with disability is another issue of marginalization; parents do not trust them to be able to join normal school, so do teachers. Some children have to go through marginalization and they are less able to control their lives.

• One important ingredient in social protection is we have to identify who are we dealing with in designing social protection

• We also deal with poverty without human faces.

Questions:

1. Ahmad (AusAID)
   It is really striking to learn that > 20% of Myamns living under poverty line but they still want to contribute to community-led social protection. Why is that so?

2. Purwanto (UNICEF)
   Returning children who are out of school to go back to school is still a challenge. Does GoI plan to incorporate out of school children?

3. Ricardo (ASEAN Network)
   Social protection can do a lot to address child poverty. How can social protection address the migrant workers?

4. Santi (Puskapa UI)
   Intrigued with the invitation to be more creative in designing social protection. Most of us highlight formal education as a solution to end child poverty, but some children face difficulties in academics world. Is school the only way out? What about alternative education? [Not a question, anyway]

Answers

1. Ei Ei Thu (Myanmar)
   The historical condition in Myanmar was there was no political will and external assistance, public service was very limited and not satisfactory. The situation somehow raised willingness from community to help each other, as Myanmar had been living under military regime for quite a long time. Once a conflict occurs in a village, the nearby village immediately collect food and stuffs that could be used to help the conflicted village, regardless of race, religion, and gender. Community-based social protection scheme can be a working mechanism for Myanmar.

2. Ari Perdana (TNP2K)
   Out of school children is a challenge, because schools normally do not accept them immediately, they have to go through a rehabilitation or something like bridging program to ‘fix’ them first. It is part of GoI’s agenda to include out of school children, some programs like bridging process/rehabilitation project, PPHPKH (subsidiary of CCT) targets out of school children and working children. The challenge is to scale up to national level.
To response to Prof Irwanto's provoking remark: the debate between aggregate number or specific figure is going to last forever. Policy should address specific problems, though it may lead to unintended consequences. There is also a limit to one policy, as one policy doesn't fit all. We need to think about unintended consequences and limitation of a policy.

3. **Prof. Irwanto (Puskapa UI)**
   Malaysia refuses to protect families/children of undocumented migrant workers, but Malaysia already ratifies the UN Convention. Indonesia doesn’t have the power to deal with that as we also marginalize undocumented migrant workers. We face double marginalization here. Specific circumstances prevent effective and efficient public policies to be implemented.

**FINAL CONCLUSIONS & RECOMMENDATIONS:**

The big challenge is how to design a responsive policy framework to contextualize social protection and to make it adaptable with local needs.
WRAP UP OF DAY 1
Parallel Sessions

Kesimpulan
1. Data statistik menunjukkan bahwa angka kemiskinan dari tahun ke tahun mengalami penurunan, namun angka keluarga rentan tetaplah tinggi dan sewaktu-waktu dapat jatuh ke dalam kemiskinan
2. Kemiskinan struktural diturunkan antar generasi
4. Masih terdapat dimensi-dimensi tersembunyi, seperti pola asuh pada anak, perlindungan anak, dsb
5. Terdapat hubungan yang jelas antara kemiskinan dan pelembagaan anak-anak
6. Kemiskinan mengakibatkan hak anak tidak terpenuhi, bahkan anak rentan diekspolitasi, oleh karena itu prevalensi prostitusi anak dan perkawinan usia dini semakin meningkat di tengah kemiskinan
7. Dalam hal program pengurangan kemiskinan yang dipakai selama ini, masih kurang memperhatikan indikator hak anak
8. Kita tidak bisa memerangi kemiskinan anak dengan cara konvensional, dibutuhkan cara-cara inkonvensional.
9. Perlindungan sosial tidak sama dengan perlindungan anak
10. Fungsi Perlindungan Sosial: untuk (1) pencegahan orang menjadi miskin, (2) perlindungan dari konsekuensi kemiskinan, (3) promosi mengentaskan orang dari kemiskinan dan (4) transformasi struktur yang melanggengkan dan mendukung pola kemiskinan

Rekomendasi
1. Perlu dirumuskan definisi baru yang tepat tentang kemiskinan, bukan hanya sekedar makanan, tetapi juga menyangkut kebutuhan-kebutuhan lainnya (mencakup juga hal-hal di luar perhitungan ekonomi)
2. Dalam pengurangan kemiskinan anak, perlu dilakukan pendekatan kultural
3. Dalam mengatasi kemiskinan perlu membongkar akar masalah atau penyebab, bukan sekedar melihat gejala kemiskinan
4. Dalam mengatasi masalah kemiskinan anak, perlu koordinasi lintas sektor, dan terpadu
5. Kebijakan sosial hanyalah sebuah alat dan bukanlah tujuan akhir. Untuk menjadi efektif dan efisien, perlu melibatkan lingkungan
6. Perlu ada peningkatan kualitas layanan dan cakupan, tidak sebatas masalah kesehatan dan pengobatan, tetapi juga mencakup aspek lain, seperti: pendidikan, kasih sayang, perhatian, kenyamanan, keamanan, pengasuhan, komunikasi yang sehat serta lingkungan yang nyaman bagi anak
7. Dalam merumuskan kebijakan perlu mengembangkan penelitian berbasis fakta
8. Dibutuhkan monitoring dan evaluasi yang sistematis pada setiap program pengentasan kemiskinan
9. Survei sangat diperlukan sebagai instrumen untuk perlindungan sosial
10. Diperlukan program penguatan kapasitas keluarga
11. Diperlukan perlindungan sosial yang terpadu untuk anak-anak, meliputi akses terhadap kesehatan, pendidikan, perlindungan dari kekerasan, dll
12. Diperlukan sinergi yang lebih baik antara perlindungan sosial dan perlindungan anak.

**Keywords:**
kerangka kerja terpadu perlindungan sosial dan perlindungan anak, konteks lokal, faktor dalam isu desentralisasi, kemiskinan multidimensi, pendekatan multi sektoral, isu-isu di sekitar pengukuran, kebutuhan untuk memanusiakan kemiskinan, marginalisasi, koordinasi masalah (pemerintah, donor)
Day II, Wednesday 11 September 2013

THEME 1

Dimensions of Child Poverty

1. The Economic Consequences of Malnutrition in Lao PDR
   Dr. Saykham Voladet (National Economic Research Institute (NERI), Ministry of Planning and Investment, Lao PDR)

2. Double-Burden of Malnutrition as a Consequence of Poverty Co-Exists in the Same Households in East Indonesia: Analysis of IFLS East 2012 data
   Avita A. Usfar (TNP2K, Indonesia)

   Annis Catur Adi (Universitas Airlangga, Indonesia)

4. Penguatan Modal Sosial untuk Perlindungan Sosial Rumah Tangga Miskin dalam Mengoptimalkan Status Gizi dan Perkembangan Sosial Emosi Anak/Strengthening of Social Capital for the Social Protection for Poor Households in Optimizing Children’s Nutritional Status as well as Their Social and Emotional Developments
   Alfiasari (Institut Pertanian Bogor, Indonesia)

5. Targeting the Poorest Children in Cambodia: Who and Where Are They?
   Reaching the Poorest Children in Cambodia: A Multi-Deprivation Analysis
   Usha Mishra Hayes (UNICEF Cambodia)

   Novi Hidayat Pusponegoro (STIS, Indonesia)

7. Dinamika Kemiskinan dan Pengukuran Kerentanan Kemiskinan dalam Upaya Melindungi Anak-Anak dari Dampak Kemiskinan/The Dynamics of Poverty and The Measuring of Poverty Vulnerability In Effort To Protect Children from Poverty Impact
   Armelia Zukma Kumala (BPS, South Sulawesi)

8. Integrating Monetary and Non-Monetary Measures of Child Poverty and Deprivation
   Martin Evans (UNICEF Headquarters, US)
1. Background & Rationale

Freedom from hunger, an essential component of MDG 1, is defined as an environment “people, at all times, have physical, social and economic access to sufficient, safe and nutritious food which meets their dietary needs and food preferences for an active and healthy life.”¹ Current scientific understanding of malnutrition has expanded beyond clinical conditions like kwashiorkor and nutritional marasmus to recognize that this visible form of malnutrition represents “the small tip of the iceberg…. only 1-5% of the burden of malnutrition.”²

Widespread malnutrition is consequence as well as a cause of poverty. Poverty and undernutrition are locked in a vicious cycle of increased mortality, poor health, and retarded cognitive and physical growth, diminished learning capacity and ultimately lower work performance, productivity and earnings. As this vicious cycle threatens health and survival, it simultaneously erodes the foundation of economic growth - people’s strength and energy, creative and analytical capacity, initiative and entrepreneurial drive. Extensive evidence demonstrates that undernutrition in young children has consequences not only for health and survival but also for physical and intellectual growth, school performance and adult productivity. Therefore, achieving reduction in the prevalence of malnutrition can substantially reduce this national burden as well as generate human and social capital to fuel economic development.

When indicators of suboptimal child nutrition are widespread, the aggregate burden on national economic growth can be significant. Data from the Lao Social Indicator Survey 2011 (LSIS) and the National Nutrition Survey of 2006 (NNS) suggest nearly 2 million Lao citizens, mainly women and children, suffer some form of undernutrition – and cannot achieve their full potential as students, workers, citizens and parents. The 10 indicators of undernutrition summarized in Table 1 suggest...

² Latham, Michael, Human Nutrition in the Developing World, Food and Nutrition Series - No. 29 FAO 1997
undernutrition represents a significant public health problem according to WHO criteria – and indicates a heavy burden on the human, social and economic development of Lao PDR.

Table 1: Summary of 10 Key Nutrition Indicators in Lao PDR from LSIS 2011 and NNS 2006

<table>
<thead>
<tr>
<th>Nutrition Indicator</th>
<th>Risk Group</th>
<th>National Prevalence (%)</th>
<th>Estimated 000/yr Affected</th>
<th>Risk or Deficit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Underweight</td>
<td>Children 6-59 months</td>
<td>17.29%</td>
<td>260</td>
<td>Mortality</td>
</tr>
<tr>
<td>Stunting</td>
<td>Children 6-23 months</td>
<td>44.2%</td>
<td>132</td>
<td>Retarded Development</td>
</tr>
<tr>
<td>Low Birth Weight</td>
<td>Infants &lt; 1 month</td>
<td>14.8%</td>
<td>23</td>
<td>Mortality, Morbidity,</td>
</tr>
<tr>
<td></td>
<td>Children 6-23 months</td>
<td>52.8%</td>
<td>180</td>
<td>Mental Development</td>
</tr>
<tr>
<td>Anemia</td>
<td>Working Age Women</td>
<td>36.2%</td>
<td>728</td>
<td>Work Performance,</td>
</tr>
<tr>
<td></td>
<td>Working Age Men</td>
<td>9.1%</td>
<td>142</td>
<td>Work Performance</td>
</tr>
<tr>
<td></td>
<td>Anemia in Pregnancy</td>
<td>36.2%</td>
<td>57</td>
<td>Mortality</td>
</tr>
<tr>
<td>Vitamin A Deficiency</td>
<td>Children 6-59 months</td>
<td>30%</td>
<td>275</td>
<td>Mortality</td>
</tr>
<tr>
<td>Sub-Optimal Breastfeeding</td>
<td>Children &lt;24 months</td>
<td>48.67%</td>
<td>158</td>
<td>Mortality and Morbidity</td>
</tr>
<tr>
<td>Birth Defects (NTD)</td>
<td>All Births</td>
<td></td>
<td></td>
<td>Mortality and Disability</td>
</tr>
</tbody>
</table>

The scientific literature has developed substantial evidence defining heightened mortality or morbidity risks as well as mental development and physical performance deficits associated with each of these 10 indicators – expressed as relative risk (RR) or deficit (%). This analysis uses a “consequence model” to apply these “coefficients of loss” established in the global scientific literature to Lao health, demographic and economic data to develop a national Damage Assessment Report (DAR) via an algorithm shown in Table 2 below. The DAR is a rough scenario describing the magnitude of the national burden emerging from the status quo of these 10 indicators. This simultaneously defines the significant national development benefits of simple, feasible and cost effective interventions to lower the burden.

Table 2 DAR Algorithm to Project Economic Losses from Individual Indicators

<table>
<thead>
<tr>
<th>Number w/ Indicator</th>
<th>Average Earnings</th>
<th>Labor Force Participation</th>
<th>Average Work-Life</th>
<th>Coefficient Risk-Deficit</th>
<th>Discount for NPV</th>
<th>Annual Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence (% x population of Risk Group)</td>
<td>$1244/y</td>
<td>All: 77.9% Male:79.5% Female:76.5%</td>
<td>All: 39y Male: 38y Female: 9y</td>
<td>RR or % from Literature @ 3%</td>
<td>Net Present Value (NPV) of Loss $/yr</td>
<td></td>
</tr>
</tbody>
</table>

These economic, demographic and labor data points were gathered from official national statistical sources and applied as follows:

- Prevalence taken from LSIS 2011 and NNS 2006 are applied to population or size of risk groups reported by or derived from Lao Statistics Bureau website.³

³ http://www.nsc.gov.la/
In a nation where “own production”, subsistence agriculture and in-kind payments represent a significant portion of individual income, official wage data may be misleading. Average annual earnings potential is estimated as follows.

- 2011 GDP reported by the World Bank of $8.3 billion.\(^4\)
- Labor, not capital or rents, are sensitive to changes in nutrition status. Labor share of GDP is estimated at 60%.\(^5\)
- This derived labor share GDP is divided by the estimated population of 15-64 year old adults, the working age population, to derive average annual earnings of $1244/year.

Average annual earnings are corrected by labor for participation rates reported by the World Bank for 2011: 77.9% for males and 76.5% for females.\(^6\)

Average time engaged in the labor force or “working life” is assumed to begin at 15 years of age and extend to the WHO Healthy Life Expectancy - of 53 for males, 54 for women and 54 over-all.\(^7\) This suggests an average work-life of 38-39 years depending on gender.

Projected earnings losses of today’s children stretch far into the future. The earnings “stream” does not begin until the child enters the work force and stretches 54 years in the future. Net Present Value (NPV) is used to estimate the value future lost productivity in present currency. Discount rate used to calculate Net Present Value is taken as 3%, recommended by the World Bank for social investment.\(^8\) This social discount rate is not related to inflation but merely reflects the subjective time preference for current consumption over future consumption or savings.\(^9\) This enables a lifetime average of 39 years of future earnings to be expressed as a current annualized economic loss.\(^10\) This represents only a fraction of “gross” earnings.

The DAR assesses the magnitude of consequences from these 10 nutrition indicators via 4 discrete pathways to economic loss:

- Mortality and disability in children with consequent lost value of a future workforce (NPV).
- Child cognition deficit resulting in inferior school performance and adult productivity (NPV).
- Current value of depressed productivity in working adults.
- Current value of excess and preventable healthcare and welfare utilization.

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\(^5\) Average Argentina, Brazil, Chile, China, Costa Rica, Kenya, Mexico, Namibia, Oman, Panama, Peru, Republic of Korea, Russia, South Africa, Thailand and Turkey in Figure 32 of Global Wage Report 2012/13, Wages and equitable growth International Labour Organization 2013.


\(^7\) http://www.worldlifeexpectancy.com/healthy-life-expectancy-by-gender


\(^9\) Ross et al, Calculating the Consequences of Micronutrient Malnutrition on Economic Productivity, Health and Survival, AED 2003

\(^10\) Formula used to calculate the NPV: (# in Risk Group w/ Deficiency X Deficit Coefficient X Labor Participation Rate) X Present Value (Discount Rate, Work Life, Annual Wage) – Present Value (Discount Rate, Years until Workforce Entry, Annual Wage) / # Annual Cohort in Risk Group.
The sections that follow present these 4 pathways to national economic loss for each of the 10 nutrition indicators presented in Table 1.

**Caveat to the Damage Assessment Report Methodology**

Converting indicators of malnutrition to economic activity and attaching a monetary value to that economic activity travels a long and winding road. First, monetizing the consequences of malnutrition is dependent on a relatively thin evidence base, complex methodologies and national health, demographic and economic statistics of uneven quality. Second, many factors beyond individual physical and intellectual potential determine earnings or work performance. Work place incentives, available technology and sense of opportunity all effect how increased human potential translates into actual improved productivity. Finally, benefits of improved nutrition extend beyond the workplace to a range of “voluntary” activities including parenting and household activities to educational improvement, entrepreneurial pursuits and community participation. In a world where improvement in nutrition, health and subsequent productivity will emerge mainly from individual choices and behaviors, the significance of these “voluntary” activities cannot be overstated. However, these are not captured in the DAR which focuses on monetary earnings only. For all these reasons and more, the margin of error is large and the calculations should be considered as an order of magnitude. These are projections to focus and facilitate policy discussion and present a solid and conservative case for policy discussion. Therefore, data judgments or assumptions consciously and consistently “biased” to minimize the impact of malnutrition. Consequently, conclusions drawn may be considered conservative low-end estimates.

**2. Child Mortality Attributable to Malnutrition**

Malnutrition is rarely specified as a cause of death. However, the close association of malnutrition, infection, disease and premature death of children has been extensively documented with a range of data demonstrating that globally malnutrition is the underlying cause of about 45% of all child deaths. Of the estimated 156 thousand children born annually in Lao, more than 12 thousand die before their 5th birthday. 86% of deaths are during the first year of life – and about half during the first month. The estimates of child mortality attributed to malnutrition in LAO PDR are based on specific mortality rates in Lao children. Official figures as well as derivations used in the DAR are shown in Table 3.

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Table 3: Statistics and Estimates for Structure of Child Mortality in Lao PDR

<table>
<thead>
<tr>
<th>Age Segment</th>
<th>Rate/1000</th>
<th>Estimated 2013</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 5 Mortality</td>
<td>79</td>
<td>12,339</td>
<td>LSIS @ 156,195 births/year</td>
</tr>
<tr>
<td>Infant Mortality/1000</td>
<td>68</td>
<td>10,621</td>
<td>LSIS @ 156,195 births/year</td>
</tr>
<tr>
<td>Neonatal &lt; 1 month</td>
<td>32</td>
<td>4,998</td>
<td>LSIS @ 156,195 births/year</td>
</tr>
<tr>
<td>Post-Neonatal 1-12 months</td>
<td>36</td>
<td>5,623</td>
<td>Infant minus Neonatal</td>
</tr>
<tr>
<td>Infant: 1-5 months</td>
<td>2,812</td>
<td></td>
<td>50% Post Neonatal – 562 deaths/month</td>
</tr>
<tr>
<td>Infant: 6-11 Months</td>
<td>2,812</td>
<td></td>
<td>50% Post Neonatal -468 deaths /month</td>
</tr>
<tr>
<td>Child: 1-5 years</td>
<td>1,718</td>
<td></td>
<td>Under Five minus Infant Mortality</td>
</tr>
<tr>
<td>Early Neonatal @ 74% of Neonatal</td>
<td>24</td>
<td>3,699</td>
<td>Calculated from WHO 2005¹²</td>
</tr>
<tr>
<td>Still Births</td>
<td>32</td>
<td>4,998</td>
<td>Calculated from WHO 2005¹³</td>
</tr>
<tr>
<td>Perinatal</td>
<td></td>
<td>8,697</td>
<td>Early Neonatal plus Stillbirths</td>
</tr>
</tbody>
</table>

How many of these deaths can be associated with malnutrition in children and their mothers? The sections that follow apply coefficients for higher risk of mortality found in the scientific literature to 5 individual indicators of malnutrition to paint a general picture of child mortality that can be attributed to current prevalence of malnutrition in Lao PDR. The general methodology is outlined in Table 4.

Table 4: Projection of Methodology for Projecting Mortality from Malnutrition Indicators

<table>
<thead>
<tr>
<th>Prevalence Indicator</th>
<th>Relative Risk of Mortality</th>
<th>PAR: Population Attributable Risk¹⁴</th>
<th>Mortality in Risk Group Affected</th>
<th># Deaths/yr Attributed To Indicator*</th>
</tr>
</thead>
<tbody>
<tr>
<td>From National Statistics</td>
<td>From Global Literature</td>
<td>Fraction (%) of Risk Group Affected</td>
<td>From National Child Mortality Statistics</td>
<td></td>
</tr>
</tbody>
</table>

¹² http://www.wpro.who.int/health_research/documents/dhs_hr_health_in_asia_and_the_pacific_10_chapter_5_mortality.pdf

¹³ IBID

¹⁴ The Population Attributable Risk (PAR) is a function of the prevalence of the nutrition indicator along with the severity of the mortality risk as expressed by the Relative Risk (RR). It is calculated with the following formula: (Prevalence*(RR-1))/(1+(Prev*(RR-1))).
2.1 Underweight

Table 5 Relative Risk of Mortality for Underweight Children < 5 yrs Causes

<table>
<thead>
<tr>
<th>Causes</th>
<th>Severe &lt; 3 SD</th>
<th>Moderate &lt; 2–3 SD</th>
<th>Mild &lt; 1-2 SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>9.7</td>
<td>2.5</td>
<td>1.8</td>
</tr>
<tr>
<td>Diarrhea</td>
<td>9.5</td>
<td>3.4</td>
<td>2.1</td>
</tr>
<tr>
<td>Pneumonia</td>
<td>6.4</td>
<td>1.3</td>
<td>1.2</td>
</tr>
<tr>
<td>Malaria</td>
<td>1.6</td>
<td>1.2</td>
<td>0.8</td>
</tr>
<tr>
<td>Measles</td>
<td>6.4</td>
<td>2.3</td>
<td>1.3</td>
</tr>
</tbody>
</table>

Measurement of weight-for-age (HAZ) in the LSIS suggests ~330 thousand children 6-59 months of age are either moderately or severely underweight. These children face a significant elevated risk of premature death. A recent meta-analysis found that the RR of death for underweight children compared to normal weight children was 10 times for severe underweight (<-3 SD), 2.5 times for moderately underweight (<-2 SD), and 1.8 times for mildly underweight (<-1SD). Data from LSIS does not include mildly underweight children and therefore are not included in this analysis.

Table 6: Mild and Moderate Underweight

<table>
<thead>
<tr>
<th>Age Segment</th>
<th>%&lt; 2 SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-5 months</td>
<td>5.5</td>
</tr>
<tr>
<td>6-11 months</td>
<td>21.1</td>
</tr>
<tr>
<td>12-23 months</td>
<td>39.1</td>
</tr>
<tr>
<td>24-35 months</td>
<td>38.1</td>
</tr>
<tr>
<td>36-47 months</td>
<td>35.8</td>
</tr>
<tr>
<td>48-59 months</td>
<td>36.6</td>
</tr>
<tr>
<td>Average &lt; 59 months</td>
<td>37.4</td>
</tr>
</tbody>
</table>

Since the risk of mortality is dramatically different as infants grow into pre-school ages, two parallel calculations are run – one for a cohort of ~78 thousand children ages 6-11 months and another for ~837 thousand children 6-59 months. We exclude children >6 months, comprising >60% of child mortality, because according to LSIS prevalence of underweight is relatively low, ~5% before climbing to 21% during the 6-11 month period and 36-39% from 1-5 year old children.

15 Robert E Black, Lindsay H Allen, Zulfiqar A Bhutta, Laura E Caulfield, Mercedes de Onis, Majid Ezzati, Colin Mathers, Juan Rivera, Maternal and child undernutrition: global and regional exposures and health consequences Maternal and Child Undernutrition Study Group, January 17, 2008


17 Ibid

18 LSIS 2011
Table 7 and 8 outline parameters used to calculate PAR for severe and moderate underweight separately for both age groups. PARs ranging from 20-41% are applied to the estimated deaths in each age segment suggesting total of nearly 2,500 deaths per year due to underweight among children 6-59 months.

**Table 7: Projection of Mortality Attributed to Underweight in Children 1-5 months**

<table>
<thead>
<tr>
<th>Prevalence of Condition</th>
<th>Relative Risk Mortality</th>
<th>Population Attributable Risk</th>
<th>Annual Deaths in Children 1-5 months</th>
<th>Annual Deaths Attributed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moderate: 17.4%</td>
<td>2.5</td>
<td>20.7%</td>
<td>2,812</td>
<td>582</td>
</tr>
<tr>
<td>Severe: 3.6%</td>
<td>9.7</td>
<td>23.9%</td>
<td></td>
<td>671</td>
</tr>
</tbody>
</table>

**Table 8 Projection of Mortality Attributed to Underweight in Children 6-59 months**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Moderate: 29.4%</td>
<td>2.5</td>
<td>30.6%</td>
<td>1,718</td>
<td>526</td>
</tr>
<tr>
<td>Severe: 8%</td>
<td>9.7</td>
<td>41.7%</td>
<td></td>
<td>705</td>
</tr>
</tbody>
</table>

2.2 Low Birth Weight

14.8% of an estimated 156 thousand births in Lao PDR resulted in low birth weight, weighing less than 2500 grams. While national data does not categorize these ~23 thousand cases by severity, based on global estimates by Black et al, we project 88% or 20,422 of these low birth weight infants weighed 2000-2499 g and 11.7% or 2,694 weighed < 2000 g. This extrapolation an incidence of 13.1% of births 2000-2499 grams and 1.7% < 2000 grams. These ~23 thousand babies are at higher risk of mortality during the neonatal period (1st month of life). A recent meta-analysis pooling 11 studies concludes that compared to normal weight babies, infants weighing 1500–1999 g were 8.1 times more likely to die and those weighing 2000–2499 g were 2.8 times more likely to die during the first month of life.

**Table 9 Extrapolation from Global Low Birth Weight Analysis by Black et al 2008**

<table>
<thead>
<tr>
<th>Global Analysis</th>
<th>Calculated Proportion for Lao</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000-2499 g</td>
<td>9.55%</td>
</tr>
<tr>
<td>1500-1990g</td>
<td>1.26%</td>
</tr>
</tbody>
</table>

As shown in Table 10, the RR mortality risks of 2.8 and 8.1 together with the derived prevalence rates for the two categories of low birth weight result in PARs of 11% and 19% suggesting that of

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19 LSIS 2011


21 IBID
4998 neonatal current deaths, nearly 1500 represent this high risk 23 thousand low birth weight babies.

### Table 10: Projection of Mortality Attributed to Low Birth Weight

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2000-2499g: 13.1%</td>
<td>X</td>
<td>2.8</td>
<td>19.1%</td>
<td>4,998</td>
</tr>
<tr>
<td>&lt; 2000 g:1.73%</td>
<td>8.1</td>
<td>=</td>
<td>10.9%</td>
<td></td>
</tr>
</tbody>
</table>

The association of maternal nutrition and low birth weight is strong. Indicators of maternal nutrition status including body mass index, mid upper arm circumference and iron status strongly predict low birth weight. One meta-analysis that included 11 trials identified a significant 20% reduction in low birth weight associated with antenatal iron folic acid supplementation. Nevertheless, not all births < 2500 grams can be confidently attributed to maternal nutrition status. The Lao NNS 2006 found about 60% of women had either low BMI or iron status, representing the top-end of potential low births weights attributable to maternal nutrition status. In recognition of the potential error band and in order to project conservatively, we apply half this number or 30% for attribution of nutrition related mortality from low birth weight – lowering our projection to 443 deaths.

### 2.3 Perinatal Mortality Attributed to Anemia in Pregnancy

Perinatal death, defined as number of stillbirths plus deaths during the first week of life, is a major cause of child death in Lao PDR. Applying estimates made for Lao in WHO’s *Health in Asia and the Pacific*, a rate of stillbirth at 32/1000 and early neonatal mortality (1st week) at 74% of neonatal deaths, perinatal mortality is estimated at nearly 8700. A recent meta-analysis including 10 individual studies quantified the often observed association of anemia during pregnancy with perinatal death concluding that where malaria is not a significant threat, as is most often the case in Lao PDR, perinatal mortality decreases 16% for every 1 gram per deciliter increase in the mother’s hemoglobin (Hb) - a protective RR of 0.84 per gram Hb.

There is no recent data on the prevalence of anemia or iron deficiency anemia among pregnant women. For the purpose of this analysis, the DAR uses data for all women of reproductive age found in the Lao NNS 2006, 36.2% - a conservative approach since iron needs rise dramatically during pregnancy and iron status often deteriorates. The NNS further found iron deficiency anemia among women at 14.6% - suggesting 40% of anemia is from lack of iron - and therefore sensitive to nutrition interventions providing dietary iron. Using an algorithm developed in WHO Global Burden of Disease, the model calculate mean hemoglobin level of 12.5 g/dL at current anemia prevalence and mean hemoglobin of 12.9 g/dL in the theoretical absence of iron deficiency, leaving a 0.41 g/dL deficit in mean hemoglobin. As shown in Table 11 below, this 0.41 g/dL deficit along with the RR of 0.84 per 1g/dL enables calculation of a PAR of 7% which is applied separately to estimated stillbirths and early neonatal deaths to project 605 perinatal

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deaths attributed to maternal anemia. A parallel analysis for maternal mortality with an established RR 0.71 per g/Hb was applied to the maternal mortality rate reported by LSIS to suggest 13.4% of maternal death Lao is associated with maternal anemia.24

### Table 11 Projection of Perinatal Mortality Attributed to Maternal IDA

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Deficit 0.74 g/dL Hb</td>
<td>0.84/1g/Dl Hb</td>
<td>7%</td>
<td>Stillbirths: 4998</td>
<td>347</td>
</tr>
<tr>
<td>Deficit 0.41 g/dL Hb</td>
<td>0.71/1g/Dl Hb</td>
<td>13.2%</td>
<td>Neonatal: 3699</td>
<td>257</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Maternal Death: 558</td>
<td>74</td>
</tr>
</tbody>
</table>

2.4 Mortality Attributed to Sub-Optimal Breastfeeding

Evidence from both developing and developed countries shows the critical lifesaving significance of exclusive breastfeeding during the first 6 months.25 A recent meta-analysis including studies from multiple counties concluded that the increased mortality risk for non-breastfed versus exclusively breastfed babies ranges from RR 10.53 for diarrhea, RR 15.13 for pneumonia and RR 14.4 from all causes.26 The risks were lower, but still significant for predominant and partial breastfeeding - ranging from RR 1.48 to 2.28. After the first 6 months, babies who are not breastfed also face higher risk of mortality than partially breastfed infants – though these risks not as acute as during the first 6 months, ranging from RR 1.52 to RR 3.68.

### Table 12 Relative Risk Infant Mortality by Breastfeeding Behavior27

<table>
<thead>
<tr>
<th></th>
<th>0-6 months</th>
<th>6-23 months</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Predominant</td>
<td>Partial</td>
</tr>
<tr>
<td>Diarrhea</td>
<td>2.28</td>
<td>4.62</td>
</tr>
<tr>
<td>Pneumonia</td>
<td>1.75</td>
<td>2.49</td>
</tr>
<tr>
<td>All Mortality</td>
<td>1.48</td>
<td>2.85</td>
</tr>
</tbody>
</table>

### Table 13 Breastfeeding Behaviors in Lao PDR, from LSIS 2011

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Exclusive</th>
<th>Predominant</th>
<th>No Breastfeeding</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 month</td>
<td>52%</td>
<td>44%</td>
<td>4%</td>
</tr>
<tr>
<td>at-5 month</td>
<td>27%</td>
<td>63%</td>
<td>10%</td>
</tr>
</tbody>
</table>

27 IBID
As indicated in Table 13, LSIS found about half of Lao infants were exclusively breastfed during the first month and at the end of 5 months this drops to about one-quarter. LSIS does not include partial breastfeeding with about twice the risk of mortality as predominant breastfeeding. Though there is reason to believe that a that a significant number of infants categorized as predominant in the LSIS are in fact partial breastfeeding, in order to ensure no over-estimation, the categories as reported by the LSIS are not adjusted to reclassify any predominant cases as partial.

Since prevalence of suboptimal breastfeeding varies significantly within this time period and since infant mortality rates are very different in the neonatal and post-neonatal period, projections are made separately for these two age groups. In addition, since preliminary results showed an exceedingly high PAR, the RR used in the analysis were adjusted to the low-end of the Confidence intervals for all-cause mortality found in the meta-analysis – namely RR 1.13 rather than 1.48 for predominant and 6.09 rather than 14.4 for no breastfeeding.

Table 14 below shows separate mortality projections for children less than one month of age and children 1-5 months totaling more than 2,300 deaths – about 22% of all infant mortality.

Table 14: Table 6 Projection of Mortality Attributed to Suboptimal Breastfeeding

<table>
<thead>
<tr>
<th>Prevalence of Condition</th>
<th>Relative Risk Mortality</th>
<th>Population Attributable Risk</th>
<th>Annual Deaths in Risk Group</th>
<th>Attributed Deaths/Yr</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 1m: 44% Predominant</td>
<td>X</td>
<td>5.4%</td>
<td>4998 Neonatal Deaths</td>
<td>270</td>
</tr>
<tr>
<td>&lt; 1m: 5% No Breastfeeding</td>
<td>6.09</td>
<td>= 18%</td>
<td></td>
<td>898</td>
</tr>
<tr>
<td>1-5m 63% Predominant</td>
<td>1.13</td>
<td>7.6%</td>
<td>2812 Deaths from 1-5 months</td>
<td>213</td>
</tr>
<tr>
<td>1-5m: 10% No Breastfeeding</td>
<td>6.09</td>
<td>33.7%</td>
<td></td>
<td>948</td>
</tr>
</tbody>
</table>

2.5 Mortality Attributed to Vitamin A Deficiency (VAD)

Vitamin A deficiency has been attributed to poor intake of vitamin A-rich foods such as liver, eggs, meat, green and yellow vegetables. Inadequate intake of vitamin A compromises the immune system, leading to risks of common illnesses progressing to more severe forms, including death. The risks are especially high during periods of rapid physical growth, and consequent increases in nutritional requirements, as in pregnancy and early childhood. Since 1993 and as recently as 2011, a number of randomized controlled trials have examined the effect of vitamin A supplementation and fortification on the survival of children aged 6-59 months showing a mortality reduction of 23%-30%. This establishes risk of death at RR of 1.75.

---

There is no recent data on vitamin A deficiency among Lao children. The 2000 National Health Survey indicated the prevalence of vitamin A deficiency was 45%, with 7% having a severe deficiency. Since 2000 this intake may have improved marginally, in part due to modest coverage of vitamin A capsules has been undertaken by the GoL along with support from UNICEF. This twice annual coverage is far from universal, with a recent survey finding coverage as low as 18%. In order to recognize the possibility of reduced national prevalence and enable a conservative analysis of the current national impact of VAD, we rates found in 2000 have been lowered one-third, leaving a prevalence rate of 30%.

As indicated in Table 15 below, a RR of mortality of 1.75 and an assumed prevalence of 30% yield a PAR of 18.4%. This is applied separately to the estimated 2812 late infant deaths and 1718 deaths in children ages 1-5 years to project a total of 832 deaths attributed to VAD – about 7% of total child mortality in Lao PDR.

<table>
<thead>
<tr>
<th>Prevalence of Condition</th>
<th>Relative Risk Mortality</th>
<th>Population Attributable Risk</th>
<th>Annual Perinatal Deaths</th>
<th>Attributed Deaths/Yr</th>
</tr>
</thead>
<tbody>
<tr>
<td>30%</td>
<td>1.75</td>
<td>18.4%</td>
<td>6-11m: 2812</td>
<td>516</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>12-59: 1718</td>
<td>316</td>
</tr>
</tbody>
</table>

2.6 Folic Acid related Neural Tube Defects:

Neural Tube Defects (NTD) including serious birth defects such as spina bifida and anencephaly are a significant cause of death and disability worldwide. A Cochrane review including five trials of folic acid (a synthetic form of folate) supplementation identified a 72% reduction in the risk of neural tube defects. A more recent systematic review had much the same findings and estimated that in 2005, 56,000 deaths worldwide were attributable to insufficient dietary folic acid. While there is no data on the incidence of NTDs in Lao, a review by the March of Dimes, global birth defects prevention NGO, suggested 374 cases annually. Global data suggest NTDs occur at a rate of 1-2 per 1000. We apply a mid-point of 1.5/1000 births to estimate 234 cases, a lower number than the March of Dimes. Given the seriousness of NTDs and high case fatality rate for births outside a facility and without access to pediatric neurosurgery, we speculate 90% of these infants die, with survivors living with a lifelong disability.


30 Health Status of the People in the Lao PDR, National Institute of Public Health of the Ministry of Health, January 2001

31 Multiple Indicator Cluster Survey (MICS) 3, Ministry of Health of the Government of the Lao PDR, National Statistical Centre (NSC) of the Committee for Planning and Investment, UNICEF, 2006


34 Calculated from March of Dimes, Report on Global Birth Defects, Appendix B, 2001
2.7 Summary of Child Mortality Attributed to 5 Malnutrition Indicators

Table 16 below summarizes findings of proportion of child morality in Lao attributable to child and maternal nutrition based on an individual indicator by indicator analysis projecting more than 6.9 thousand deaths of children from the perinatal period until 5 years of age. However, during the neonatal period, infancy 1-5 months, and period of 1-4 years, this includes multiple and overlapping risks. For example, some children may suffer both VAD and underweight or low birth weight and suboptimal breastfeeding. Since there is no data on how many children suffer these multiple risks, the DAR uses a formula to develop “hybrid” PAR adjusting for multiple parallel risks as recommended by Rockhill et al to statistically correct for any potential “double-count.”

This adjustment reduces the attributed child mortality to 6016, ~1/3rd of all 17,338 deaths estimated from the perinatal period till 5 years.

Table 16: Summary Individual and Adjusted Mortality Attributed to 6 Nutrition Indicators

<table>
<thead>
<tr>
<th>Perinatal</th>
<th>Individual Analysis</th>
<th>Adjusted Multiple Risks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maternal Anemia (Stillbirths)</td>
<td>347</td>
<td>347</td>
</tr>
<tr>
<td>Maternal Anemia (Early Neonatal)</td>
<td>257</td>
<td>257</td>
</tr>
<tr>
<td>Perinatal Deaths</td>
<td>605</td>
<td>605</td>
</tr>
<tr>
<td>Neonatal Period</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low Birth Weight</td>
<td>443</td>
<td>408</td>
</tr>
<tr>
<td>Folic Acid associated Birth Defects</td>
<td>211</td>
<td>195</td>
</tr>
<tr>
<td>Sub Optimal Breast Feeding</td>
<td>1,168</td>
<td>1,078</td>
</tr>
<tr>
<td>Neonatal Deaths</td>
<td>1,821</td>
<td>1,680</td>
</tr>
<tr>
<td>Infant: 1-6 Month</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sub Opt BF</td>
<td>1,161</td>
<td>1,161</td>
</tr>
<tr>
<td>Deaths in infant 1-5 months</td>
<td>1,161</td>
<td>1,161</td>
</tr>
<tr>
<td>Infant 6-11 Months</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Underweight</td>
<td>1,252</td>
<td>1,009</td>
</tr>
<tr>
<td>VAD</td>
<td>516</td>
<td>416</td>
</tr>
<tr>
<td>Deaths in infant 6-11 months</td>
<td>1,769</td>
<td>1,426</td>
</tr>
<tr>
<td>Child 12-59 months</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Underweight</td>
<td>1,231</td>
<td>911</td>
</tr>
<tr>
<td>VAD</td>
<td>316</td>
<td>233</td>
</tr>
<tr>
<td>Deaths in Children 1-4 years</td>
<td>1,546</td>
<td>1,144</td>
</tr>
<tr>
<td>Total Deaths from Perinatal to 5 years of Age</td>
<td>6,902</td>
<td>6016</td>
</tr>
<tr>
<td>Proportion all 17,338 deaths &lt; 5 yrs including and Stillbirth</td>
<td>40%</td>
<td>35%</td>
</tr>
</tbody>
</table>


36 Calculations for multiple exposure adjustment provided in Annex 1
2.8 Estimating Value of Workforce Lost to Child Mortality

The value of this loss is immeasurable. What is the national economic loss that can be attributed to premature deaths 6016 of infants and children? The DAR takes a discounted net present value (NPV) of future lost earnings discounted at 3% and at constant 2013 levels. The NPV includes a delayed earnings stream that presumes entry into the workforce at average of 15 years of age – a delay ranging from 15 years for perinatal and neonatal deaths to 13 years for the 1-4 year old cohort. Further, this cold economic perspective attributes an economic value only to the 78% who participate in the labor force. In other words, this economic calculation attributes no value at all to ~22% of these child deaths who are not projected to participate in the labor force and be economically active.37

At a 3% discount rate, the NPV of a lifetime of lost potential future earnings from emerging from an estimated 6016 children indicates economic losses from child mortality totaling ~$70 million. At about $11.5 thousand per life, this methodology does not reflect to true loss. As shown in Table 17 below, when the discount rate to calculate the NPV is set at 7%, the value is more than cut in half. Life is very sensitive to discount rates. Clearly, this methodology does not begin to measure the value of human life.

### Table 17 Algorithm Used for Value of Lost Workforce due to Child Mortality

<table>
<thead>
<tr>
<th>Child Deaths Attributed to Malnutrition</th>
<th>Average Wage</th>
<th>Labor Force Participation Rate</th>
<th>NPV: 39 yr Worklife w/delayed earning stream</th>
<th>= Net Present Value of Losses ($000,000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6016</td>
<td>$1244</td>
<td>77.9%</td>
<td>@ 3%</td>
<td>$69.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>@ 7%</td>
<td>$27.5</td>
</tr>
</tbody>
</table>

2.9 Perspectives on the Attributions for child Mortality

![Image of Nutrition Indicators]

37 The formula is (6016 Deaths X 77.9%) X (PV(39 yrs x $1244/yr @ 3%)) - (PV(13-15 yrs x $1244 @3%) )

38 Delay in earnings stream varies slightly with estimates at 15 years for deaths in peri and neonatal; 14.5 years for and early infancy; 14 years for late infancy and 13 years for 1-4 years olds.
It’s important to note that nutrition related deaths are only in part associated with lack of staple foods like rice that are usually used as benchmarks of food security. While the causes of underweight, which represent about 1/3\textsuperscript{rd} of the attributed losses, include lack of sufficient quantity of food (calories) this indicator is associated with a range of causes including – initial birth come, infection, lack of hygiene and suboptimal breastfeeding. However, the other indicators are not associated with lack calories or food quantity but rather food quality, child care behaviors and the nutrition status of the mother.

- Vitamin A deficiency reflects low quality of diet rather than lack of sufficient quantity of food. Vitamin A is available mainly in animal products and to some extent fruits and vegetables – and not offered by rice, cassava or other staple grain and root foods.
- About ¼ of the losses attributed to child mortality are associated only with maternal status and not with nutrition of child infant – namely low birth weight delivery, perinatal deaths from maternal anemia, birth defects associated with folic acid deficiency.
- Another 1/3\textsuperscript{rd} of deaths are linked exclusively with maternal behavior, lack of optimal breastfeeding.

Therefore, significantly reducing this burden of childhood deaths will involve a comprehensive set of interventions beyond ensuring access to increasing quantities of staple foods.

3. Depressed Future Productivity of Children

Malnutrition coincides with many health and economic deprivations which affect child growth and development. Isolating the “nutrition factor” or the “child development factor” is complicated by countless interactions of nutrition, nature and nurture. However, there is substantial evidence that after correction for poverty and associated environmental threats, nutrition has independent and additive impacts on child growth, cognition and development.\textsuperscript{39} This in turn is linked to future earnings and productivity as an adult via a long line of economic scholarship and evidence.\textsuperscript{40}

Undernutrition diminishes children’s cognitive development through physiological changes, by reducing the ability to participate in learning experiences, or both. Even in mild or moderate cases, malnourished children score poorly on tests of cognitive function, psychomotor development and fine motor skills. With lower activity levels, they interact less frequently with their environments and thus fail to acquire physical and intellectual skills at normal rates. In large part these early childhood deficits determine their ability to capitalize on educational opportunities and later employment opportunities, resulting in an adult productivity deficit.

This analysis focuses on childhood anemia and stunting - indicators strongly associated with slow growth, depressed cognition, inferior school performance and reduced future earnings. At current prevalence rates for these two indicators, possibly three-quarters of Lao’s population of children 6-24 months will not have the opportunity to grow to their full physical, intellectual and productive potential.

\textsuperscript{39} Grantham- McGregor et al, Developmental Potential in the first 5 Years for Children in Developing Countries, The Lancet, VOL 369, 2007

3.1 Stunting or Small Stature

Children who fall more than 2 standard deviations below an international reference population developed by WHO are considered to be low height for age (HAZ), or stunted. Findings from well-nourished populations consistently show that in a range of nations and ethnic groups, grow at very close to the same trajectory. As shown in the attached figure from WHO Assessment of linear growth in well-nourished children from birth to 1000 days in Brazil, Ghana, India, Norway, Oman and USA shows that there is some minor some variation, the growth curves across the world are very similar. If in well-nourished populations there is no average difference in length among countries, “being short” only has negative effects when there is malnutrition.

Stunting is a general marker of the cumulative effects of chronic malnutrition in childhood – one result of the all too common combination of inadequate diet, infection, and suboptimal child care. Stunted children suffer low physical activity, impaired motor and mental development, lowered immune competence, greater severity of infections and increased mortality. Stunting has a number of life-long consequences – and after 2 years of age there is limited possibility of “catch-up growth” to reverse the consequences of early childhood stunting. A number of studies have documented the association between stunting and future productivity via 3 pathways.

- **An association with lower cognition which in turn is linked to lower earnings as adults**: Numerous studies have directly associated stunting with lower test scores for childhood cognition. A recent pooled analysis from 5 countries concluded that “being moderately or severely stunted was associated with lower scores for cognition in every study and the effect size varied from 0.4 to 1.05 SD.” This magnitude of deficit is linked with 5-20% lower earnings as adults.

- **An indirect association mediated by school participation and performance.** Substantial evidence shows stunted children start school later, progress through school less rapidly and have lower over-all schooling attainment. A review of evidence from 79 countries concluded “for every 10% increase in stunting, the proportion of children reaching the

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44 IBID

final grade of primary school dropped by 7.9%.” 46 Most recently, an authoritative review in the Lancet concluded that after statistically correcting for poverty, stunted children suffer a combined grade attainment and school performance deficit of 2.91 years - with each year predicting decreased future wages of 8.3%. 47

- **A direct association between lower adult height and reduced earnings.** Direct observations of the links of stunting with future productivity deficits provide a more modest scenario for economic losses. An examination of nutrition/productivity links using wage rates in urban Brazil using four variables (height, BMI, per capita energy consumption and per capita protein intakes) found only height was a significant determinant of wages. 48 A number of studies, controlling for a variety of characteristics, document a direct association between lower adult height and reduced earnings. 49 Two widely noted studies ventured specific estimates of lower earnings among stunted manual laborers. An analysis of wages in urban Brazil, Strauss et al estimated that a 1% increase in height leads to a 2-2.4% increase in wages or earnings. 50 Among sugar cane workers in the Philippines, Haddad & Bouis estimated that an individual 15 cm taller than average could be expected to earn 13% more, suggesting wages earned workers rose 1.38% for every 1% increase in height. 51

The DAR considers two approaches to quantifying the economic impact of stunting in Lao PDR. A global literature review of losses from both grade attainment and school performance in the Lancet concludes that a stunted child suffers a “total percentage loss of adult yearly income” of 19.8%. Table 18 below, uses this “coefficient of deficit” along with LSIS finding that 44% of children 6-24 months fall < 2 SD below international reference standard age for height, to calculate an NPV for lost future productivity may rise as high as $194 million annually.

**Table 18 Projecting Economic Loss from Stunting via Schooling Methodology**

<table>
<thead>
<tr>
<th>Number w/ Deficit or Risk</th>
<th>Average Earnings</th>
<th>Labor Force Participation</th>
<th>Average Work-Life</th>
<th>Coefficient Risk-Deficit</th>
<th>Discount for NPV</th>
<th>Annual Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>131,568</td>
<td>$1244/y</td>
<td>All: 77.9%</td>
<td>All: 39y</td>
<td>19.8%</td>
<td>@ 3% 14yr delay</td>
<td>NPV $193.7 million/yr</td>
</tr>
</tbody>
</table>

The second approach is based on direct observations of Haddad et al that wages earned workers rose 1.38% for every 1% increase in height. This finding together with figures found standard growth reference charts suggest that severe stunting (> -3 SD) represents a 6.25% reduction in

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46 Ibid


48 (Haddad & Bouis 1991)


50 Thomas & Strauss et al Health and wages: evidence on men and women in urban Brazil, Journal of Development Economics, 1997; 77:15


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height and moderate stunting (-2 to -3 SD) represents a 4.375% deficit.\textsuperscript{52} Multiplying these percentage height deficits by the assumed loss of 1.38% productivity suggests severely stunted children suffer a productivity loss of 8.6% while moderate stunting results in about a 6% future deficit. These coefficients are applied to the data for severe and moderate stunting reported by LSIS 2011 in Table 19 below indicating NPV of annual loss amounting to ~$70 million annually. Given the wide variation in these two approaches, both using evidence based assumptions, the DAR will take forward the lower figure found in Table 19 in order to ensure that economic losses from stunting are not over-estimated.

<table>
<thead>
<tr>
<th>Number w/ Deficit or Risk</th>
<th>Average Earnings</th>
<th>Labor Force Participation</th>
<th>Average Work-Life</th>
<th>Coefficient Risk-Deficit</th>
<th>Discount for NPV</th>
<th>Annual Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moderate: 25.4%/75,691</td>
<td>X $1244/y</td>
<td>X All: 77.9%</td>
<td>X All: 39y</td>
<td>6.038%</td>
<td>@ 3% With 14 yrs delay</td>
<td>NPV $69.8 million/yr</td>
</tr>
<tr>
<td>Severe: 18.8%/55,877</td>
<td></td>
<td></td>
<td></td>
<td>8.625%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 3.2 Anemia in Children:

A range of evidence links iron status in children to cognitive and development deficits and to lower future earnings. These are summarized below.

- A *Journal of Nutrition* review of the literature documents the positive impact of iron intervention on cognitive scores, generally ranging from 0.5 to 1 SD and concluded that “available evidence satisfies all of the conditions needed to conclude that iron deficiency causes cognitive deficits and developmental delays.”\textsuperscript{53}

- A recent review from child psychology, nutrition and economic science, concluded that development deficits related to iron status in children less than 5 years old children are associated a 4% drop in earnings.\textsuperscript{54} Several intervention studies show that iron supplementation in children < 5 years led to cognitive improvements which were sustained into adolescence with a correlation coefficient 0.62.\textsuperscript{55} Therefore, the DAR corrects the 4% deficit by a factor of 0.62 to arrive at a 2.5% decrease in future earnings and productivity.\textsuperscript{56}

Data on iron status and anemia among children in Lao is scarce. The recent Maternal and Young Child Security Initiative (MYCNSIA) combined data from 2 sources, the national LSIS and a supplementary survey conducted in 3 provinces from 2011-2012. This provides the most recent

\textsuperscript{52} Burkhalter, Barton R., Victor M. Aguayo, Serigne M. Diene, Margaret B. Parlato, and Jay S. Ross \textit{PROFILES: A Data-Based Approach to Nutrition Advocacy and Policy Development.} BASICS/ USAID 1998

\textsuperscript{53} Haas, J. and Brownlie T., Iron Deficiency and Reduced Work Capacity: A Critical Review of the Research *Journal of Nutrition*. 2001;131

\textsuperscript{54} Horton & Ross The Economics of Iron Deficiency Food Policy 28 (2003) 51–75

\textsuperscript{55} Pollitt et al. 1995 and Jensen, 1980 in Horton & Ross The Economics of Iron Deficiency Food Policy 28 (2003) 51–75

\textsuperscript{56} Horton & Ross The Economics of Iron Deficiency Food Policy 28 (2003) 51–75
and reliable data for anemia in Lao children. MYCANSIA found about 40% of children < 5 years of age in the survey provinces suffered anemia. However, among children in the very sensitive development growth stages of 6-23 months anemia rates were considerable higher, averaging 52.8%. The DAR apply this prevalence rate to the national population of children 6-24 months indicating more than 157 thousand anemic children suffering current cognitive development deficits and future earnings deficits. As outlined in Table 15, this suggests an NPV for future productivity deficits in these 157 thousand children total $29 million annually. The lifetime deficit for each child is about $185, but given the high prevalence of anemia and large numbers of children affected, this relatively modest individual deficit accumulates with significant impact on the national economy.

Table 20 Projecting Economic Loss from Childhood Anemia

<table>
<thead>
<tr>
<th>Number w/ Risk</th>
<th>Average Earnings</th>
<th>Labor Force Participation</th>
<th>Average Work-Life</th>
<th>Coefficient Risk-Deficit</th>
<th>Discount for NPV</th>
<th>Annual Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>52.8%/157,279</td>
<td>$1244/y</td>
<td>All: 77.9%</td>
<td>All: 39y</td>
<td>2.5%</td>
<td>@ 3% With 14 yrs delay</td>
<td>NPV $29 million/yr</td>
</tr>
</tbody>
</table>

3.3 Long Term Disability from Folic Acid Related Neural Tube Defects

No data was identified on chances of survival for the estimated 234 annual cases of folic acid related birth defects such as spina bifida and anencephaly. Given lack of access to pediatric neuro-surgery, the DAR speculates a 90% fatality rate, this leaves about 23 surviving case with lifelong disability and a projected 100% loss of productivity. Since this is a speculative number, and results in the same 100% loss as mortality, these projected earnings losses from these cases are included in the previous mortality analysis.

4. Depressed Current Productivity: Anemia in Adult Workers

Although the Lao MDGs, National Nutrition Policy and this analysis focuses mainly on malnutrition in pregnant and children, widespread anemia among adults may result in current work performance deficits - and losses to the national economy. In addition to the potential impact on national economic development, the inter-generational links of mother and child associated with child nutrition indicators – including birth outcome, underweight, stunting and others – suggest that undernutrition among adult women may be an intergeneration link and an important component of the national burden of malnutrition.

Weakness, fatigue and lethargy brought on by anemia results in measurable productivity deficits in the manual labor. Aerobic capacity, endurance and energy efficiency are compromised 10-50%.57 A substantial literature shows the negative impact on indicators of work performance. The output of iron supplemented rubber tree tappers involved in heavy manual labor in Indonesia was found 17% higher than non-supplemented co-workers.58 There is also evidence anemia impairs


less physically demanding work in “blue collar labor” or manufacturing not requiring significant physical exertion. Based on an extensive review of the literature, Ross & Horton estimate a 5% deficit among all manual or “blue collar” manufacturing work and an additional 12% loss for heavy manual labor such as agriculture and construction.

The Lao National Nutrition Survey of 2006 established national prevalence of anemia at 36.2% for reproductive age women – more than half a million women of working age. While there is no available data on anemia or iron deficiency in Lao men, it stands to reason that this condition exists – but at a much lower level than in women. For the sake of this analysis we will assume anemia in men at one-quarter the female rate – or ~9%.

While there is reason to believe anemia has a negative impact on all kinds of work performance, including “white collar” jobs, the published evidence is limited to “blue collar” or manual work requiring physical exertion. As with previous analysis, productivity deficits are only applied to individuals participating in the labor force (79.5% of men and 76.5% of women). However, for adult anemia the DAR applies an additional screen to include only to individuals in manual labor - not to administrative, managerial, education and other “white collar” jobs. The manual labor share of employment is estimated from the findings in 4th Lao Expenditure and Consumption Survey (LECS4) which estimates “total hours worked in different sectors as percent of total hours.” As shown in the Table 21 below, based on the categories of work reported by LECS4, the DAR model assumes 72.2% of working women and 73.3% of working men are engaged in manual labor. While there is no data distinguishing normal manual labor from heavy manual labor (and the definition may be ambiguous), based on a global analysis done for the Copenhagen Consensus, we assume 15% of manual labor may be classified as heavy – and therefore subject to an additional 12% deficit.

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62 Ross L Horton S The Economic Consequences of Iron Deficiency, Micronutrient Initiative 1998

63 Lao PDR National Nutrition Survey UNICEF/NCDC, 2010

64 National data of anemia in men is scarce. The Philippines national survey finds anemia rates of 21% for women and 10% of men. We take one half of this proportion for this analysis.

65 Sue Horton, Harold Alderman, Juan A. Rivera, Hunger and Malnutrition, Copenhagen Consensus, 2008
Table 21 Estimated Proportion Labor as Manual Labor from LECS4 Table 5.2 LECS

<table>
<thead>
<tr>
<th>Industry</th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>61.1</td>
<td>61.8</td>
</tr>
<tr>
<td>Mining</td>
<td>0.3</td>
<td>0.1</td>
</tr>
<tr>
<td>Food Processing</td>
<td>1.2</td>
<td>1.1</td>
</tr>
<tr>
<td>Textiles</td>
<td>3.2</td>
<td>3.3</td>
</tr>
<tr>
<td>Wood/Chemical</td>
<td>1.5</td>
<td>1.5</td>
</tr>
<tr>
<td>Equipment</td>
<td>1.8</td>
<td>1.3</td>
</tr>
<tr>
<td>Electricity</td>
<td>0.1</td>
<td>0.3</td>
</tr>
<tr>
<td>Construction</td>
<td>3</td>
<td>3.9</td>
</tr>
<tr>
<td></td>
<td>72.2</td>
<td>73.3</td>
</tr>
</tbody>
</table>

Table 22 below shows calculations for national economic losses emerging from anemia among women and men employed in manual labor. After corrections for general labor participation and estimates for proportion employed in manual labor, the 5% productivity deficit is applied to 308 thousand women and 83 thousand men – with an additional 12% deficit for those assumed to be engaged in heavy manual labor. Since these are current losses no discounting is applied before reaching an estimate of $55 million in depressed productivity of manual laborers with anemia.

Table 22 Projecting Economic Loss from Stunting via Direct Observation of Earning Methodology

<table>
<thead>
<tr>
<th>Number w/ Deficit or Risk</th>
<th>Average Earnings</th>
<th>Labor Force Participation</th>
<th>Manual Labor %</th>
<th>Coefficient Deficit</th>
<th>Coefficient Deficit</th>
<th>Annual Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female 15-64y 36.5%/557,180</td>
<td>X $1244/y</td>
<td>X 76.5%</td>
<td>X 72.2%</td>
<td>X 5% for Manual Labor</td>
<td>X +12% for Heavy Manual Labor (15%)</td>
<td>= $55,147,273/yr</td>
</tr>
<tr>
<td>Male: 15-64y: 9%/143,225</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. Excess Healthcare Expenditures

Malnutrition in children contributes to impaired immunity and infection. Consequently, malnourished children may suffer more frequent or more severe illness which in turn translates into increased utilization of health services. This can generate a significant financial burden both on individual families as well as the health and medical system. While there are also significant opportunity costs to families involved in caring for sick children, only direct financial costs will be estimated in the DAR. While excess healthcare expenditures are measured for two indicators, there are doubtless countless cases of sickness associated with other nutrition indicators. However, evidence is not considered sufficiently robust or specific to quantify the impact of these other indicators.
5.1 Excess Healthcare Costs Due to Suboptimal Breastfeeding

A long literature has documented the association of suboptimal breastfeeding and increased morbidity from acute respiratory infection (ARI) and diarrhea. For children 0-6 months, the most recent authoritative review in the Lancet finds that predominantly breastfed infants have a relative risk of 1.26 for diarrhea morbidity and the risk triples for those not breastfeeding at all. For ARI the relative risk of morbidity is 1.79 for partial breastfeeding while infants with no breastfeeding are twice likely to suffer respiratory disease.

**Table 23 RR of Diarrhea and ARI by Breastfeeding Status**

<table>
<thead>
<tr>
<th>Breastfeeding Behavior and Age Segment</th>
<th>Diarrhea Cases RR</th>
<th>ARI Cases RR</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-6 months</td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>3.65</td>
<td>2.48</td>
</tr>
<tr>
<td>Partial</td>
<td>3.04</td>
<td>2.07</td>
</tr>
<tr>
<td>Predominant</td>
<td>1.26</td>
<td>1.79</td>
</tr>
<tr>
<td>6-23 months</td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>1.2</td>
<td>1.17</td>
</tr>
</tbody>
</table>

To estimate the higher burden of diarrhea and ARI cases emerging widespread suboptimal breastfeeding in Lao, the DAR make a series of assumption based on LSIS sample reporting cases of diarrhea or breastfeeding in the past 2 weeks. Assuming the two week time period reflects annual use, the percent reporting an episode is adjusted for annual cases per child (times 26 weeks). Since the sample was taken in the dry season when diarrhea and ARI typically decline, the resulting projection may be an under-estimate. Table 24 shows parameters for projection of 1.1 million annual cases of diarrhea and > 300 thousand cases of ARI.

**Table 24 Estimated Cases of Diarrhea and Respiratory Disease in Children < 6 months and Children 6-23 Months**

<table>
<thead>
<tr>
<th>Cohort &lt; 6 months: 78,097</th>
<th>Diarrhea</th>
<th>ARI</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Had Episode in past 2 weeks (Dry Season)</td>
<td>11.4%</td>
<td>2.9%</td>
</tr>
<tr>
<td>Projected Episode per child over 52 weeks</td>
<td>2.964</td>
<td>0.754</td>
</tr>
<tr>
<td>Estimated Total Annual Cases</td>
<td>231,481</td>
<td>58,885</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cohort 6-24 months: 234,292</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>% Had Episode in past 2 weeks</td>
<td>15.0%</td>
<td>4.0%</td>
</tr>
<tr>
<td>Projected Episode per child over 52 weeks</td>
<td>3.910</td>
<td>1.034</td>
</tr>
<tr>
<td>Estimate Annual Cases</td>
<td>916,086</td>
<td>242,193</td>
</tr>
</tbody>
</table>

How many of the estimated cases above can be attributed to the higher risks of morbidity related to the suboptimal breastfeeding behaviors among Lao mothers? Based on national prevalence of

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66 Robert E Black, Lindsay H Allen, Zulfiqar A Bhutta, Laura E Caulfield, Mercedes de Onis, Majid Ezzati, Colin Mathers, Juan Rivera, Maternal and child undernutrition: global and regional exposures and health consequences Maternal and Child Undernutrition Study Group, Lancet Published Online January 17, 2008
suboptimal breastfeeding along with the RR for elevated risk associated with each behavior and age segment, the calculation shown in Table 26 suggests PARs of 8-21% for Diarrhea and 7-57% for ARI. As shown in Table 26, these PARs are applied to the expected number of cases within each subgroup. For example, the cohort of 63% of children predominantly breastfeeding would be expected to represent 63% or 145,833 total diarrhea cases. The estimated cases of diarrhea attributed to suboptimal breastfeeding are derived by applying the PAR of 14% to this expected number of cases, 20,545 cases to this suboptimal breastfeeding behavior. Applying this methodology to all 3 relevant behaviors in both relevant age groups suggests more than 57 thousand cases of diarrhea and about 23 thousand cases of ARI can be attributed to suboptimal breastfeeding behaviors, in total about 80 thousand annual cases.

### Table 25 Population Attributable Risk for Diarrhea and ARI from Suboptimal Breastfeeding Behaviors

<table>
<thead>
<tr>
<th>Suboptimal Breastfeeding</th>
<th>Diarrhea</th>
<th>ARI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>RR</td>
<td>PAR</td>
</tr>
<tr>
<td>Infants &lt; 6 months</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Predominant Breastfeeding</td>
<td>63%</td>
<td>1.26</td>
</tr>
<tr>
<td>No Breastfeeding</td>
<td>10%</td>
<td>3.65</td>
</tr>
<tr>
<td>Children 6-23 months</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Continued Breastfeeding</td>
<td>44%</td>
<td>1.2</td>
</tr>
</tbody>
</table>

### Table 26 Projections for Excess Cases of Diarrhea and ARI based on Population Attributable Risks

<table>
<thead>
<tr>
<th></th>
<th>Diarrhea</th>
<th>ARI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Expected Cases Proportional to Prevalence</td>
<td>Attributed Excess Cases</td>
</tr>
<tr>
<td>&lt; 6 Months</td>
<td>Total: 231,481 cases</td>
<td>Total: 58,885 cases</td>
</tr>
<tr>
<td>Predominant Breastfeeding</td>
<td>145,833 cases: 63%</td>
<td>20,525</td>
</tr>
<tr>
<td>No Breastfeeding</td>
<td>23,148 cases: 10%</td>
<td>4,849</td>
</tr>
<tr>
<td>6-23 Months</td>
<td>Total: 916,086 cases</td>
<td>Total: 242,193 cases</td>
</tr>
<tr>
<td>No Continued Breastfeeding</td>
<td>398,554 case: 44%</td>
<td>31,903</td>
</tr>
<tr>
<td>Total Cases</td>
<td>57,277</td>
<td>22,956</td>
</tr>
</tbody>
</table>

Establishing a financial cost for these 80 thousand annual cases of diarrhea and ARI requires several assumptions and derivations from available data. First, as indicated in Table 27 shows available LSIS on utilization of health care services. Not all cases result in health care seeking and only the proportion of cases actually seeking care or receiving medical services is counted as a cost. For ARI, utilization of health care services is based on the percent of cases seen in public or private health care facilities along with the proportion receiving medication. For diarrhea, LSIS data defines the proportion of cases receiving specific treatments. For example, 42% of diarrhea cases received Oral Rehydration Therapy (ORT) and 5% received some sort of injection. In both cases, we speculate a proportion of cases serious enough to be referred from the primary health care level to a hospital.
Table 27 Data and Derivations for Health Care Utilization for Diarrhea and ARI Cases in Children < 24 months

<table>
<thead>
<tr>
<th>Utilization and Cost estimates</th>
<th>Diarrhea</th>
<th>ARI</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taken to Public Facility %</td>
<td>29%</td>
<td></td>
<td>LSIS</td>
</tr>
<tr>
<td>Taken to Private Facility %</td>
<td>11%</td>
<td></td>
<td>LSIS</td>
</tr>
<tr>
<td>Received Antibiotics or other pills</td>
<td>47%</td>
<td>48%</td>
<td>LSIS</td>
</tr>
<tr>
<td>Received Injections</td>
<td>5%</td>
<td></td>
<td>LSIS</td>
</tr>
<tr>
<td>ORT</td>
<td>42%</td>
<td></td>
<td>LSIS</td>
</tr>
<tr>
<td>Home and Other Treatment</td>
<td>10%</td>
<td></td>
<td>LSIS</td>
</tr>
<tr>
<td>Hospitalizations</td>
<td>1%</td>
<td>10%</td>
<td>Estimate</td>
</tr>
</tbody>
</table>

The second difficulty in making this analysis of excess costs attributed to breastfeeding behaviors is the cost per case or treatment is a speculative figure. Estimates for cost per case or treatment are ventured in the DAR based on rough estimates provided by Ministry of Health to the National Economic Research Institute. While understanding the degree of speculation involved, unit costs are ventured in Table 28 below.

Table 28 Speculated Unit Costs for Medical Care and Services Applied to Child Diarrhea and ARI

<table>
<thead>
<tr>
<th>Calculated Number of Treatments</th>
<th>Unit Cost</th>
<th>Background</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taken to Public Facility #</td>
<td>$11.76</td>
<td>90,000 Kip/Consult</td>
</tr>
<tr>
<td>Taken to Private Facility #</td>
<td>$23.53</td>
<td>Estimated 1 times Public Facility</td>
</tr>
<tr>
<td>Received Antibiotics or other pills</td>
<td>$1.053</td>
<td>8000 Kip Full Course</td>
</tr>
<tr>
<td>Received Injections</td>
<td>$7.89</td>
<td>5 Injections @ 8000 Kip</td>
</tr>
<tr>
<td>ORT</td>
<td>$0.98</td>
<td>5 treatments @ 5000 Kip</td>
</tr>
<tr>
<td>Home and Other Treatment</td>
<td>$2.6</td>
<td>Special foods, folk remedies etc.</td>
</tr>
<tr>
<td>Hospital Cost Per Day</td>
<td>$26.32</td>
<td>200,000 Kip/dy</td>
</tr>
<tr>
<td>Average Hospital Days Diarrhea/ARI</td>
<td>2/4.7</td>
<td>2/3rd MOH Maximum</td>
</tr>
</tbody>
</table>

Based on the data, derivations and speculations in Tables 24-28 above, the 80 thousand excess cases is adjusted to reflect those actually seeking care and then multiplied by the unit cost of the specified product or service to project an annual health care cost of more than half a million dollars annually due to the current prevalence of suboptimal breastfeeding practices in Lao.
Table 29 Excess Cost of Health Services Attributed to Suboptimal Breastfeeding Practices in Lao PDR

<table>
<thead>
<tr>
<th>Attributed Cases Utilizing Health Services</th>
<th>Estimated Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Diarrhea</td>
</tr>
<tr>
<td>Taken to Public Facility #</td>
<td>-</td>
</tr>
<tr>
<td>Taken to Private Facility #</td>
<td>-</td>
</tr>
<tr>
<td>Received Antibiotics or other pills</td>
<td>26,900</td>
</tr>
<tr>
<td>Received Injections</td>
<td>3,062</td>
</tr>
<tr>
<td>ORT</td>
<td>24,215</td>
</tr>
<tr>
<td>Home and Other Treatment</td>
<td>5,863</td>
</tr>
<tr>
<td>Hospitalizations Diarrhea</td>
<td>573</td>
</tr>
<tr>
<td>Hospitalizations ARI</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td></td>
</tr>
</tbody>
</table>

5.2 Costs Associated with Low Birth Weight Deliveries

Of more than 23 thousand low birth weight deliveries in Lao, the DAR estimates 20,422 are infants weighing 2000-2499 grams while 2694 are severe cases weighing less than 2000 grams at birth. Excess healthcare costs are estimated only for the 42% in health facilities, as reported by LSIS. Parameters used to estimate the added cost to health care system for 9,599 babies born in Lao health care facilities is shown in the table below. A rough speculation is also ventured made for modest financial costs that may fall on families due to low birth weight babies not delivered in a medical or health facility.

Table 30 Unit Costs and Utilization for Estimating Excess Annual Costs of Low Birth Weight Deliveries

<table>
<thead>
<tr>
<th>Percent Born in Facility</th>
<th>42%</th>
<th>LSIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Added Days in Facility &lt; 2000 Grams</td>
<td>4.69</td>
<td>2/3rd of Maximum from MOH Guidelines</td>
</tr>
<tr>
<td>Added Days in Facility 2-2500 Grams</td>
<td>3.35</td>
<td>2/3rd of Maximum from MOH Guidelines</td>
</tr>
<tr>
<td>Cost of Bed/ICU/Treatments for Mother Per Night</td>
<td>$26</td>
<td>Reported by MOH</td>
</tr>
<tr>
<td>Post Maternity Care Visits for Mother and Child</td>
<td>3</td>
<td>Estimated by MOH</td>
</tr>
<tr>
<td>Cost Per Post Maternity Care Visit</td>
<td>$3.95</td>
<td>Sick Child Visit @30,000 Kip</td>
</tr>
<tr>
<td>Born At Home</td>
<td>13,518</td>
<td>Derived from LSIS</td>
</tr>
<tr>
<td>Cost to Families Per Case</td>
<td>$9</td>
<td>65000 Kip estimated by NERI/MOH Work Group</td>
</tr>
</tbody>
</table>

Based on the data and unit costs as well as speculations ventured above, low birth weight cases represent a financial burden of about $1.1 million annually to Lao government and individual families.

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67 Based global analysis in Black et al Maternal & child undernutrition: global and regional exposures and health consequences Maternal and Child Undernutrition Study Group, Jan 17, 2008
### Table 31: Annual Health Costs Attributed to Low Birth Weight Deliveries in Lao

<table>
<thead>
<tr>
<th>Case Description</th>
<th>Annual Cost Projections for LBW Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>1119 Babies &gt; 2000g @ $88.16 per case</td>
<td>$138,089</td>
</tr>
<tr>
<td>8480 Babies 2000-2499g @ $123.42</td>
<td>$747,592</td>
</tr>
<tr>
<td>Follow-up Post natal care for 9,599 Facility born Babies</td>
<td>$113,672</td>
</tr>
<tr>
<td>Speculated Family Costs for 13,518 Estimated Home Births</td>
<td>$115,613</td>
</tr>
<tr>
<td>Annual Cost Projections for LBW Cases</td>
<td>$1,114,966</td>
</tr>
</tbody>
</table>

### 6. Summary: National Economic Consequences of Child Malnutrition

At current prevalence for 10 indicators of malnutrition analyzed in the DAR, the burden on national economy of Lao PDR may be at least ~$200 million annually, representing about 2.4% of GDP. Individual analysis from mortality as well as lost productivity have been statistically adjusted to correct for possible “double counting” of children suffering more than one form of malnutrition. For example, the NPV for Lost Future Productivity is about 74% of the sum of the individual analysis for anemia and stunting in children 6-24 months of age to account for children who may be both anemic and stunted.

Almost three quarters of this $200 million annual loss represents Net Present Value of future losses due to mortality, depressed cognitive development and consequent lost future work potential of children. Projecting economic losses from future productivity amongst children is very sensitive to the discount rate used in calculating the NPV. When a rate of 7% is used instead of the 3%, the total annual loss declines to $113 million. While lost current productivity of adults and healthcare costs are not affected, the NPV of future losses from childhood risks and deficits declines dramatically – and represents less than half the total loss when this higher discount rate is applied.

### Table 32 Summary Economic Consequences for All Indicators: $000,000/yr

<table>
<thead>
<tr>
<th></th>
<th>Lost Workforce</th>
<th>Lost Future Productivity</th>
<th>Lost Current Productivity</th>
<th>Healthcare Costs</th>
<th>Total</th>
<th>$000000/yr</th>
<th>% of GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maternal Anemia</td>
<td>$7.0</td>
<td></td>
<td></td>
<td>$7.02</td>
<td>4%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suboptimal Breastfeeding</td>
<td>$23.6</td>
<td></td>
<td></td>
<td>$24.13</td>
<td>12%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low Birth Weight</td>
<td>$5.6</td>
<td></td>
<td></td>
<td>$6.70</td>
<td>3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Birth Defect (NTDs)</td>
<td>$2.2</td>
<td></td>
<td></td>
<td>$2.2</td>
<td>1%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Childhood Anemia</td>
<td>$21.5</td>
<td>$21.53</td>
<td></td>
<td></td>
<td>11%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stunting</td>
<td>$51.4</td>
<td></td>
<td></td>
<td></td>
<td>26%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Underweight</td>
<td>$21.7</td>
<td></td>
<td></td>
<td></td>
<td>11%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vitamin A Deficiency</td>
<td>$9.3</td>
<td></td>
<td></td>
<td></td>
<td>5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IDA in Adults</td>
<td>$69.4</td>
<td>$73.0</td>
<td>$55.1</td>
<td>$199.18</td>
<td>100%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual Total</td>
<td>35%</td>
<td>37%</td>
<td>28%</td>
<td>1%</td>
<td>37%</td>
<td>$1.7</td>
<td>2.40%</td>
</tr>
</tbody>
</table>

68 GDP is the same total used to calculate individual earnings $8,297,664,741
Over the next decades, a growing Lao PDR economy will doubtless lower this human and financial burden. However, nutrition status will respond relatively slowly to economic growth. A recent World Bank analysis of malnutrition and economic growth in 79 countries concluded “that income growth can play an important role in malnutrition reduction, but that it is not enough. Increases in the number and effectiveness of direct nutrition interventions have a crucial role to play if nutrition goals are to be met.”  

According to the Disease Control Priorities Project, “Progress has been made in some areas, but the current magnitude of the problems and of the associated disease burden underscores the need for more investment in nutritional interventions.”

If malnutrition continues to drains the Lao economy on the magnitude of 2.5% of GDP, the ambitious national goal of 8% annual GDP growth will be more difficult to achieve and sustain. The DAR estimate describes the magnitude losses from malnutrition in order to spur policy discussion and ultimately secure investment in programs on a scale appropriate to the extent of the burden malnutrition.

The “baseline losses” projected by the DAR indicate the potential for significant economic as well as human and social benefits that might be secured by investment in interventions to lower prevalence of these indicators of malnutrition.

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70 Laura E. Caulfield, Stephanie A. Richard, Juan A. Rivera, Philip Musgrove, and Robert E. Black, Stunting, Wasting, and Micronutrient Deficiency Disorders, Disease Control Priorities in Developing Countries, 2006
The Existence of Double-Burden of Malnutrition in the Same Households in Eastern Indonesia: Analysis using Global vs. Alternative Asian BMI Cut-off Points

Avita A Usfar
Peter Agnew
Kartika S Juniawat
Fiona Howell
Secretariat of the National Team for the Acceleration of Poverty Reduction (TNP2K)

ABSTRACT

The study utilizes the data from the first round of Indonesian Family Life Survey conducted in the eastern part of the country (IFLS East) during 2012 to identify child-mother pairs which experience the Double Burden of Malnutrition (DBM) - a situation where overnutrition of the mother and undernutrition of the child coexist within the same household. The analysis is done using several cross tabulations and comparisons to determine outcomes for the two separate Body Mass Index (BMI) measurement classifications; the Global-Cut off and the Asian Cut-off. The study also explores the difference in household characteristic as factors contributing to DBM. The results showed that the prevalence of child undernourishment within the IFLS East is considerably high, especially for the stunting prevalence (44%). The results also showed that the use of the Asian-Cut off for classification of BMI raises the prevalence of mothers in the categories of overweight and obese from 32% to 46%, consequently raising the prevalence of DBM child-mother pairs by 6 percentage points. The study was able to detect a significant risk factor for DBM of maternal short stature, but was not able to detect other significant factors leading to the presence of the DBM child-mother pair. The paper argues that more research is required into the special characteristics of the women in between the two cut-off classifications, as well as their children. Findings of the additional research may lead to a determination of the appropriateness of the Asian Cut-off as more accurately capturing the severity and prevalence of double burden of malnutrition amongst the population. Several policy recommendations for the further monitoring and analysis of DBM and obesity amongst women of child bearing age are provided.

Key words: Double Burden of Malnutrition, nutrition transition, Indonesian Family Life Survey, WHO Global BMI Cut-off point, Asian BMI Cut-off point
INTRODUCTION

The Double Burden of Malnutrition (DBM) is a situation where undernutrition and overnutrition coexist within the same country, community or household. The DBM is a global problem, with 25% of the world’s population being overweight, while 17% of pre-school children are underweight and 28.5% are stunted and 40% of women of reproductive age have anaemia (UNSCN 2010). The DBM is a particular concern for developing and middle income countries that find themselves in the midst of what is known as the ‘nutrition transition’. This term comprises food consumption and physical activity changes that are associated with lifestyle transformations in modernizing or westernizing societies (Popkin 2001). The nutrition transition often occurs in countries experiencing economic growth, but which are also characterized by high rates of undernutrition. The rapid onset of obesity leaves a gap in suitable policies, which remain largely focused on tackling undernutrition. The evidence for the severity and implications of DBM is also still quite limited, making advocacy for the incorporation of actions for its address into policy difficult. The challenge is for the research to catch pace with the rapid onset of the problem which is already considered an epidemic.

The issue of child stunting has become a more widely recognized problem in recent years, however, recognition of the phenomena of the DBM has come to light relatively recently in Indonesia. In Indonesia there is little awareness of the DBM amongst government policy makers, the general public or even within health professional circles. As in many cultures, being overweight is still perceived rather positively in Indonesia and associated with higher social status. In fact there is still widespread denial that obesity is even a disease, where many people believe that obesity is solely the result of poor personal choices. The challenge for the nutrition and medical community is to raise public awareness that obesity is a disease rooted in genetics and biological factors which start as early as conception, which is then compounded by poor nutrition.

In this study, we first present the prevalence of the malnutrition problem amongst the children and mothers in the eastern part of Indonesia based on the analysis of the 2012 Indonesian Family Life Survey (IFLS East). For the nutritional status of the mother, we use two different classifications: the Global Cut-off and the Asian Cut-off in order to contrast the the severity of the prevalence of the malnutrition problem using those two different classifications. Secondly, we conduct an analysis of the data set to identify the child-mother pairs which are experiencing the DBM. Finally, we compare the DBM child-mother pairs and the normal/well-nourished child-mother pairs utilizing a wide range of household characteristics to examine potential characteristics which may contribute to the prevalence of DBM within a household.

This study largely complements the 2012 assessment of the DBM in Indonesia by Roger Shrimpton which points to several causes of the DBM and highlights the urgency of policy action. Shrimpton utilizes a four-wave panel from a series of Indonesian Family Life Surveys (IFLS, 1993, 1997, 2000, 2007) to highlight the problem of overweight/obesity and its rapid increase during this period. Also, this study builds on the studies of Römling and Qaim (2012a and 2012b) which also looked at the four-wave panel series of IFLS data for trends in obesity and DBM.

Additional reviews of relevant journals have been carried out for the inclusion of analysis from articles published on topics of relevance to the DBM problem in Indonesia. This paper is not the result of a systematic literature review, but rather discusses relevant literature with the aim of raising attention to the growing body of evidence which shows links between undernutrition and overnutrition within the same household.

The paper also aims to raise awareness of the need for appropriate policy development as Indonesia undergoes its rapid nutrition transition. Various methodologies for determining the
severity of the DBM in Indonesia are explored and considered. Specifically, the use of alternative Body Mass Indexes (BMI) classification is reviewed to highlight the need for contextually specific tools for analysis of the DBM. Attention is also drawn to the need for looking not only at the malnourished child, but to the health status and risks of mothers which contribute to the DBM, to determine methods of early identification and prevention for potential inclusion in future policies.

LITERATURE REVIEW

The Double Burden of Malnutrition in Indonesia

Roger Shrimpton, in his 2012 study The Double Burden of Malnutrition in Indonesia, also looks at the panel of the IFLSs carried out in 321 communities in 13 provinces including data from 1993, 1997, 2000 and 2007. His work shows that over the fifteen year period, the proportion of thin men and women (BMI<18.5) decreased considerably while the proportion of fat men and women (BMI>25) almost doubled. Shrimpton also points out that according to the national Basic Health Research Survey (Riskesdas) 2010, the proportion of total mortality caused by non-communicable diseases (NCDs) in Indonesia surpassed that of the communicable diseases around the turn of the millennium, and that in 2007 NCDs accounted for nearly 60% of mortality. Stroke was the leading cause of death at 15.4%, followed by tuberculosis (7.5%), which was the most common communicable disease cause of mortality while cardiovascular disease (CVD) accounted for 30.6% of all NCD deaths. This was followed by cancer (12.9%) and Chronic Obstructive Pulmonary Disease (7.1%) and diabetes (2.9%) (Directorate of Non-Communicable Disease Control – MOH, 2011). The link between the high levels of NCDs and the DBM household is explored further.

Shrimpton’s study also noted that Indonesia’s most stunted province, East Nusa Tenggara (NTT) with the prevalence of 58%, also has the highest level of low-birth-weight rates in Indonesia at 19%. Young child wasting rates in Indonesia are also high, with eighteen provinces having a prevalence of over 15%, a level which is considered an emergency situation necessitating supplementary feeding the by WHO. However overweight is also a significant problem. Ten provinces have young child overweight/obesity rates of over 15%, and in three provinces both young child wasting and overweight/obesity rates are over 15%. Importantly for this study, Shrimpton noted that rates of adult overweight/obesity are similar if not of greater magnitude in the outer islands – many of which are included in the IFLS east dataset used for this study.

In a study utilizing the four IFLS waves, Römling and Qaim (2012a) shed additional light on the prevalence and trends of obesity in Indonesia. Detailed household and individual level data gathered from adults and spanning the time period from 1993 to 2007 suggests that the obesity pandemic in Indonesia will further increase in extent and severity. The study utilized the Asian Cut-off for BMI classification with a BMI of higher than 27 kg/m² categorized as obese, and between 23 and 27 kg/m² as overweight/pre-obese. Accordingly, a BMI between 18.5 and 23 kg/m² is categorized as normal weight, whereas less than 18.5 kg/m² is considered underweight.

The authors disaggregated the data by gender to show that on average both men and women have increased their BMI significantly. The mean of BMIs increased 0.64 points for men and 1.23 points for women from 1993 to 2000, and 1.19 points for men and 1.41 points for women from 2000 to 2007 suggesting that the nutrition transition in Indonesia in also accelerating. While the BMI of individuals is often positively associated with improved living standards, it is also associated with poorer segments of society. Many in the poorer income quintiles have also increased their BMI beyond normal weight levels over the 14-year period of observation. Analysis in the study also showed that the nutrition transition is not an urban phenomenon, but is present in accelerating rates amongst rural areas. The general analysis of the panel data confirms that
'Indonesia is in the process of a fast and profound nutrition transition, with constantly rising prevalence rates of obesity' (Römling and Qaim, 2012a).

A separate study by Römling and Qaim (2012b) exploited household panel data from the same four-wave survey data, and as well utilized a Theil Index to determine intra-household nutritional inequality to examine the nature of the nutrition transition in Indonesia. Data showed that the proportion of underweight households (where there is at least one underweight member but no overweight members) declined from 26.3% to 14.9% between 1993 and 2007, however the number of overweight households (where there are no underweight members and at least one overweight) increased from 35% in 1993 to 51% in 2007, while the proportion of the double burden households increased from 12% in 1993 to 17% in 1997 and remain relatively steady up to 2007. The panel data showed that the household nutritional status is actually transitory in nature with 51% of households moving to other categories between periods of observations, with nearly 60% of the normal households moving into different categories; most of them to the overweight group.

The introduction of the Theil Index allowed for a more in-depth analysis of the data showing that intra-household nutritional inequality is highest among the overweight households and is increasing amongst the poor. In 1993 the highest prevalence of double burden households was amongst the richest quintiles, but by 2007 the poorest quintile had the highest proportion of double burden. The study also pointed to higher levels of intra-household nutritional inequality within urban households. Analysis showed that intra-household nutritional inequality may be increasing amongst urban households and households with higher numbers of family members. The authors suggest that this may be due to several reasons including; rising levels of extreme obesity amongst individual household members and the likelihood of larger BMI differences amongst larger households, and the existence of greater choices of poorer quality foods in urban environments.

**The Life-cycle Dimension of the DBM and Links to Non-Communicable Disease**

Non-Communicable Diseases (NCDs) account for over half of total deaths in the world (Abegunde and Stanciole 2006). The science linking NCDs to intrauterine growth restriction, caused by poor maternal nutrition and leading to intergenerational malnutrition, has been under discussion since the 1960s (Neel 1962). The *fetal origins hypothesis* is based on associations observed between foetal or early growth restriction and the subsequent development of chronic disease, in particular insulin resistance and impaired glucose tolerance (Hales & Barker, 1992). Hofman et al., in 1997 also proposed the concept of *foetal salvage* in which selective changes in growth rates of certain organs, often the brain and other key organs, are intentionally sacrificed by adaptations in foetal metabolism. The World Health Organization estimates that 66 percent of deaths due to chronic disease and NCDs worldwide now occur in developing countries and that obesity is a primary risk factor in these contexts (WHO 2004). And within such countries, the poor are increasingly affected as development progresses (Monteiro et al. 2004).

Cara Eckardt of the International Food Policy Research Institute (IFPRI) in a review of a series of Latin American and Caribbean studies in 2006 concluded that micronutrient malnutrition may be indirectly contributing to the risk of overweight/obesity and chronic diseases via its relationship with childhood stunting and subsequent short adult stature, which, in turn, increases the risk for overweight/obesity and chronic disease in the context of the nutrition transition (Eckardt, 2006). Several studies propose that the effects of the nutrition transition and the emergence of the DBM problems may also be genetic in nature. It is proposed that genetic factors could endow individuals that were able to efficiently collect and process food to deposit fat during periods of food abundance, which has been called the "thrifty genotype" hypothesis (Neel 1962). This thrifty
gene then works to the disadvantage of those who are later exposed to a poor diet high in fats and sugars as adults, or as children, who are then predisposed to obesity.

**Contributing Factors to DBM**

It is generally agreed that DBM is the result of a culmination of factors which are locally specific to the context in which they are found. In a study conducted by Oddo et al (2012) which reviewed data from a total of 247,126 rural households that participated in the Indonesia Nutrition Surveillance System (2000–2003), DBM was observed in 11% of the households in rural Indonesia. The authors found that maternal short stature and older age were strong predictors of DBM. Child characteristics such as older age and being female were associated with increased risk of DBM, whereas currently being breastfed was protective against DBM by 26%. A larger family size and higher weekly per capita household expenditure were also strongly linked to DBM.

CM Doak et al, in their 2004 study, looked into the relationship between urban and rural residence as well as income when comparing the data for DBM in a multi-country data review which included Indonesia. Using the Global Cut-off BMI, all persons were classified into categories of double burden, overweight, underweight and normal. Multiple logistic regressions were used to explore income and urban risk factors. The study found that the highest prevalence of DBM households were within those countries in the middle range of gross national product (GNP). Importantly, in Indonesia the DBM households were not found to be easily distinguished from ‘overweight’ only households, implying the identification of DBM households maybe difficult. Due to the complexity of the issue, there is much debate on the contributing factors related to DBM.

**Economic Consequences of DBM**

Developed and developing countries are both struggling to address the economic consequences of DBM. At the root of this problem is health financing. The problem is urgent as the numbers of obese and DBM are predicted to increase significantly along with aging populations, unplanned urbanization, and unhealthier lifestyles. An Asian Development Bank study showed that when the impact of health care costs on household resources is factored into real costs, about 78,000,000 more people in developing Asia would fall into poverty. For Indonesia this equates to 8.7% more or 1,400,000 more people if based on the current national poverty line of $1.08/day (ADB 2011). The Asian Development Bank also quotes Harvard University health economist David Bloom who estimates that chronic illnesses, such as heart disease and cancer, will cost the world an estimated $35 trillion over the next 25 years.

Attempts have been made to calculate the costs of gestational malnutrition. There is also evidence that constrained foetal growth produces measureable differences in immunity, as well as a greater propensity for diet related non-communicable diseases such as type 2 diabetes and cardiovascular diseases later in the life course. Based on conservative assumptions related only to lost productivity, the costs of child undernutrition in the Asia region were estimated to be at least 2 or 3 percent of GDP (Horton 1999).

Guillespie and Haddad (2001) assert that the most sustainable and economic pro-poor growth strategies are found in nutrition interventions, however the actual components of a national strategy must be chosen contextually and based on local evidence. They state clearly that a shift from a curative approach to a preventative and promotion-based approach will have the most significant and rapid impact. The authors also suggest that national economic analysts employ the use of the disability adjusted life years (DALY) when analysing and advocating for nutrition financing. The DALY combines years lost due to mortality with years lost due to morbidity and disability which demonstrates that nutrition interventions have a high estimated benefit in terms
of reducing the burden of disease and consequentially economic loss. Lastly, the authors recommend the diversion of a small amount of resources from less effective food assistance programs through improved targeting of direct nutrition programs toward the current generation of infants (2001). The World Bank also notes that annually, Indonesia loses over US$2.6 billion in GDP to vitamin and mineral deficiencies (World Bank 2012), money which could be used to broaden nutrition interventions.

**The DBM and Global Cut-off and Asian Cut-off of BMI Classification**

The severity of the problem of the DBM can be determined using varying methodologies. This study looked at two separate standards for classification of overweight and obese for measuring nutritional status of the mothers. The first classification is commonly referred to as the Global Cut-off which utilizes a BMI of >25 kg/m² to determine overweight status and >30 kg/m² to determine obesity. The second classification is commonly referred to as the Asian Cut-off which utilizes a BMI of >23 kg/m² to determine overweight status and >27 kg/m² to determine obesity. The Global Cut-off has been developed in the context of Caucasian communities, derived largely from mortality statistics from European and American populations and is endorsed by the WHO. For this reason many in Asian countries believe that there is a need to review the WHO recommended cut-off limits for obesity in Asian populations to ensure that populations with a higher health risk and susceptibility to disease are detected.

Several studies have separately established that the BMI cut-off point for obesity for Asian populations is pegged between 23 and 27 kg/m², challenging the notion that one BMI cut-off point fits all populations (Durenburg et al 1998, and Chang et al 2003). Furthermore, studies have shown that Asian populations have higher risks of type 2 diabetes, cardiovascular disease, and mortality from other causes at a relatively lower BMI, which they postulated to be largely attributable to the higher proportion of body fat in Asian populations (Norgen 1994 and Tai et al. 1999). Using regression analyses to study the relationships between BMI and actual Percentage of Body Fat (PBF), Goh et al (2004) showed that the most appropriate BMI cut-off point for obesity for a sample of local healthy Asian (Chinese/Singaporean) men and women aged 30–70 years was 27. Goh et al (2004) found that if the Global Cut-off BMI of 30 kg/m² was used, between 86.6% and 93.3% of obese women and men will be misclassified as non-obese. On the other hand, 2.7% and 5.0% of non-obese men and women, respectively, will screen positive. This data supports the need to review the use of the Global Cut-off when discussing health policy for largely homogenous Asian countries. The official communication on the matter of Global vs. Asian Cut-offs from the WHO concluded that the proportion of Asian people with a high risk of type 2 diabetes and cardiovascular disease is substantial at BMIs lower than the existing WHO Global Cut-off point for overweight (>25 kg/m²). However, available data do not necessarily indicate a clear BMI cut-off point for all Asians for overweight or obesity classification (the numbers did not hold for Japanese and Northern Chinese populations). The cut-off point for observed risk varies from 22 kg/m² to 25 kg/m² in different Asian populations; for high risk it varies from 26 kg/m² to 31 kg/m². No attempt was made, therefore, to redefine cut-off points for each population separately. The communication did however recognize the need for a variety of health actions along the continuum of BMI and proposed methods by which countries could make decisions about the definitions of increased risk for their specific population (WHO, 2004).
METHODOLOGY

Data Source

The data source of this study is the 2012 Indonesian Family Life Survey East (IFLS-East) which is a data set covering a wide range of characteristics of households which was carried out for the first time in 7 eastern provinces of Indonesia which were not covered in any previous IFLS. The 7 provinces are East Kalimantan, Maluku, North Maluku, East Nusa Tenggara, Papua, West Papua and South East Sulawesi. The questionnaires used in the IFLS East were modified from the previous IFLS in order to capture the specific conditions of the respondents, the field teams and the government implementers in the Eastern provinces of Indonesia. The IFLS East covered 99 enumeration areas in 99 villages, 91 sub-districts, and 52 districts within the 7 provinces. There are 38 villages categorized as urban areas and 61 villages categorized as rural areas. Total number of households interviewed was 2,457.

The questionnaire used in the IFLS East survey consists of four modules: the household, individual, cognitive test and health measurement. The household module was administered to the head of household or the spouse, the individual module was responded by all individuals in the household, the cognitive test was administered to all members of the household who were older than 7 but less than 24 years old, and the health measurement module captured a selection of health indicators for all members of the households.

Measurement of Nutritional Status of Children and Mothers

Nutritional status of children 0-59 months is analysed using Weight-for-Age (WFA) Z-scores, Weight-for-Height (WFH) Z-scores, and Height-for-Age (HFA) Z-scores as measures of underweight, wasting, and stunting respectively. The following WHO (1995) classifications of the Z-scores are used:

<table>
<thead>
<tr>
<th>Classification</th>
<th>Z-score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Severely undernourished</td>
<td>&lt;-3 Standard Deviation (SD)</td>
</tr>
<tr>
<td>Moderately undernourished</td>
<td>≥-3 to &lt;-2 SD</td>
</tr>
<tr>
<td>Normal</td>
<td>≥-2 to &lt;2 SD</td>
</tr>
<tr>
<td>Overnourished</td>
<td>&gt;2 SD</td>
</tr>
</tbody>
</table>

The following lower and upper SD boundaries are used as cut-offs for Z-scores: WFA -6 to +5, WFH -5 to +5, and HFA -6 to +6, children who have scores outside these boundaries are excluded from the analysis (WHO 2009).

The nutritional status of mothers is evaluated using Body Mass Index (BMI or kg/m2). In this paper, two different classifications are used: the Global Cut-off (WHO 1995, WHO 2000) and the alternative Asian Cut-off (WHO 2004). The classifications of nutritional status based on the BMI of mothers using the two cut-offs is as follows:

1 The Z-score is obtained by comparing the WFA, WFH, and HFA of the children with the WHO reference of children population.
Furthermore, all BMIs of <12 or >50 were excluded from the further analysis. Maternal stature was classified as short if found to be <145 cm.

**Double Burden of Malnutrition Child-Mother Pair Determination**

Mothers who have a BMI score ≥25 (using the Global Cut-off) or ≥23 (using the Asian Cut-off) who have a child who has a HFA Z-score lower than -2 SD is categorized as a DBM child-mother pair, while other pairs are categorized as non-DBM. Furthermore, in this paper, the DBM child-mother pairs will be compared with child-mother pairs where both child and mother have normal/well-nourished nutritional status. Normal for mothers means that the BMI score is between 18.5 and 25 (using Global Cut-off), and normal for children means that the HFZ Z-score is between -2 and 2 SD.

In this study, to link the mothers and the children within the same household, the household roster of the questionnaire is used. The number of households selected for further analysis of child-mother pairs is derived based on those having complete anthropometric data. From the total of 10,745 persons surveyed, 10,705 (99.7%) have complete anthropometric measurements, of which 1,340 contain anthropometric data of children 0-59 months. After data cleaning in regards to height, weight, age, z-scores, and BMIs, the anthropometric data of 1,035 children and 842 of their biological mothers are used for further analysis. If there is more than 1 child age 0-59 months belonging to the same mother, the older child is selected for the pair analysis as it has been shown that there is an association between children’s age and DBM, in which households which have older children have increased odds of DBM (Oddo et al., 2012). The identification of the child-mother pairs using the older child ensures the highest capture of DBM households. Furthermore, the IFLS East data used in this study also shows a tendency of poorer nutritional status as the child gets older.

**Potential Contributing Factors of DBM**

There are several potential contributing factors of DBM. The factors that are analysed in this study are divided into the following categories: Socio-economic and demographic characteristics, food intake/dietary diversity, health status, environmental condition, and access to health care. The explanation of the variables that are included in each categories is provided in the appendix.

**FINDINGS AND DISCUSSION**

**Characteristics of the Subset for the Analysis**

In this study, we focus on a subset of households which have children under five years old and their biological mother living in the same house. This subset comprises 824 households and include 1,035 children and 842 mothers. Within the subset, 84% of the children are living with...
both parents. Most households (70%) are located in the rural areas, and comprise of nuclear families (64%), with an average household size of 5.4 members. The number of biological children of the same mother within households ranges from 1 to 3, with 79% of mothers having only one child under-five years old. The mean age of the father is 34 years and the mean age of the mother is 30 years. The mean year of schooling for the father is 9 years, while for the mother it is 8.6 years. The main occupation of the father is in the informal sector (64%) followed by the formal sector (35%). About two-third of the mothers are working either in the informal (54%) or are not working (32%). Only 13% of the mothers work in the formal sector.

Overall Nutritional Status of Children in the Subset

In the subset, there are 1,035 children under the age of 59 months that have complete data for nutritional status. The majority of the children are found to be within the normal range for each of the nutritional status measures: 55% for stunting index, 82% for wasting index, and 71% for the underweight index. However, only 425 children, or 41.1%, can be categorized as normal in all of the indices of nutritional status. The proportion of those considered moderate for each of the indices is larger than the proportion of those considered severe. Based on the WHO classification, the prevalence of undernourishment in children is considered high for underweight and wasting indices, and very high for the stunting index.

![Figure 1. Nutritional Status of Children under the age of five](image)

For HFA levels, it is found that 20.6% of the children are severely stunted, 23.4% are moderately stunted, and 55.9% are of normal height, while 0.2% are overnourished (Figure 1). The Z-score mean is -1.6. The total stunting prevalence among children in the sample is 44.0% which is 25% higher than the national average figure of 35.6% based on Riskesdas 2010.

For WFH levels, it is found that 3.4% of the children are severely wasted, 7.4% are moderately wasted, 82.1% are normal, while 7.1% are overnourished. The Z-score mean is -0.4. The total wasting prevalence among children in the sample is 10.8% which is lower than the national average figure of 13.3% based on Riskesdas 2010. Nationally, the prevalence of overnourished children under the age of five years as measured by WFH index is 14%.
For WFA levels, it is found that 5.9% of the children are severely underweight, 18.8% are moderately underweight, 70.8% are normal, while 4.4% are overnourished. The Z-score mean is 1.0. The total underweight prevalence among children in the sample is 24.7% which is 39% higher than the national average figure of 17.9% based on Riskesdas 2010.

![Figure 2. Nutritional Status of Children by Urban/Rural Location](image)

The location in which children reside is not balanced between rural and urban areas. Seven out of ten children live in rural areas. The data shows that undernourishment in rural areas is significantly more problematic than in urban areas for both moderate and severe classifications (Figure 2). Conversely, there are a higher percentage of overnourished children in urban areas compared to rural areas in terms of WFH (12.6% vs. 4.8%) and WFA (8.0% vs. 3.0%). There is a small percentage, less than 0.5%, of overnourishment in both rural and urban areas in terms of HFA.

Moderate undernourishment levels are comparable in both boys and girls for all indices however more boys (52%) are severely stunted as compared to girls (35%) as shown in Figure 3. The prevalence of overnourishment is similar for both boys and girls across the three measures of nutritional status. The prevalence of overnourished boys based on WFH is 7.8% and for girls 6.3%.
In terms of the economic status of the households, the data shows a clear pattern of nutritional status in terms of stunting and underweight, and the measure of relative poverty which is measured by quintiles of expenditure amongst the households that have children 5 years old or younger. The figure below shows the prevalence of stunting, wasting and overweight, for both severe and moderate classifications in each quintile. The prevalence of malnutrition, particularly the stunting and the underweight, is higher in the lowest quintile (the poorest) compared to the higher quintiles (richer).
Amongst the children, acute child morbidity such as influenza, cough, fever, and anaemia within the last 4 weeks is very common. The prevalence is as follows: runny nose 56%, cough 52%, fever 48%, anaemia 61%. Diarrhoea in the last 4 weeks was recalled in 12% of the children.

**Nutritional Status of Mothers within the Subset**

Figure 5 below shows the nutritional status of the 842 mothers using the two Body Mass Index (BMI) classifications: the Global Cut-off and the Asian BMI Cut-off points. The majority of the mothers in the subset are found to be of normal BMI when using both the Global Cut-off point and the Asian Cut-off point.

The implication of using the Asian Cut-off is that there are significantly more mothers within the sample that can be categorized as either *overweight* and *obese* (45.6%), than when using the Global Cut-off (32.2%). The percentage of obese mothers is more than doubled from 8.8% under the Global Cut-off to 20.7% using the Asian Cut-off. By using the Asian Cut-off, 23.3% of mothers that are categorized as normal when using the Global Cut-off become categorized as overweight, and 50.8% of the overweight mothers are categorized as obese. In summary, nearly one quarter of mothers (25.3%) are re-categorized when applying the Asian Cut-off BMI.

![Figure 5. Nutritional Status of Mothers](image)

Figure 6 below shows the distribution of the nutritional status by the age groups of the mothers using the two different cut-off classifications. As it is can be seen from the figure there is a much higher percentage of mothers with overweight and obesity in the age group of 31-40 than in any other age groups. A similar tendency also emerges as the Asian Cut-off is being used. Furthermore, using the Asian Cut-off, the proportion of 31-40 years old mothers who are overweight is slightly larger than the proportion of normal mothers.
The figure below shows the prevalence of overweight and obesity amongst mothers disaggregated by expenditure quintiles. The data shows that there is a positive correlation between expenditure quintiles and the percentage of obese mothers in each quintile. This shows that at this point of the nutrition transition in Indonesia, obesity is still most prevalence amongst the wealthier, however, the prevalence is also alarming for the poor. This is supportive of the findings of Romling and Qaim, 2012a.

**Prevalence of Double Burden of Malnutrition in Child-Mother Pairs**

In this section, the double burden of malnutrition is discussed for child-mother pairs where the total subset is 842 pairs. For the analysis, the HFA index (stunting) is used for the children’s nutritional status and the BMI is used for the mother’s nutritional status. Data for the two
measures are cross-tabulated. As mentioned above, only one child per mother is included in the analysis, that being the oldest child under-five.

Table 3 shows the tabulations using the two cut-offs of BMI. Using the Global Cut-off, 32% of the child-mother pairs can be categorized as normal, while 13% of the child-mother pairs can be categorized as a DBM pair. However, when using the Asian Cut-off, the child-mother pairs that can be categorized as normal are 25%, while those categorized as DBM pairs is 19%. Household characteristics of the DBM child-mother pairs are analysed and compared for both Global and Asian Cut-off points to determine whether the child-mother pairs have any differences in observable characteristics between the two different cut off. The t-test results for detecting the difference-in-means do not detect any significance difference between the two groups for any of the variables. As there was no detectable difference in the analysis of variables between the two child-mother pair groups, the Global Cut-off will be used to analyse the difference between normal/well-nourished child-mother pairs in the sample and those categorized as DBM pairs.

Table 3. Nutritional Status of Child-mother pairs using the Global and Asian Cut-off points

<table>
<thead>
<tr>
<th>HFA of children 0-59 months</th>
<th>BMI of mothers using Global Cut-off</th>
<th>BMI of mothers using the alternative Asian Cut-off</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Under-weight (%)</td>
<td>Normal (%)</td>
</tr>
<tr>
<td>Severe stunting</td>
<td>2.3</td>
<td>12.2</td>
</tr>
<tr>
<td>Moderate stunting</td>
<td>3.7</td>
<td>13.2</td>
</tr>
<tr>
<td>Normal</td>
<td>4.3</td>
<td>32.1</td>
</tr>
<tr>
<td>Overnourished</td>
<td>0</td>
<td>0.1</td>
</tr>
<tr>
<td>Total</td>
<td>10.2</td>
<td>57.6</td>
</tr>
</tbody>
</table>

Potential Risk Factors Contributing To DBM

When the well-nourished child-mother pairs are compared with the DBM pairs utilizing the Global Cut-off, the results of both groups were more or less similar in regards to nearly all variables studied using the level of significance of 5% as shown in Table 4. However, for the variable of maternal short stature the DBM pairs showed statistically significant differences in the number of mothers considered short (p<0.05). This finding supports commonly held theories of intergenerational transmission of stunting. The mother, likely being born from an undernourished woman herself, developed undernourishment starting from in-utero resulting in her own short stature (145 cm, WHO standard). When she experiences poor nutrition during pregnancy, the chance of her baby having low birth weight, complications and growth restriction is higher (Bhutta et.al. 2013). Our finding on the significance of maternal short stature is similar to the findings from the Indonesia Nutrition Surveillance System data of 2000-2003 (Oddo et al 2012). Maternal and foetal undernutrition increased the susceptibility of the child to overnutrition and diet-related NCDs in adulthood.
### Table 4. Household Characteristics of well-nourished vs. DBM child-mother pair

<table>
<thead>
<tr>
<th>Type of characteristics</th>
<th>N</th>
<th>Well-nourished Child-Mother Pair</th>
<th>DBM Child-Mother Pair</th>
<th>Diff. (A)-(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HOUSEHOLD SOCIO-ECONOMIC AND DEMOGRAPHIC</strong></td>
<td></td>
<td>(A)</td>
<td>(B)</td>
<td></td>
</tr>
<tr>
<td>Average household size</td>
<td>380</td>
<td>5.3</td>
<td>5.6</td>
<td>0.3</td>
</tr>
<tr>
<td>Average age of child</td>
<td>380</td>
<td>28.9</td>
<td>37</td>
<td>8.1</td>
</tr>
<tr>
<td>Education of head of household</td>
<td>380</td>
<td>8.5</td>
<td>9.1</td>
<td>0.6</td>
</tr>
<tr>
<td>Education of biological mother</td>
<td>380</td>
<td>9</td>
<td>8.8</td>
<td>-0.2</td>
</tr>
<tr>
<td>Education of biological father</td>
<td>320</td>
<td>9.4</td>
<td>9.7</td>
<td>0.3</td>
</tr>
<tr>
<td>Location in urban areas</td>
<td>380</td>
<td>30.1</td>
<td>24.3</td>
<td>-5.8</td>
</tr>
<tr>
<td>Working Mother</td>
<td>380</td>
<td>62.8</td>
<td>71.2</td>
<td>-8.3</td>
</tr>
<tr>
<td>Working Father</td>
<td>299</td>
<td>98.6</td>
<td>100</td>
<td>-0.1</td>
</tr>
<tr>
<td><strong>NUTRITIONAL STATUS</strong></td>
<td></td>
<td>(A)</td>
<td>(B)</td>
<td></td>
</tr>
<tr>
<td>Average birth weight of Child</td>
<td>268</td>
<td>3.3</td>
<td>3.2</td>
<td>-0.1</td>
</tr>
<tr>
<td>Short Stature-Mother</td>
<td>380</td>
<td>5</td>
<td>12</td>
<td>7</td>
</tr>
<tr>
<td>Anemia-Mother</td>
<td>371</td>
<td>55.6</td>
<td>45.6</td>
<td>-10</td>
</tr>
<tr>
<td><strong>FOOD INTAKE</strong></td>
<td></td>
<td>(A)</td>
<td>(B)</td>
<td></td>
</tr>
<tr>
<td>Dietary diversity - child</td>
<td>232</td>
<td>4.8</td>
<td>5.2</td>
<td>0.4</td>
</tr>
<tr>
<td>Dietary diversity - mother</td>
<td>265</td>
<td>5.2</td>
<td>5.4</td>
<td>0.2</td>
</tr>
<tr>
<td><strong>HEALTH STATUS OF THE CHILD</strong></td>
<td></td>
<td>(A)</td>
<td>(B)</td>
<td></td>
</tr>
<tr>
<td>Influenza</td>
<td>380</td>
<td>57.9</td>
<td>48.3</td>
<td>-9.6</td>
</tr>
<tr>
<td>Cough</td>
<td>380</td>
<td>50.4</td>
<td>48.3</td>
<td>-2.1</td>
</tr>
<tr>
<td>Fever</td>
<td>380</td>
<td>50</td>
<td>51.8</td>
<td>1.8</td>
</tr>
<tr>
<td>Diarrhoea</td>
<td>380</td>
<td>10.5</td>
<td>12.3</td>
<td>1.8</td>
</tr>
<tr>
<td>Anaemia</td>
<td>258</td>
<td>62.5</td>
<td>60</td>
<td>-2.5</td>
</tr>
<tr>
<td><strong>ENVIRONMENTAL HEALTH</strong></td>
<td></td>
<td>(A)</td>
<td>(B)</td>
<td></td>
</tr>
<tr>
<td>Distance to clean water</td>
<td>380</td>
<td>63.6</td>
<td>23.2</td>
<td>-40.4</td>
</tr>
<tr>
<td>Open Type of Water sources</td>
<td>380</td>
<td>80.1</td>
<td>83.3</td>
<td>3.2</td>
</tr>
<tr>
<td>Open Type of Latrine</td>
<td>380</td>
<td>19.6</td>
<td>22.8</td>
<td>3.2</td>
</tr>
<tr>
<td>Inadequate Condition of garbage disposal</td>
<td>380</td>
<td>42.1</td>
<td>47.4</td>
<td>5.3</td>
</tr>
<tr>
<td>Inadequate Condition of sewage draining</td>
<td>380</td>
<td>59.8</td>
<td>61.4</td>
<td>1.6</td>
</tr>
<tr>
<td><strong>ACCESS TO HEALTHCARE</strong></td>
<td></td>
<td>(A)</td>
<td>(B)</td>
<td></td>
</tr>
<tr>
<td>Time needed to reach healthcare facility</td>
<td>374</td>
<td>0.6</td>
<td>2</td>
<td>1.4</td>
</tr>
<tr>
<td>Time needed to reach posyandu</td>
<td>380</td>
<td>0.1</td>
<td>0.1</td>
<td>0</td>
</tr>
<tr>
<td>Number of weighing in the last 6 months</td>
<td>376</td>
<td>3.3</td>
<td>2.8</td>
<td>-0.5</td>
</tr>
<tr>
<td>Ownership of child growth monitoring card (KMS)</td>
<td>380</td>
<td>1</td>
<td>0.9</td>
<td>-0.1</td>
</tr>
</tbody>
</table>

* p<0.05, ** p<0.01, ***p<0.001
The anemia prevalence amongst mothers is considerably high. Within the well-nourished child-mother pairs the prevalence is 55% and amongst mothers in the DBM child-mother pairs, the rate is 45%. The difference of the prevalence (10%) in the two groups is statistically significant. Similar findings were shown in studies conducted among Chinese and Egyptian samples which linked obesity to lower rate of anemia when compared to well nourished individuals (Qin et al, 2013, Eckhardt et al., 2006). Both studies were inconclusive in the correlation between obesity and anemia and cited differences in absorbable iron contents within diets, more study is required in this area.

Although our analysis did not show differences in characteristics of DBM households measured using Global Cut-off and Asian Cut-offs for BMI, the lower Asian Cut-off can be used as a tool for the early detection of those categorized as overweight and at risk for NCDs. Several studies have supported the use of 23 kg/m2 as a cut-off for overweight for Asian based on studies in Bangladesh, Indonesia, and Vietnam (Oddo et al 2012, Usfar et al 2010).

Furthermore, while the data is not presented in the table above, we find when using of the Asian Cut-off, several variables which are not significant at 5% under the Global Cut-off, become significant under the Asian Cut-off. This might be due to the sample size in the two groups, DBM and non-DBM, becoming more balanced when the Asian Cut-off is used. Using the Asian Cut-off, it is shown that 74% of mothers are working in the DBM pairs whereas 58% of mothers are working in non-DBM (normal/well nourished) pairs. This result could be attributable to less time available for child care activities. Interestingly, dietary diversity scores were higher amongst children in the DBM households by 0.5. Lastly, the birthweight of children in the DBM pairs is 0.21 kilograms less than that of the non-DBM pairs. This finding is inline with previous studies which link maternal malnutrition with low birth weight.

**Limitation of the Study and Analysis**

The non-representativeness of the data may inhibit generalization of the situation in the eastern part of Indonesia. The data also cannot be considered as representative of the provincial situation due to the limited coverage and sample size. Nor is the sample representative of the eastern region as it comprises of only the 7 selected provinces. Because of the final size of the sample, it is difficult to observe possible trends in the nutritional status of children or their mothers within the various provinces. However, there seems to be no difference in terms of proportion of stunted children between locations (range 11%-18%).

The NCD data of the mothers were collected based on self-reporting, of an earlier diagnosis by health professional (diabetes, CVD, stroke and cancer) or through direct measurement for hypertension and cholesterol. However, the self-reporting method of data collection may not provide reliable data due to memory recall bias. Due to this data limitation, we were not able to link the high cases of overweight and obesity of the mothers with her NCD data. For a future study it may be more valid to include only data for those illnesses measured directly.

**POLICY IMPLICATIONS AND RECOMMENDATIONS**

The nutrition transition is evolving rapidly in Indonesia. Households are moving out of undernutrition status and into the double burden and overweight categories as nutrition and physical activity behaviours are changing. Statistics for undernutrition remain a great concern, however the rapid increase in obesity amongst adults, and particularly among pregnant women and in children, is particularly alarming. Food and nutrition security policies should be developed in consideration of the DBM and detailed with evidence based interventions targeting specific areas.
phases of the life course (pregnancy, 0-6mths, early childhood, adolescence, reproductive age, etc). Interventions which address the direct causes of malnutrition (nutrition specific) and interventions which impact the contributing factors of malnutrition (nutrition sensitive) are included in the Scaling Up Nutrition movement that was adopted into Indonesian policy in 2012, but need to be reviewed for language and messages that also include overnutrition and obesity as well as undernutrition.

BMI screening for expecting mothers could be included within pre-natal and post-natal check-ups to allow health professionals to provide enhanced counselling to mothers at risk of obesity. The use of the Asian BMI Cut-off in such screenings could be rolled out within the national Jampersal program which provides free pre-natal and post-natal health services. Education of BMI and its impact on maternal and newborn health should also be included in family planning strategies.

Rates of stunting in the IFLS East sample are very high (44%) when compared to the 2010 Riskesdas national average of 35.6. Further training of health workers and volunteers to recognize when children are stunted and to provide appropriate counselling to mothers of stunted children is still required. Targeted messaging related to the linkage between malnourished mothers and child health outcomes should be a priority.

Additionally, programs and policies that promote diet quality among all people throughout the life cycle and across socio-economic status should be a major focus for policy makers as the nutrition transition escalates in Indonesia and western lifestyles are adopted. Campaigns could make use of a variety of media sources to target various education levels and more isolated locations.

The findings support the arguments for the intergenerational nature of malnutrition. Short mothers who are malnourished are giving birth to stunted children who will in turn pass NCDs on to their own children. National campaigns need to target adolescent girls and women of child-bearing age with nutrition education, behaviour change communication, and improved access to iron and multiple micronutrient supplements.

Additional analyses are required to determine the pattern of overlapping malnutrition and overweight/obesity with respect to socio-demographic characteristics and diet patterns in different areas of the country. Further research into the cultural factors around pregnancy, child birth and child care may be important to better understand nutritional trends and outcomes.

**ACKNOWLEDGMENTS**

We thank Mercoledi Nikman Nasir, Novat Pugo Sambodo, and Wisnu Harto Adi Wijoyo for preparing a clean data set and Dr. Jan Priebe for his technical inputs into the calculation of nutrition indicators.

**DISCLAIMER**

The opinions expressed are those of the authors and do not necessarily reflect the views of the Secretariat of the National Team for the Acceleration of Poverty Reduction (TNP2K).
REFERENCES


Appendix 1. Explanations of variables

The following indicators are used to describe socio-economic and demographic characteristics of the households: household size, age of the child, education of the biological father and mother (years of schooling), employment status of the mother and father, and location (urban/rural).

Dietary diversity score is calculated based on 10 food items captured in the IFLS East questionnaire, namely: tubers, eggs, fish, meat, dairy products, green leafy vegetables, banana, papaya, carrot, and mango. A score from 0-10 was used with 10 being the most diverse consumption score.

Data on the health status of the children was gathered based on recall information from the mothers for specific illnesses within the last 4 weeks, including: influenza, cough, difficulty of breathing, fever, and diarrhoea. Anaemia for children 6-59 months was classified as <120 g/l (WHO 2011).

The following indicators are used as a proxy for the environmental conditions: access and distance to a clean water source, place of defecation, garbage disposal, and type of sewage system. Access to drinking water is divided into closed and open sources. Closed sources are considered: mineral water (bottled), piped, and well/pump (electric/hand). Open sources are considered: open well (manually drawn), rain water, river water, pond water, open storage tank, and others. Distance to water source is measured in meters. The main place of defecation is categorized into closed latrine and open defecation. Closed latrines are considered: own latrine with septic tank, own latrine without septic tank, shared latrine, or public latrine. Open defecation includes those defecating in the river, yard/paddy field, drainage canals, ponds, animal pens, sea/lake, and other responses. Garbage disposal is considered adequate if it is thrown into a garbage container, picked-up, or burnt. Inadequate disposal is considered thrown into the river/yard/garden, left on the open ground, thrown into an open hole/forest/mountain, thrown into the sea/lake/beach/rice field, and others. Adequate household drainage system is noted when the household is connected to a running sewer system or a covered permanent hole outside of the home. Inadequate household drainage includes blocked sewers, or drainage into a river, beside/behind the house/yard, into a pond/lake, animal pens, paddy field, sea/beach, and others.

Access to health care is measured against use of two types of responses; use of village health post (Posyandu) and use of other health facilities including hospitals (government or private), doctors, private clinic, midwife, nurse, or government health clinic. Attendance at a Posyandu is noted when it was stated that a visit was made in the last 6 months prior to the survey. The variable for the ownership of a health monitoring card is based on the mother’s statement. The travel time to the Posyandu and health facilities is also noted.
Balita pada Rumah Tangga Miskin di Kabupaten Prioritas Kerawanan Pangan di Indonesia Lebih Rentan Mengalami Gangguan Gizi

Annis Catur Adi dan Dini Ririn Andrias
Universitas Airlangga (UNAIR)

Abstrak

Latar belakang. Risiko ketidaktahanan pangan rumah tangga timbul karena rendahnya pendapatan, rendahnya ketersediaan pangan maupun faktor geografis. Proporsi penduduk dengan asupan kalori di bawah tingkat konsumsi minimum (1400 kkal/hr) sebesar 14,47% dan (1200 kkal/hr) sebesar 64,21%, hampir dua kali lipat dari target MDGs (35,32%) menunjukkan adanya gangguan ketahanan pangan rumah tangga di Indonesia, yang dapat berdampak pada gangguan status gizi balita ketika rentan, diantaranya balita.

Tujuan. Menilai status gizi dan menganalisis risiko gangguan gizi balita pada rumah tangga miskin di daerah prioritas dan non prioritas kerawanan pangan di Indonesia

Metode. Analisis lanjut data Riskesdas tahun 2010 untuk 99 kabupaten: diantaranya 71 kabupaten prioritas Masalah kerawanan pangan (prioritas I:11, prioritas II: 25 dan prioritas III: 35) dan 28 kabupaten non prioritas di Indonesia, dengan unit analisis rumah tangga yaitu 11084 rumah tangga dan 2464 rumah tangga diantaranya termasuk miskin dan memiliki balita

Hasil. Hasil penelitian menunjukkan risiko terjadinya masalah gizi balita di wilayah prioritas rawan pangan yaitu gizi buruk dan kurang 2,172 kali lebih besar dan risiko sangat pendek dan pendek 1,669 kali besar dibandingkan di wilayah non prioritas.

Balita pada rumah tangga miskin di kabupaten prioritas rawan pangan berisiko terjadi gizi buruk dan kurang 1,445 kali lebih besar serta berisiko sangat pendek/pendek lebih besar 1,406 kali dibandingkan balita pada rumah tangga tidak miskin. Berdasarkan kelompok usia, balita berusia 1-3 tahun pada rumah tangga miskin diperoleh prioritas kerawanan pangan berisiko terjadi gizi buruk dan kurang 1,535 lebih besar serta berisiko terjadi sangat pendek dan pendek 1,608 kali dibandingkan balita usia 0-6 bulan.
**Simulan.** Balita pada rumahtangga miskin di daerah kabupaten prioritas kerawan pangan (I,II dan III) lebih rentan mengalami gangguan gizi (sangat pendek/pendek dan gizi buruk/kurang) dibandingkan di kabupaten non prioritas.

**Saran.** Balita berusia 1-3 tahun pada rumahtangga miskin di kabupaten prioritas rawan pangan di Indonesia perlu mendapat prioritas utama percepatan perbaikan gizi.

**Kata kunci:** rumahtangga miskin, status gizi, balita, rawan pangan

**Latar belakang**

Status gizi yang optimal merupakan salah satu dasar utama dalam mencapai pembangunan (the World Bank, 2006) dan mempunyai peran penting terhadap kualitas SDM dan status gizi yang optimal ditentukan oleh kuantitas dan kualitas dari asupan makanan yang dikonsumsi. Oleh karena itu, dalam *Millenium Development Goals* (MDGs), masalah gizi disertakan sebagai indikator pencapaian MDGs, khususnya pada tujuan pertama MDGs (Goal 1: menanggulangi kemiskinan dan kelaparan). Indikator tersebut adalah prevalensi balita dengan berat badan rendah (gizi buruk dan gizi kurang) dan proporsi penduduk dengan asupan kalori di bawah tingkat konsumsi minimum. Namun demikian, pencapaian tujuan pertama MDGs tersebut di sebagian besar Negara berkembang masih lambat dan belum merata, padahal pencapaian sasaran goal 1 juga berpengaruh terhadap pencapaian goal MDGs lainnya (RI, 2012).


Tahun-tahun pertama kehidupan yang biasanya satu hingga lima tahun merupakan kelompok usia yang paling rawan masalah gizi. Masalah gizi kurang pada kelompok rentan (termasuk balita), sering kali masih sering tidak terpantau dan bahkan terkadang kurang cepat ditanggulangi, padahal dapat memunculkan masalah besar bagi kualitas SDM. Disisi lain kecepatan perbaikan gizi kurang antar wilayah di Indonesia sangat beragam. Meskipun telah banyak upaya yang telah dilakukan, tetapi sebagian wilayah masih jalan ditempat dan bahkan tambah parah, meskipun sebagian daerah semakin baik (Hardinsyah, 2007). Berdasarkan hasil survey Riset Kesehatan Dasar (Riskesdas) terakhir, menunjukkan prevalensi nasional gizi buruk dan gizi kurang pada balita cenderung semakin mengalami penurunan yaitu dari 18,4% pada 2007 menjadi 17,9% pada 2010, namun angka ini masih di bawah target MDGs yaitu 15,5% (Bappenas, 2010). Masalah gizi pada balita juga menunjukkan masih perlunya penanganan serius, jika ditinjau dari besaran masalah kesehatan masyarakat. Menurut kriteria World Health Organization (WHO), kekurangan gizi pada

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**Child Poverty and Social Protection**

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Sebagaimana gambaran tersebut diatas, untuk mencapai status gizi balita dan kesehatan yang optimal, diperlukan akses untuk pemenuhan pangan yang cukup. Pemenuhan pangan sumber utama zat gizi sangat penting sebagai dasar untuk mewujudkan sumberdaya daya manusia yang berkualitas. Dengan demikian, ketahanan pangan merupakan prasyarat utama terpenuhinya konsumsi pangan yang cukup gizi dan upaya-upaya untuk menjamin kecukupan pangan dan gizi akan mendukung komitmen pencapaian MDGs. Oleh karena itu mempelajari permasalahan gizi pada kelompok rentan, terutama balita pada rumahtangga miskin di daerah prioritas masalah kerawanan pangan Indonesia merupakan hal yang esensial untuk akselerasi penurunan masalah kelaparan dan gizi di daerah rawan pangan, terutama untuk membuat prioritas intervensi apabila terdapat kendala keterbatasan sumber daya. Kelompok rentan, terutama balita biasanya menjadi penyumbang terbesar terhadap tingginya proporsi masalah gizi dan kelaparan.

**Tujuan Penelitian**

Tujuan umum penelitian ini adalah menilai status gizi dan menganalisis risiko terjadinya masalah gizi (*underweight, wasting* dan *stunting*) balita pada rumahtangga miskin di wilayah prioritas dan non prioritas masalah kerawanan pangan di Indonesia

Tujuan khusus penelitian ini adalah

1. Mempelajari karakteristik rumahtangga yang memiliki balita di wilayah prioritas dan non prioritas masalah kerawanan pangan di Indonesia
2. Menganalisis risiko munculnya masalah gizi balita pada rumah tangga di wilayah prioritas dan non prioritas masalah kerawanan pangan di Indonesia
3. Menganalisis risiko munculnya masalah gizi balita pada rumah tangga miskin dan tidak miskin di wilayah prioritas dan non prioritas masalah kerawanan pangan di Indonesia
4. Menganalisis risiko munculnya masalah gizi balita pada rumahtangga miskin menurut karakteristik balita di wilayah prioritas masalah kerawanan pangan di Indonesia

**Tinjauan Pustaka**

*Ketahanan pangan.* Pangan adalah kebutuhan dasar manusia paling utama, karena itu pemenuhan pangan merupakan bagian dari hak asasi individu dan merupakan prasyarat bagi pemenuhan hak-hak dasar lainnya. Mengingat pentingnya pemenuhan kecukupan pangan, setiap Negara akan mendahulukan pembangunan ketahanan panganannya sebagai fondasi bagi pembangunan sector-sektor lainnya. (BKP RI, 2010). Definisi ketahanan pangan yang diterima secara luas, sebagaimana disepakati dalam *World Food Summit* tahun 1996 di Roma, yaitu “*Food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life.*” Ketahanan pangan tercapai apabila bahwa setiap orang, sepanjang waktu, memiliki akses (baik akses ekonomi maupun fisik) terhadap pangan yang cukup, aman dan bergizi untuk memenuhi kebutuhan hidup aktif dan sehat. Sementara Undang-Undang Republik Indonesia Nomor 7 Tahun 1996 tentang Pangan mendefinisikan ketahanan pangan sebagai kondisi
terpenuhinya pangan bagi rumah tangga yang tercermin dari tersedianya pangan yang cukup, baik jumlah maupun mutu, aman, merata, dan terjangkau.

**Wilayah prioritas kerawanan pangan.** Ketersediaan, keterjangkauan, penyerapan dan stabilitas dari ketiga elemen ketahanan pangan tersebut dapat berbeda-beda kondisi, penyebab maupun dampaknya pada level makro, meso dan mikro. Sebagai contoh, ketersediaan pangan mungkin cukup pada level nasional, namun tidak cukup pada kabupaten-kabupaten tertentu atau pada wilayah yang kurang beruntung, ataupun pada kelompok populasi yang terdiskriminasi. (Gross dkk, 2000). Dengan menggunakan pendekatan *Integrated Food Security and Humanitarian Phase Classification* (IPC) yang dikembangkan oleh *Food Security Analysis Unit* (FSAU) Somalia, *World Food Program* (WFP) mengklasifikasikan beberapa area di Indonesia dalam wilayah rawan pangan kronis, antara lain Sumatra Utara, Jawa Timur, Kalimantan Barat, Kalimantan Timur, beberapa wilayah di Kalimantan Tengah, Kepulauan Timor, Sulawesi Barat, Sulawesi Tenggara, Papua, Maluku, dan beberapa wilayah Indonesia Timur sebagai wilayah rawan pangan kronis. Sementara pada tahun 2005 dan 2009, Departemen Pertanian, Badan Ketahanan Pangan (BKP) dan WFP menyusun peta kerawanan pangan Indonesia atau *Food Insecurity Atlas* (FIA), melalui indeks komposit, antara lain: rasio konsumsi normatif per kapita terhadap ketersediaan bersih padi, jagung, ubi kayu dan ubi jalar; persentase penduduk hidup di bawah garis kemiskinan; persentase desa yang tidak memiliki akses penghubung yang memadai; persentase rumah tangga tanpa akses listrik; angka harapan hidup pada saat lahir; berat badan balita di bawah standar (*underweight*); perempuan buta huruf; persentase rumah tangga tanpa akses ke air bersih; persentase rumah tangga yang tinggal lebih dari 5 km dari fasilitas kesehatan; bencana alam; penyimpanan curah hujan; persentase daerah puso; dan deforestasi hutan. Dengan menggunakan indikator komposit tersebut, dari 349 Kabupaten, terdapat 100 Kabupaten prioritas, terbagi menjadi: 30 kabupaten prioritas 1; 30 kabupaten prioritas 2; dan 40 kabupaten prioritas 3 (FIA, 2009). Sejalan dengan hasil yang diperoleh oleh WFP, gambaran FIA menunjukkan bahwa propinsi yang menyumbangkan daerah prioritas satu kerawanan pangan, antara lain Papua, Sumatera Barat, Maluku, Nusa Tenggara Timur, Papua Barat, Sumatera Utara, Jawa Timur dan Kalimantan Barat.


Metode


Pemilihan sampel dalam Riskesdas 2010 dilakukan dalam 2 tahap, yaitu tahap pertama pemilihan blok sensus, dan tahap kedua pemilihan rumah tangga. Dari 2800 blok sensus yang direncanakan dalam Riskesdas 2010, terealisasi 2798 blok sensus, dimana tiap blok sensus terdiri dari 25 rumah tangga yang tersebar di 33 provinsi dan 441 kabupaten di Indonesia, sedangkan hasil pemilihan dipereoleh 11084 rumah tangga dan 2464 rumah tangga diantaranya tergolong miskin dan memiliki balita

Variabel penelitian. Variabel, indikator dan skala data yang digunakan dalam analisis penelitian ini adalah:

<table>
<thead>
<tr>
<th>Nama Variabel</th>
<th>Indikator</th>
<th>Skala Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Status gizi:</td>
<td>Status gizi menurut indeks berat badan menurut umur (BB/U), dan diklasifikasikan:</td>
<td>Ordinal</td>
</tr>
<tr>
<td>a. Status gizi balita</td>
<td>1. Normal</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Underweight</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Severe underweight (WHO MGRS, 2005)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Status gizi menurut indeks tinggi badan menurut umur (TB/U), dan diklasifikasikan:</td>
<td>Ordinal</td>
</tr>
<tr>
<td></td>
<td>1. Normal</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Stunting</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Severe stunting (WHO MGRS, 2005)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Status gizi menurut indeks berat badan menurut tinggi badan (BB/TB), dan diklasifikasikan:</td>
<td>Ordinal</td>
</tr>
<tr>
<td></td>
<td>1. Normal</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Wasting</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Severe wasting (WHO MGRS, 2005)</td>
<td></td>
</tr>
<tr>
<td>Rumahtangga miskin</td>
<td>Diproksi dengan menggunakan indikator pangsa pengeluaran pangan, dengan diklasifikasikan:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. Miskin, jika pangsa pengeluaran pangan tinggi (&gt;60%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Tidak miskin, jika pangsa pengeluaran pangan rendah (≤ 60%)</td>
<td></td>
</tr>
</tbody>
</table>

Status gizi balita dinilai berdasarkan data umur dan hasil antropometri dengan pengukuran berdasarkan berat badan dan tinggi badan/panjang badan.

Pengolahan dan Analisis Data. Data diolah dengan program statistik SPSS for windows. Gambaran mengenai konsumsi dan status gizi disajikan secara deskriptif dengan tabulasi frekuensi dan grafik, dan dilakukan stratifikasi menurut tingkatan prioritas masalah kerawanan pangan (prioritas 1, 2, 3 dan non prioritas), sehingga dapat diketahui prevalensi rumah tangga rawan...
pangan dan besaran masalah gizi (status gizi) menurut kategori kabupaten prioritas kerawanan pangan. Data mengenai hubungan antar variabel dianalisis menggunakan analisis statistik bivariat spearman correlation untuk menganalisis hubungan antara kategori wilayah prioritas masalah kerawanan pangan dengan kecukupan gizi dan status gizi, serta membuat tabel silang antara masing-masing variabel bebas dan variabel terikat dengan tujuan menghitung nilai odd ratio (OR). Uji kemaknaan digunakan metode chi square tes.

Analisis dan interpretasi data pada laporan ini dilakukan bukan per kabupaten, mengingat data Riskesdas tahun 2010 bukan merupakan representasi per kabupaten, melainkan representasi propinsi. Oleh karena itu, analisis dan interpretasi dilakukan secara per kategori wilayah prioritas kerawanan pangan (kategori 1, 2, 3 dan non prioritas), meskipun pada masing-masing kategori terdiri dari kabupaten-kabupaten prioritas dan kabupaten-kabupaten non prioritas kerawanan pangan menurut Food Insecurity Atlas Indonesia tahun 2009.

**Temuan dan analisis**

1. **Karakteristik Sosekonomi RumahTangga Balita**

Rumah tangga yang menjadi sampel penelitian sebanyak 11084 rumah tangga, sebagian besar rumah tangga mempunyai jumlah anggota rumah tangga yang tergolong kecil yaitu ≤ 4 orang (66,9%). Namun, persentase rumah tangga dengan jumlah anggota ≤ 4 orang terlihat lebih tinggi di kabupaten non prioritas (71,6%) dibanding di kabupaten prioritas kerawanan pangan (66,1%) di prioritas ketiga; 65,4% di prioitas kedua; dan 53,9% di prioritas pertama) (Tabel 1), yang mengindikasikan bahwa rumah tangga di wilayah non prioritas kerawanan pangan cenderung terdiri dari keluarga kecil dan sebaliknya diwilayah prioritas kerawanan pangan cenderung lebih banyak jumlah anggota keluarganya. Padahal kemungkinan terjadinya KEP berat pada anak-anak diawal usia pertumbuhan, lebih sedikit ditemukan pada rumah tangga a dengan jumlah anggota keluarganya lebih kecil. Besar keluarga atau jumlah anggota keluarga dapat mempengaruhi distribusi pangan di dalam rumah tangga, sehingga berpengaruh terhadap akses ekonomi pangan (USAID, 1994). Demikian juga Babatunde (2007), menyatakan semakin besar jumlah anggota rumah tangga, kemungkinan tahan pangan semakin menurun. Dengan kata lain, rumah tangga dengan keluarga besar lebih cenderung mengalami rawan pangan dibanding keluarga kecil, apalagi dalam kondisi miskin. Sumber pangan keluarga, terutama pada rumah tangga miskin atau sangat miskin, akan lebih mudah memenuhi kebutuhan makannya jika yang harus diberi makan jumlahnya sedikit dan sebaliknya.

Rumah tangga yang menjadi sampel penelitian sebanyak besar yaitu 6720 (60,6 %) tergolong rumah tangga yang membelanjakan lebih dari 60% pendaptnya untuk memenuhi kebutuhan pangan keluarga sehari hari, diproksi sebagai rumah tangga miskin dan sebesar 4364 (39,4%) tergolong rumah tangga yang membelanjakan kurang dari 60% pendaptnya untuk memenuhi kebutuhan pangan keluarga sehari hari, diproksi sebagai rumah tangga non miskin, secara lengkap disajikan pada Tabel 1.
### Tabel 1. Karakteristik sosial ekonomi rumah tangga

<table>
<thead>
<tr>
<th>Variabel</th>
<th>Kategori wilayah prioritas kerawanan pangan</th>
<th>Total (N=11084)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Prioritas 1 (n=934)</td>
<td>Prioritas 2 (n=2377)</td>
</tr>
<tr>
<td>Jumlah anggota rumah tangga, n (%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt;4 orang</td>
<td>431 (46.1)</td>
<td>822 (34.6)</td>
</tr>
<tr>
<td>≤4 orang</td>
<td>503 (53.9)</td>
<td>1555 (65.4)</td>
</tr>
<tr>
<td>Pangsa pengeluaran pangan (%)b</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tinggi (&gt;60%)</td>
<td>641 (68.6)</td>
<td>1513 (63.7)</td>
</tr>
<tr>
<td>Rendah (≤60%)</td>
<td>293 (31.4)</td>
<td>864 (36.3)</td>
</tr>
</tbody>
</table>

*Spearman correlation (r=0.089, p<0.001); bSpearman correlation (r=0.114, p<0.001)

Data tabel 1 menunjukkan bahwa pada semua kategori wilayah prioritas kerawanan pangan dan non prioritas sebagian besar mengalokasikan pengeluaran untuk pangan. Terdapat kecenderungan bahwa semakin prioritas rawan suatu wilayah, semakin besar persentase rumah tangga dengan pangsa pengeluaran pangan tinggi (>60%). Sesuai dengan hukum Engel, pada saat terjadinya peningkatan pendapatan, keluarga akan membelanjakan pendapatannya untuk pangan dengan porsi yang semakin mengecil. Sebaliknya apabila pendapatan menurun, maka porsi yang dibelanjakan untuk pangan makin meningkat. Menurut data Susenas 1998, pengeluaran untuk pangan bagi rumah tangga miskin berkisar antara 60-80% dari pendapatan, sedangkan bagi rumah tangga yang mampu antara 20-59%.

#### 2. Status Gizi dan Risiko Masalah Gizi Balita pada Rumah tangga di Wilayah Prioritas dan Non prioritas Kerawanan Pangan di Indonesia

**Status gizi balita.** Balita merupakan salah satu kelompok rentan gizi yang biasanya paling terpengaruh di antara seluruh anggota keluarga apabila terjadi kekurangan pangan dalam keluarga. Pangan untuk setiap anak berkurang dan seringkali orangtua tidak menyadari bahwa usia anak-anak memerlukan makanan yang cukup untuk pertumbuhan dan perkembangannya. Balita yang berada di wilayah prioritas masalah kerawanan pangan mempunyai persentase masalah gangguan gizi lebih besar dibandingkan wilayah non prioritas masalah kerawanan pangan. Secara lengkap status gizi balita dengan berbagai indicator penilaian disajikan pada tabel 2.
### Tabel 2. Status gizi balita menurut kategori wilayah prioritas kerawanan pangan di Indonesia

<table>
<thead>
<tr>
<th>Variabel</th>
<th>Kategori wilayah prioritas kerawanan pangan</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Prioritas 1</td>
<td>Prioritas 2</td>
</tr>
<tr>
<td>Status gizi dengan indikator BB/U, n (%), N=3882a</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gizi buruk</td>
<td>48 (12.8)</td>
<td>79 (9.4)</td>
</tr>
<tr>
<td>Gizi kurang</td>
<td>75 (19.9)</td>
<td>147 (17.5)</td>
</tr>
<tr>
<td>Gizi baik</td>
<td>241 (64.1)</td>
<td>578 (68.7)</td>
</tr>
<tr>
<td>Gizi lebih</td>
<td>12 (3.2)</td>
<td>37 (4.4)</td>
</tr>
<tr>
<td>Status gizi dengan indikator TB/U, n (%), N=3839b</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sangat pendek</td>
<td>140 (37.4)</td>
<td>227 (27.2)</td>
</tr>
<tr>
<td>Pendek</td>
<td>74 (19.8)</td>
<td>171 (20.5)</td>
</tr>
<tr>
<td>Normal</td>
<td>160 (42.8)</td>
<td>436 (52.3)</td>
</tr>
<tr>
<td>Status gizi dengan indikator BB/TB, n (%), N=3808c</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sangat kurus</td>
<td>39 (10.5)</td>
<td>62 (7.5)</td>
</tr>
<tr>
<td>Kurus</td>
<td>25 (6.8)</td>
<td>57 (6.9)</td>
</tr>
<tr>
<td>Normal</td>
<td>237 (64.1)</td>
<td>577 (69.7)</td>
</tr>
<tr>
<td>Gemuk</td>
<td>69 (18.6)</td>
<td>132 (15.9)</td>
</tr>
</tbody>
</table>

*Spearman correlation (r=0.015, p<0.001); †Spearman correlation (r=0.016, p<0.01); ‡Spearman correlation (r=0.038, p<0.05)

Prevalensi masalah gizi balita di wilayah prioritas 1 dan non prioritas masalah kerawanan pangan di Indonesia, secara berturut-turut: underweight (gizi buruk dan kurang) sebesar 32,7% dan 26,6%, stunting (sangat pendek dan pendek) sebesar 56,2 % dan 44,5%, dan wasting (sangat kurus dan kurus) sebesar 17,3% dan 13,9%. Terdapat hubungan yang signifikan antara stunting (p=0,01) dan underweight (p=0,001) dengan kategori wilayah prioritas kerawanan pangan. Adanya hubungan secara signifikan antara antara stunting dan underweight dengan kategori wilayah prioritas kerawanan pangan, menunjukkan bahwa semakin meningkatnya status prioritas kerawanan pangan suatu wilayah, persentase balita yang mengalami gangguan masalah gizi (stunting dan underweight) semakin meningkat (Tabel 3). Dalam kondisi rawan pangan, dimana ketersediaan pangan keluarga umumnya terbatas sehingga pangan untuk setiap anak berkurang hingga pada akhirnya tidak cukup untuk memenuhi kebutuhan pangan guna mencegah gangguan gizi, terutama pada anak. Hal serupa menurut Oh dan Hong (2003) dalam penelitian mereka di Korea memperoleh adanya hubungan signifikan antara kerawanan pangan dengan konsumsi makanan pada anak.
Risiko terjadi gangguan gizi. Balita yang berada di wilayah prioritas 1 masalah kerawanan pangan paling besar risikonya dibandingkan wilayah prioritas masalah kerawanan pangan lainnya, dimana risiko terjadinya balita underweight sebesar 2.172 kali lebih besar dan terjadinya stunting sebesar 1,669 kali lebih besar dibandingkan pada balita yang berasal dari rumah tangga di kabupaten non prioritas. Sedangkan risiko terjadinya kekurusan, justru nampak lebih besar (1,405 kali) terjadi di wilayah prioritas 3 dibandingkan wilayah prioritas lainnya. Jadi kategori wilayah prioritas masalah kerawanan pangan merupakan factor risiko terjadinya masalah gizi underweight, stunting maupun wasting pada balita di Indonesia.

3. Status gizi dan Risiko masalah gizi balita pada rumah tangga miskin dan tidak miskin di wilayah prioritas dan non prioritas masalah kerawanan pangan di Indonesia

**Status gizi balita dan kemiskinan.** Masalah gizi kurang pada balita bukanlah merupakan hal yang baru, namun masalah ini tetap aktual yang dicerminkan dengan adanya peningkatan KEP di daerah kantong-kantong kemiskinan. Secara umum balita yang berada di rumah tangga miskin diwilayah prioritas masalah kerawanan pangan mempunyai persentase masalah gangguan gizi lebih besar dibandingkan wilayah non prioritas. Secara lengkap penilaian status gizi dengan berbagai indicator disajikan pada Tabel 4.
Tabel 4. Status gizi balita menurut kategori rumah tangga miskin dan tidak miskin di Indonesia

<table>
<thead>
<tr>
<th>Variabel</th>
<th>Status gizi Balita</th>
<th>Kategori Rumahtangga</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Miskin</td>
<td>Tidak Miskin</td>
</tr>
<tr>
<td>Status gizi dengan indikator BB/U, n (%), N=2630a</td>
<td>Gizi Buruk dan Kurang</td>
<td>586 (22,3)</td>
<td>217 (8,3)</td>
</tr>
<tr>
<td></td>
<td>Gizi Baik</td>
<td>1210 (46,0)</td>
<td>617 (23,5)</td>
</tr>
<tr>
<td>Status gizi dengan indikator TB/U, n (%), N=2598b</td>
<td>Sangat pendek dan Pendek</td>
<td>910 (35,0)</td>
<td>358 (13,8)</td>
</tr>
<tr>
<td></td>
<td>Normal</td>
<td>861 (33,1)</td>
<td>469 (18,1)</td>
</tr>
<tr>
<td>Status gizi dengan indikator BB/TB, n (%), N=2580c</td>
<td>Sangat kurus dan Kurus</td>
<td>299 (11,6)</td>
<td>140 (5,4)</td>
</tr>
<tr>
<td></td>
<td>Normal dan Gemuk</td>
<td>1459 (56,6)</td>
<td>682 (26,4)</td>
</tr>
</tbody>
</table>

*Pearson Chi-square (p<0.01);  † Pearson Chi-square (p<0.01);  ‡ Pearson Chi-square (p>0.05)

Hasil analisis menunjukkan adanya hubungan secara signifikan antara status gizi kurang/buruk (underweight) dan pendek/sangat pendek (stunting) pada balita dengan kategori tingkat kemiskinan rumah tangga (p<0,01). Kondisi memberikan gambaran dan sekaligus bukti bahwa tingkat kemiskinan pada rumah tangga yang memiliki balita di daerah prioritas masalah kerawanan pangan maupun non prioritas menjadi faktor yang berkontribusi penting terjadinya gangguan masalah gizi pada balita, terutama underweight dan stunting.


Tabel 5. Risiko defisit asupan energi dan protein balita rumah tangga miskin dan tidak miskin

<table>
<thead>
<tr>
<th>Kategori Rumahtangga</th>
<th>Asupan energi &amp; protein</th>
<th>p-value</th>
<th>OR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Defisit ringan &amp; berat</td>
<td>Cukup</td>
<td></td>
</tr>
<tr>
<td>Energi</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Miskin</td>
<td>2021 (77.7)</td>
<td>579 (22.3)</td>
<td>0.000*</td>
</tr>
<tr>
<td>Tidak miskin</td>
<td>989 (70.8)</td>
<td>408 (29.2)</td>
<td></td>
</tr>
<tr>
<td>Protein</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Miskin</td>
<td>1560 (60.0)</td>
<td>1040 (40.0)</td>
<td>0.000*</td>
</tr>
<tr>
<td>Tidak miskin</td>
<td>724 (51.8)</td>
<td>673 (48.2)</td>
<td></td>
</tr>
</tbody>
</table>

*significant (chi-square test)
Risiko balita pada rumah tangga miskin di Indoensia mengalami deficit energi yaitu 1,440 kali lebih besar (p<0.001) dan 1.394 kali lebih berisiko mengalami deficit protein (p<0.001), dibandingkan balita yang berada pada rumah tangga tidak miskin di semua wilayah tanpa membedakan kategori wilayah. Sehingga kategori kemiskinan rumah tangga merupakan factor risiko terjadinya keparahan masalah ketidakcukupan (defisiensi) konsumsi gizi energi dan protein balita di Indonesia. Kemiskinan menyebabkan akses terhadap pangan di rumah tangga sulit dicapai sehingga seseorang akan kekurangan berbagai zat gizi yang dibutuhkan tubuh. Kecukupan gizi hanya bisa diperoleh dan dipenuhi dari asupan makanan/minuman yang dikonsumsi sehari-hari. Marco dan Thorburn (2009) juga menemukan bahwa rumah tangga dengan pendapatan yang lebih rendah lebih cenderung mengalami kerawanan pangan.

**Risiko gangguan status gizi pada balita rumahtangga miskin** Masalah kemiskinan adalah akar dari masalah kekurangan gizi dan rentan terhadap kerawanan pangan. Balita yang berada pada rumahtangga miskin secara umum mempunyai persentase masalah gangguan terhadap status gizi lebih besar dibandingkan balita pada rumahtangga tidak miskin. dengan berbagai indicator penilaian status gizi, secara lengkap disajikan pada tabel 6

<table>
<thead>
<tr>
<th>Kategori rumahtangga</th>
<th>n (%)</th>
<th>p-value</th>
<th>OR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gizi buruk dan gizi kurang</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rumahtangga miskin</td>
<td>731</td>
<td>0.0001*</td>
<td>1,445 (1.238-1,686)</td>
</tr>
<tr>
<td>Rumahtangga tidak miskin</td>
<td>301</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sangat pendek dan pendek</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rumahtangga miskin</td>
<td>1254</td>
<td>0.0001*</td>
<td>1,406 (1.231-1.608)</td>
</tr>
<tr>
<td>Rumahtangga tidak miskin</td>
<td>566</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sangat kurus dan kurus</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rumahtangga miskin</td>
<td>394</td>
<td>0.491</td>
<td>0,994 (0.829-1.191)</td>
</tr>
<tr>
<td>Rumahtangga tidak miskin</td>
<td>216</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*significant (chi-square test)

4. Risiko munculnya masalah gizi balita pada rumah tangga miskin di wilayah prioritas masalah kerawanan pangan di Indonesia


Tabel 7. Risiko status gizi kurang, pendek dan kekurusan balita pada rumah tangga miskin menurut jenis kelamin di wilayah prioritas kerawanan pangan di Indonesia

<table>
<thead>
<tr>
<th>Kategori Jenis Kelamin Balita Rumah Tangga Miskin di wilayah prioritas kerawanan pangan</th>
<th>n (%)</th>
<th>p-value</th>
<th>OR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gizi buruk dan gizi kurang</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perempuan</td>
<td>264 (14.7)</td>
<td>0.012*</td>
<td>0.772 (0.634-0.942)</td>
</tr>
<tr>
<td>Laki-laki</td>
<td>322 (17.9)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sangat pendek dan pendek</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perempuan</td>
<td>424 (23.9)</td>
<td>0.015*</td>
<td>0.789 (0.655-0.951)</td>
</tr>
<tr>
<td>Laki-laki</td>
<td>486 (27.4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sangat kurus dan kurus</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perempuan</td>
<td>151 (8.6)</td>
<td>0.732</td>
<td>1.053 (0.821-1.350)</td>
</tr>
<tr>
<td>Laki-laki</td>
<td>148 (8.4)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*significant (chi-square test)

Balita perempuan pada rumah tangga miskin yang berada di wilayah prioritas masalah kerawanan pangan lebih kecil risikonya mengalami gangguan masalah gizi dibandingkan balita laki-laki, dimana risiko terjadinya balita perempuan underweight sebesar 0.772 kali lebih rendah dibanding balita laki-laki (atau balita laki-laki lebih berisiko 1,295 kali lebih besar) dan terjadinya stunting sebesar 0,789 kali lebih rendah dibanding balita laki-laki (atau balita laki-laki lebih berisiko 1,267 kali lebih besar). Sedangkan risiko terjadinya kekurusan, relative sama (tidak beda signifikan) antara balita perempuan dan balita laki-laki. Sehingga kategori jenis kelamin merupakan factor protektif terjadinya masalah gizi underweight dan stunting balita pada rumah tangga yang miskin di daerah prioritas kerawanan pangan Indonesia.

Faktor usia dan resiko terjadinya masalah gizi pada balita rumah tangga miskin. Usia bawah lima tahun biasanya merupakan usia yang rawan terjadi gangguan gizi. Berdasarkan kelompok usia, balita kelompok usia 1-3 tahun pada rumah tangga miskin di wilayah prioritas kerawanan pangan secara umum mempunyai persentase masalah gangguan terhadap status gizi lebih besar dibandingkan kelompok usia balita lainnya. Adanya gangguan status gizi balita berdasarkan kelompok usia pada rumah tangga miskin, secara lengkap disajikan pada tabel 8.
Tabel 8. Risiko status gizi kurang, pendek dan kekurusan balita pada rumah tangga miskin menurut usia di kabupaten prioritas kerawanan pangan di Indonesia

<table>
<thead>
<tr>
<th>Kategori Usia Balita pada Rumah Tangga Miskin di wilayah prioritas kerawanan pangan</th>
<th>Risiko</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n (%)</td>
</tr>
<tr>
<td>Gizi buruk dan gizi kurang</td>
<td></td>
</tr>
<tr>
<td>4 – 5 tahun</td>
<td>124 (6.9)</td>
</tr>
<tr>
<td>1 – 3 tahun</td>
<td>398 (22.2)</td>
</tr>
<tr>
<td>7 – 11 bulan</td>
<td>25 (1.4)</td>
</tr>
<tr>
<td>0 – 6 bulan</td>
<td>39 (2.2)</td>
</tr>
<tr>
<td>Sangat pendek dan pendek</td>
<td></td>
</tr>
<tr>
<td>4 – 5 tahun</td>
<td>179 (10.1)</td>
</tr>
<tr>
<td>1 – 3 tahun</td>
<td>626 (35.3)</td>
</tr>
<tr>
<td>7 – 11 bulan</td>
<td>42 (2.4)</td>
</tr>
<tr>
<td>0 – 6 bulan</td>
<td>63 (3.6)</td>
</tr>
<tr>
<td>Sangat kurus dan kurus</td>
<td></td>
</tr>
<tr>
<td>4 – 5 tahun</td>
<td>42 (2.4)</td>
</tr>
<tr>
<td>1 – 3 tahun</td>
<td>211 (12.0)</td>
</tr>
<tr>
<td>7 – 11 bulan</td>
<td>17 (1.0)</td>
</tr>
<tr>
<td>0 – 6 bulan</td>
<td>29 (1.6)</td>
</tr>
</tbody>
</table>

*significant (chi-square test)

**Risiko terjadi gangguan gizi.** Balita pada rumah tangga miskin di wilayah prioritas kerawanan pangan yang berusia 4-5 tahun berisiko 1.742 kali lebih besar dan yang berusia 1-3 tahun berisiko 1.535 lebih besar mengalami underweight dibandingkan balita kelompok usia 0-6 bulan. Risiko terjadinya stunting, balita kelompok usia 4-5 tahun sebesar 1.588 kali lebih besar dan balita kelompok usia 1-3 tahun sebesar 1.608 lebih besar dibandingkan balita usia 0-6 bulan.


**Implikasi/rekomendasi kebijakan.**

**Implikasi Kebijakan**

Kemiskinan dan kerawanan pangan seringkali saling berkaitan. Kerawanan pangan, baik pada taraf meso (wilayah) maupun micro (rumah tangga), dapat dampak pada defisiensi zat gizi (energi dan protein) hingga menyebabkan gangguan status gizi, terutama kelompok rentan gizi yaitu balita. Selain masa usia balita merupakan Gold Period, secara ekonomis membiarkan balita menderita gangguan gizi berarti membiarkan potensi generasi mendatang ‘hilang’ dan bagi rumah tangga miskin berarti melestarikan terjadinya lingkaran kemiskinan.

1. Resiko balita yang berada di wilayah prioritas 1 masalah kerawanan pangan di Indonesia, mengalami masalah status gizi (risiko underweight 2,17 kali dan stunting 1,67 kali) lebih
besar dibandingkan balita diwilayah non prioritas, namun risiko terjadi masalah kekurusan relative sama dengan diwilayah non prioritas. Prioritas wilayah kerawanan pangan menjadi factor risiko terhadap terjadinya masalah status gizi (underweight dan stunting) pada balita.

2. Resiko balita yang berada pada rumahtangga miskin wilayah prioritas kerawanan pangan di Indonesia, mengalami masalah defisieni gizi (defisieni energi 1,44 kali dan protein 1,39 kali) dan masalah status gizi (risiko underweight 1,45 kali dan stunting 1,41 kali ) lebih besar dibandingkan balita pada rumahtangga tidak miskin, namun risiko terjadi masalah kekurusan relative sama. Tingkat kemiskinan rumahtangga menjadi factor risiko terjadinya defisiensi gizi (energi dan protein) dan masalah status gizi (underweight dan stunting) pada balita di wilayah prioritas maupun non prioritas kerawanan pangan di Indonesia.

3. Balita berusia 1-3 tahun pada rumahtangga miskin di daerah prioritas kerawanan pangan perlu diprioritaskan sebagai sasaran utama pada Program akselerasi perbaikan gizi (SUN) dan penguatan ketahanan pangan rumahtangga

**Rekomendasi Kebijakan:**

Sasaran prioritas upaya percepatan perbaikan gizi adalah penurunan prevalensi kekurangan gizi balita dengan mengintegrasikan upaya pengetasan kemiskinan dan upaya peningkatan pelayanan gizi, dengan:

1) Fokus sasaran: balita pada rumahtangga miskin, terutama balita laki-laki berusia 1-3 tahun dengan jenis kelamin laki-laki, dengan tetap tidak mengabaikan balita perempuan.

2) Fokus kegiatan: Perbaikan akses pangan rumahtangga miskin dan inovasi intevensi gizi pada balita yang diintegrasikan dengan kegiatan penguatan ekonomi produktif yang disertai penguatan modal social.

3) Focus perhatian wilayah: diprioritaskan pada wilayah kabupaten prioritas 1 masalah kerawanan pangan (30 Kabupaten di Indonesia berdasarkan food insecurity atlas), meskipun dengan tidak mengabaikan kabupaten prioritas berikutnya.


5) Perlunya kajian kualitatif coping strategy terkait gizi dan ekonomi rumahtangga miskin di daerah prioritas I kerawanan pangan sebagai dasar menyusun detail strategi efektif dalam akselerasi perbaikan gizi anak dan penguatan ketahanan pangan rumahtangga miskin.

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Penguatan Modal Sosial untuk Perlindungan Sosial Rumah Tangga Miskin dalam Mengoptimalkan Status Gizi dan Kematangan Sosial Anak

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PENDAHULUAN


Permasalahan kemiskinan dan resikonya terhadap pertumbuhan dan perkembangan anak mengancam baik di wilayah perkotaan maupun perdesaan. Bagi rumah tangga miskin di daerah perkotaan, keberadaan modal berupa uang \( (financial \text{ } capital) \) dan modal alam \( (natural \text{ } capital) \) cukup terbatas. Mereka tidak mempunyai cukup uang untuk membeli kebutuhan pangan secara cukup baik jumlah maupun mutunya. Begitu pula dengan modal alam, patadnya pemukiman penduduk di daerah perkotaan menyebabkan lahan yang dapat dimanfaatkan rumah tangga untuk menghasilkan sumber bahan pangan secara langsung juga terbatas. Selain itu, keterbatasan akses terhadap sumberdaya fisik seperti pelayanan kesehatan publik, pelayanan transportasi publik, dan fasilitas-fasilitas pelayanan sosial lainnya seringkali dialami oleh rumah tangga miskin. Kondisi tersebut pada akhirnya menyebabkan kualitas modal manusia yang ada pun menjadi terbatas kemampuannya untuk melakukan upaya-upaya optimal dalam rangka meningkatkan kesejahteranyaan.

Sementara itu, rumah tangga miskin perdesaan, meskipun sama-sama miskin tentu saja mempunyai permasalahan yang berbeda dengan rumah tangga miskin di perkotaan. Menurut World Bank (2002), kemiskinan mencakup empat dimensi yaitu kurangnya kesempatan \( (lack \text{ } of \text{ } opportunity) \), rendahnya kemampuan \( (low \text{ } capabilities) \), rendahnya tingkat ketahanan \( (low \text{ } level \text{ } of \text{ } security) \), dan rendahnya kemampuan masyarakat miskin dalam berpartisipasi, bernegosiasi, berperan dalam perubahan, dan terlibat dalam institusi sosial yang dapat mempengaruhi tingkat kesejahteranyaan. Keempat dimensi tersebut juga tercermin dalam kondisi masyarakat perdesaan yang sebagian besar adalah masyarakat pertanian. Kurangnya kesempatan untuk bisa memperoleh akses pembangunan secara mudah, rendahnya kemampuan yang dicirikan dengan rendahnya tingkat pendidikan masyarakat pertanian, rendahnya tingkat ketahanan yang diakibatkan dari rendahnya pendapatan keluarga petani, serta masih belum berdayanya keluarga pertanian masih menjadi karakteristik umum dari keluarga petanian di Indonesia. Kedua karakteristik kemiskinan yang berbeda antara wilayah perkotaan maupun perdesaan mengindikasikan bahwa program pengentasan kemiskinan rumah tangga miskin yang berdampak terhadap kualitas pertumbuhan dan perkembangan anak harus sesuai permasalahan yang dihadapi.

Pengentasan kemiskinan tentu saja bukanlah hal yang mudah. Menurut Bank Dunia (Martianto et al. 2006a), kemiskinan telah menyebabkan rendahnya kualitas asupan zat gizi, terjadinya penyakit infEKsi, serta buruknya pengetahuan dan praktek keluarga berencana, sehingga menyebabkan rendahnya status gizi anak balita dan ibu hamil yang pada akhirnya menyebabkan rendahnya kualitas sumber daya manusia. Rendahnya kualitas sumber daya manusia akan menyebabkan terbatasnya kemampuan dalam meningkatkan kesejahteraan hidupnya yang pada akhirnya menyebabkan rumah tangga dan juga anggotanya, termasuk anak-anak, tetap dalam keadaan miskin. Oleh karenanya, perlu ada upaya yang komprehensif untuk dapat memutuskan lingkaran setan tersebut.

Dalam rangka pengentasan kemiskinan dan peningkatan kesejahteraan masyarakat, Departemen Pengembangan Internasional Inggris \( (Department \text{ } for \text{ } International \text{ } Development \text{ } of \text{ } United \text{ } Kingdom) \) mengembangkan sebuah pendekatan yang disebutnya sebagai \( Sustainable \text{ } Livelihoods \text{ } Approach \). Pendekatan ini menyandarkan pada lima modal yang dimiliki oleh masyarakat yaitu \( financial \text{ } capital, \text{ } human \text{ } capital, \text{ } natural \text{ } capital, \text{ } physical \text{ } capital, \text{ } \text{ } \text{ and } \text{ } social \text{ } capital \) (Farrington et al. 1999). Keterbatasan modal berupa uang, modal alam, modal fisik, dan juga modal manusia yang dimiliki rumah tangga miskin khususnya dalam memanfaatkan sumber daya yang dimiliki untuk pengoptimalan kualitas tumbuh kembang anak kiranya membutuhkan pendorong berupa sumberdaya yang dimiliki dari hubungan sosial yang dimiliki anggota masyarakat, yang tidak lain adalah modal sosial. Oleh karenanya, dengan berbagai keterbatasan yang dimiliki, masyarakat miskin masih dapat memanfaatkan modal sosial yang mereka miliki secara kolektif di tingkat
komunitas untuk menciptakan lingkungan yang kondusif bagi pertumbuhan dan perkembangan anak.

Berbagai penelitian menunjukkan bahwa modal sosial telah terbukti sebagai pilar dalam menggerakkan berbagai sumber daya untuk mengembangkan kapasitas sosial dan ekonomi dalam suatu masyarakat (Narayan, 1998; Ha, Kant, & MacLaren, 2004). Berbagai kajian juga menunjukkan bahwa modal sosial dapat berperan cukup penting dalam investasi manusia (Sandefur, Meier, & Hernandez, 1999; Winter, 2000), termasuk juga pada keluarga-keluarga miskin (Grootaert, 1999; Jones, et al., 2002). Oleh karenanya, untuk dapat melakukan perlindungan sosial yang dapat mendukung tumbuh kembang anak secara optimal, khususnya pada keluarga miskin, menjadi penting untuk dapat menyandarkan pada keberadaan dan bekerjanya modal sosial.

Berdasarkan latar belakang tersebut maka makalah ilmiah ini disusun dengan tujuan untuk menyajikan sebuah analisis empiris mengenai peran modal sosial dalam perlindungan rumah tangga miskin agar dapat mengoptimalkan tumbuh kembang anak secara optimal. Makalah ilmiah ini merupakan hasil analisis penulis terhadap dua studi yang telah dilakukan penulis. Studi pertama, dilakukan penulis pada rumah tangga miskin perkotaan di Kota Bogor, yang salah satunya bertujuan untuk menganalisis hubungan modal sosial dengan status gizi anak balita sebagai indikator kualitas pertumbuhan anak. Sementara itu, studi kedua dilakukan penulis pada rumah tangga di wilayah perdesaan di Kabupaten Bogor yang salah satunya menganalisis hubungan modal sosial dengan perkembangan sosial emosi anak sebagai salah satu indikator kualitas perkembangan anak. Analisis terhadap dua studi yang pernah dilakukan penulis yang dituangkan dalam makalah ini diharapkan dapat memberikan bukti empiris mengenai peran modal sosial, yang selanjutnya dapat dijadikan landasan untuk melakukan program-program penguatan modal sosial untuk perlindungan rumah tangga miskin dalam mengoptimalkan kualitas tumbuh kembang anak.

**TINJAUAN PUSTAKA**

**Modal Sosial**


Sementara itu, James Coleman mendefinisikan modal sosial dari sudut pandang fungsi modal sosial itu sendiri, yang mana bukan ditekankan pada hubungan-hubungan sosial (*social relations*) seperti definisi Bourdieu namun ditekankan pada struktur sosial (*social structure*). Fungsi yang dapat diidentifikasi dari modal sosial adalah nilai dari aspek-aspek struktur sosial yang mana menunjuk pada sekumpulan kewajiban dan harapan, jaringan informasi, norma-norma dan sanksi-sanksi yang efektif yang dapat memaksakan atau menyemangati seseorang untuk bertingkah
laku agar tetap eksis dalam menjaga hubungannya dengan orang lain. Jika Bourdieu tertarik pada pengembangan konsep modal sosial sebagai sumberdaya bagi modal ekonomi sesorang (economic capital), Coleman lebih tertarik untuk mengembangkan bagaimana modal sosial dalam jaringan keluarga dan komunitas sebagai sumberdaya bagi modal manusia (human capital). Sementara itu, tokoh modal sosial lainnya, Robert Putnam mendefinisikan modal sosial sebagai kepercayaan (trust), norma (norms), dan jaringan (networks) yang memfasilitasi adanya kerjasama untuk mencapai keuntungan bersama. Putnam menyebutkan bahwa aspek modal sosial yang dapat membedakan hasil pembangunan ekonomi dan politik pada tingkat regional dan nasional, adalah norma hubungan timbal balik yang didasari oleh kepercayaan sosial (social trust) (Winter 2000).

Stone dan Hughes (2002) melambangkan modal sosial sebagai sebuah perekat di antara anggota masyarakat untuk menjaga kebersamaan komunitas/masyarakat yang dilambangkan dengan jaringan-jaringan dalam hubungan sosial, yang dicirikan oleh adanya norma kepercayaan dan hubungan timbal balik yang mengarahkan masyarakat untuk mencapai kepentingan bersama. Modal sosial mempunyai tiga pilar utama, yaitu:

1. Kepercayaan (trust)

Mollering menyebutkan bahwa modal sosial mempunyai enam fungsi penting yaitu: (1) Kepercayaan dalam arti confidence yang merupakan ranah psikologis individual sebagai sikap yang akan mendorong sesorang dalam mengambil keputusan setelah menimbang resiko yang akan diterima.; (2) Kerja sama yang menempatkan trust sebagai dasar hubungan antar individu tanpa rasa saling curiga; (3) Penyederhanaan pekerjaan yang memfungsikan trust sebagai sumber untuk membantu meningkatkan efisiensi dan efektivitas kerja kelembagaan-kelembagaan sosial; (4) Ketertiban dimana trust sebagai inducing behaviour setiap individu untuk menciptakan kedamaian dan meredam kekacauan sosial; (5) Peluang kohesivitas sosial yang membantu merekakan setiap komponen sosial yang hidup dalam komunitas menjadi kesatuan; (6) Trust sebagai modal sosial yang menjamin struktur sosial berdiri secara utuh dan berfungsi secara operasional serta efisien (Dharmawan 2002a; 2002b).

2. Jaringan sosial (networks)

Menurut Stone dan Hughes (2002), modal sosial mempunyai dua ukuran utama yaitu: (1) jaringan sosial (networks) dan (2) karakteristik jaringan sosial (networks characteristics). Jaringan sosial dilihat dengan menggunakan beberapa ukuran yaitu: (a) ikatan informal yang dikarakteristikkan dengan adanya kepercayaan dan hubungan timbal balik yang lebih familiar dan bersifat personal seperti pada ikatan pada keluarga, pertemanan, pertetanggaan; (b) ikatan yang sifatnya lebih umum seperti ikatan pada masyarakat setempat, masyarakat umum, masyarakat dalam kesatuan kewarganegaraan. Ikatan ini dikarakteristikkan dengan adanya kepercayaan dan hubungan timbal balik yang sifatnya umum; dan (c) ikatan kelembagaan yang dikarakteristikkan dengan adanya kepercayaan dalam kelembagaan yang ada. Misalnya pada ikatan dalam sistem kelembagaan dan hubungan kekuanan. Sementara itu, karakteristik jaringan sosial (network characteristics) dapat dilihat dari tiga karakteristik yaitu: bentuk dan luas (size and extensiveness), kerapatan dan ketertutupan (density and closure), dan keragaman (diversity). Karakteristik bentuk dan luas misalnya mengenai jumlah hubungan informal yang terdapat dalam sebuah interaksi sosial, jumlah tetangga mengetahui pribadi sesorang dalam sebuah sistem sosial, dan jumlah kontak kerja. Kerapatan dan ketertutupan sebuah jaringan sosial dapat dilihat misalnya dengan beberapa besar sesama anggota keluarga saling mengetahui teman-teman dekatnya, diantara teman saling mengetahui satu sama lainnya, masyarakat setempat saling mengetahui satu sama lainnya. Keragaman, jaringan sosial dikarakteristikkan misalnya dari keragaman etnik teman, dari
perbedaan pendidikan dalam sebuah group atau dari pencampuran budaya dalam wilayah setempat.

3. **Norma sosial (social norms)**


**Status Gizi Balita**


Penilaian status gizi dapat dilakukan secara langsung maupun tidak langsung (Jelliffe et al. 1989). Penilaian status gizi secara langsung dapat dilakukan melalui metode : (a) antropometri, (b) biokimia, (c) klinis, dan (d) biofisik. Sementara itu, penilaian status gizi secara tidak langsung dapat dilakukan melalui : (a) survei konsumsi, (b) statistik vital, dan (c) faktor ekologi. Salah satu metode yang sering digunakan dalam penilaian status gizi balita adalah dengan metode antropometri.

Penilaian status gizi secara antropometri menunjuk pada pengukuran variasi dimensi, proporsi, dan berbagai aspek dari komposisi tubuh manusia pada umur dan level gizi yang berbeda. Metode ini diniilai sangat bermanfaat untuk menilai status gizi pada anak-anak dikarenakan pertumbuhan yang cepat pada anak-anak dan kasus Kurang Energi dan Protein (KEP) biasanya terjadi pada kelompok anak-anak. Indeks antropometri yang biasa digunakan pada penilaian status gizi pada anak adalah : (a) indeks berat badan menurut umur (BB/U), (b) indeks berat badan menurut panjang/tinggi badan (BB/BB), (c) indeks tinggi badan menurut umur (TB/U), (d) indeks gabungan (BB/U, BB/BB, dan TB/U), (e) indeks lingkar lengan atas (LILA), (f) indeks lingkar kepala menurut umur (LK/U), dan (g) tebal lipatan lemak di bawah kulit (TLBK) (Jelliffe et al. 1989, Riyadi 2003).

Penilaian status gizi balita dengan menggunakan indeks gabungan merupakan indikator yang baik dan dapat memberikan gambaran yang obyektif tentang perubahan status gizi khususnya dalam menilai status gizi bayi (umur kurang dari satu tahun), anak yang berumur satu sampai dua tahun, anak pra-sekolah yang berumur 2 sampai 6 tahun, dan anak sekolah dasar yang berumur 6 sampai sepuluh tahun. Indeks ini menggabungkan indikator penilaian BB/U, BB/BB, dan TB/U. Data yang diperoleh dari pengukuran ketiga indeks tersebut dan perhitungan z-score dengan menggunakan referensi NCHS/WHO kemudian dikelompokkan dalam tiga kelompok, yaitu : (1) normal, bila z-
score antara -2 SD/standar deviasi sampai +2 SD; (2) tinggi (di atas normal), bila z-score > +2 SD; dan (3) rendah (di bawah normal), bila z-score < -2 SD (Riyadi 2003).

**Perkembangan Sosial**


Salah satu aspek yang dapat dijadikan indikator dalam area kualitas perkembangan psikososial anak adalah perkembangan sosial, yang salah satu dapat diukur melalui kematanan sosial. Kematangan sosial merupakan kompetensi sosial yang didefinisikan sebagai kemampuan sosial seseorang dalam mengolah kemandirian dan tanggung jawab sosial (Doll, 1953). Dalam pengukuran kematangan sosial anak beberapa dimensi yang dapat diukur adalah kemampuan menolong diri sendiri (self help), gerakan motorik (locomotion), kemampuan melakukan sesuatu (occupation), komunikasi (communication), pengaturan diri (self-direction), dan sosialisasi (socialization) (Doll, 1965). Kematangan sosial menjadi salah satu kompetensi penting dalam perkembangan anak karena keberhasilan perkembangan sosial akan menentukan keberhasilan seseorang dalam membangun interaksi sosialnya. Seperti yang diungkapkan oleh Goleman (2006) yang menerangkan bahwa keberhasilan seseorang dalam kehidupanannya sangat ditentukan oleh kecerdasan sosial yang dimilikinya, baik dalam memahami apa yang dirasakan terhadap orang lain maupun bagaimana seseorang bertindak atas apa yang dirasakan tersebut dalam interaksinya dengan orang lain.
METODOLOGI

Desain, Lokasi, dan Waktu Penelitian


Sesuai dengan salah satu ruang lingkup konferensi yaitu pemeliharaan lingkungan dalam perlindungan sosial anak pada masyarakat miskin maka analisis yang akan disajikan dalam makalah ilmiah ini adalah sebagian data dari kedua penelitian tersebut yang terkait dengan modal sosial dan peranan yang dijalankan dalam mengoptimalkan tumbuh kembang anak, dalam hal ini status gizi dan perkembangan sosial anak, pada rumah tangga miskin.

Populasi dan Contoh Penelitian

Studi 1


Studi 2

Populasi penelitian ini adalah seluruh keluarga petani yang mempunyai minimal 1 (satu) anak (dengan rentang usia 2-18 tahun) di Kabupaten Bogor. Penelitian dilakukan di Kecamatan
Nanggung, Kabupaten Bogor. Pemilihan lokasi tersebut atas pertimbangan bahwa Kecamatan Nanggung adalah salah satu kecamatan dengan potensi ekonomi di sektor pertanian dan memiliki jumlah penduduk miskin yang cukup tinggi yaitu 27.851 jiwa (34.20%). Dari 10 desa di Kecamatan Nanggung terdapat dua desa yang berbasis pertanian yaitu Desa Kalongliud (padi) dan Desa Hambaro (palawija dan tanaman obat), oleh karena itu lokasi penelitian akan dilaksanakan di dua desa tersebut. Dari kerangka unit contoh, dipilih secara acak (random sampling) keluarga petani sebagai contoh dalam penelitian ini. Di setiap desa pemilihan contoh yaitu keluarga petani dan anaknya dibagi ke dalam tiga kelompok yaitu keluarga petani dengan : 1) mempunyai minimal 1 anak usia balita (2-5 tahun) masing-masing desa 40 keluarga; 2) mempunyai minimal 1 anak usia sekolah (6-12 tahun) masing-masing desa 40 keluarga masing-masing desa 40 orang; dan 3) mempunyai minimal 1 anak usia remaja (13-18 tahun) masing-masing desa 40 keluarga; sehingga total contoh adalah 240 keluarga. Sama halnya dengan Studi 1, ibu dan anak keluarga terpilih adalah responden dalam penelitian ini.

Jenis dan Cara Pengumpulan Data

Data yang dianalisis dalam makalah ilmiah ini adalah data primer yang diperoleh dari kedua studi yang dikumpulkan melalui wawancara reponden menggunakan kuesioner yang terstruktur. Sesuai dengan tujuan penulisan makalah ilmiah ini maka variabel penelitian yang disajikan dari kedua studi adalah:

1. Karakteristik sosial ekonomi keluarga yang terdiri dari jumlah anggota keluarga, tingkat pendidikan kepala rumah tangga, dan pengeluaran keluarga. Pengeluaran keluarga dipilih sebagai indikator untuk menganalisis keadaan ekonomi rumah tangga responden karena lebih menggambarkan pemutaran sumber daya materi yang lebih riil dan juga lebih menggambarkan kebutuhan rumah tangga. Pada hasil Studi 1 juga akan disajikan analisis tentang kondisi ketahanan pangan rumah tangga miskin yang diukur dari konsumsi pangan rumah tangga. Selain itu, pada Studi 1 juga dilakukan pengukuran lingkungan pengasuhan anak pada rumah tangga responden.

2. Modal sosial

Modal sosial dalam penelitian ini diukur dari 3 (tiga) pilar modal sosial Robert Putnam yaitu kepercayaan, jaringan sosial, dan norma sosial. Instrumen pengukuran kepercayaan (trust) diukur dengan instrumen yang dikembangkan penulis dari konsep Mollering dalam Dharmawan (2002a; 2002b), yang terdiri dari (1) kepercayaan diri rumah tangga dalam menjalani hubungan sosial, (2) kepercayaan rumah tangga untuk menjalani kerjasama tanpa rasa saling curiga, (3) kepercayaan rumah tangga bahwa kerjasama yang dibangun dengan rumah tangga lain dapat membantu pemenuhan kebutuhan pangan, (4) kepercayaan rumah tangga bahwa kerjasama yang dibangun dengan rumah tangga lain dapat membantu dalam pengasuhan balita, (5) kepercayaan rumah tangga bahwa lingkungannya dapat menciptakan kedamaian dan meredam kekacauan sosial, (6) kepercayaan rumah tangga bahwa menjaga keeratan hubungan di dalam lingkungannya adalah hal penting, dan kepercayaan rumah tangga bahwa lingkungannya dapat menjadi hubungan di antara mereka tetap langgeng. Sementara itu, instrumen jaringan sosial antar rumah tangga di dalam komunitas diukur dengan instrumen yang dikembangkan penulis dengan mengembangkan konsep Stone dan Hughes (2002) tentang jaringan sosial yang terdiri dari sifat jaringan (formal dan informal) dan karakteristik jaringan baik dalam bentuk/basis hubungan sosial, luas, kedalaman dan keterbukaan, keragaman, dan permanensi. Pilar modal sosial ketiga yaitu norma sosial diukur dengan ada tidaknya aturan-aturan tidak tertulis dalam hubungan antar rumah tangga di

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1 Dikutip dari presentasi Kabupaten Bogor dalam Lokakarya KKP Fakultas Ekologi Manusia, IPB pada tanggal 15 April 2008

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dalam komunitas, nilai-nilai tradisional yang sudah ada turun temurun, dan juga nilai-nilai agama yang diyakini dalam menjalin hubungan sosial. Sementara itu, instrumen modal sosial yang digunakan pada Studi 2 merupakan penyederhanaan dari instrumen modal sosial Studi 1 dengan dimensi yang tetap.

3. Status gizi balita pada Studi 1 diukur dengan menimbang berat badan (BB) dan mengukur tinggi badan (TB) balita.

4. Kematangan sosial anak pada Studi 2 diukur dengan mengembangkan konsep Doll (1965) dengan enam dimensi utamanya, yaitu: Dalam pengukuran kematangan sosial anak beberapa dimensi yang dapat diukur adalah kemampuan menolong diri sendiri (self help), gerakan motorik (locomotion), kemampuan melakukan sesuatu (occupation), komunikasi (communication), pengaturan diri (self-direction), dan sosialisasi (socialization).

**Pengolahan dan Analisis Data**

Data yang diperoleh, diolah dengan menggunakan program Microsoft Excell dan SPSS. Sementara itu, data status gizi balita diolah dengan menggunakan program WHO Anthro 2005 untuk menentukan apakah balita yang diukur mempunyai skor dalam kategori: (1) normal, bila z-score antara -2 SD/standar deviasi sampai +2 SD; (2) tinggi (di atas normal), bila z-score > +2 SD; dan (3) rendah (di bawah normal), bila z-score < -2 SD. Berdasarkan tujuan yang dianalisis maka analisis yang digunakan adalah uji korelasi untuk menguji hubungan antara variabel modal sosial dengan status gizi balita (pada Studi 1) dan antara modal sosial dengan kematangan sosial anak (pada Studi 2).

**TEMUAN DAN ANALISIS**

**Karacteristik Sosial Ekonomi Rumah Tangga Responden**

*Studi 1.* Berdasarkan jumlah anggota keluarga pada Studi 1, sebagian besar rumah tangga miskin mempunyai anggota rumah tangga antara empat hingga delapan orang (60.6% di Kelurahan Kedung Jaya dan 60.7% di Kelurahan Tajur), dengan rata-rata anggota rumah tangga adalah 5.8 ± 2.9 orang per rumah tangga di Kelurahan Kedung Jaya dan 4.9 ± 2.6 orang per rumah tangga di Kelurahan Tajur. Sebagian besar kepala rumah tangga, yaitu 63.6% di Kelurahan Kedung Jaya dan 42.9% di Kelurahan Tajur adalah tidak tamat SD. Kepala rumah tangga miskin responden yang tamat SMA/sederajat hanya ada di Kelurahan Tajur, yaitu sebanyak 21.4%.


Jumlah anggota keluarga yang lebih sedikit di Kelurahan Tajur juga mencerminkan satu keluarga inti dengan fungsi ekonomi rumah tangga dilakukan dalam lingkup satu keluarga inti. Hal ini berbeda dengan kondisi di Kelurahan Kedung Jaya, yang mana adanya kecenderungan lebih dari satu keluarga inti untuk tinggal dalam satu atap rumah tangga masih lebih tinggi. Kondisi ini juga mengindikasikan adanya fenomena masih adanya anak yang tinggal bersama orang tua mereka.
meskipun sudah berkeluarga. Hal ini didukung oleh temuan bahwa sebagian besar rumah tangga miskin responden (48.5%) di Kelurahan Kedung Jaya mempunyai dua keluarga inti.


Hasil penelitian ini juga menunjukkan bahwa 96.72% rumah tangga miskin responden menggunakan kompor berbahan bakar minyak tanah dan rata-rata 15.54% pengeluaran rumah tangga per bulan digunakan untuk membeli minyak tanah. Kondisi tersebut menunjukkan bahwa rata-rata, lebih dari 75% pengeluaran rumah tangga miskin responden habis digunakan untuk memenuhi kebutuhan pangan dan bahan bakar minyak. Oleh karenanya, apabila harga BBM naik yang juga menyebabkan harga-harga kebutuhan pangan, khususnya beras, juga naik maka bisa diprediksi alokasi pengeluaran rumah tangga untuk memenuhi kebutuhan pangan dan minyak tanah juga akan naik.

**Tabel 1. Rata-rata pengeluaran rumah tangga/kapita/bulan Studi 1**

<table>
<thead>
<tr>
<th>Kelurahan</th>
<th>Rata-rata pengeluaran rumah tangga/kapita/ bulan (Rp)</th>
<th>Rata-rata pengeluaran pangan rumah tangga/kapita/ bulan (Rp)</th>
<th>Rata-rata persentase pengeluaran rumah tangga/ bulan untuk pangan (%)</th>
<th>untuk beras (%)</th>
<th>untuk minyak tanah (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kedung Jaya</td>
<td>Rp 115,310.79</td>
<td>Rp 67,813.20</td>
<td>60.07</td>
<td>22.66</td>
<td>14.45</td>
</tr>
<tr>
<td>Tajur</td>
<td>Rp 132,898.16</td>
<td>Rp 74,883.22</td>
<td>58.03</td>
<td>22.65</td>
<td>16.82</td>
</tr>
<tr>
<td>TOTAL</td>
<td>Rp 123,383.68</td>
<td>Rp 71,058.46</td>
<td>59.13</td>
<td>22.66</td>
<td>15.54</td>
</tr>
</tbody>
</table>

**Studi 2.** Hasil analisis Studi 2 pada besar keluarga menunjukkan bahwa rumah tangga miskin di wilayah perdesaan mempunyai rata-rata jumlah anggota keluarga 5.7 ± 1.7 orang dan kedua desa mempunyai rata-rata jumlah anggota keluarga yang sama. Mayoritas responden termasuk ke dalam keluarga sedang, yaitu jumlah anggota keluarga 5-7 orang (60%). Hanya seperempatnya saja yang termasuk ke dalam keluarga besar (> 7 orang). Begitu juga jika dilihat di masing-masing desa, dengan proporsi contoh yang sama, Desa Hambaro memiliki persentase lebih besar dalam jumlah anggota keluarga yang termasuk ke dalam keluarga sedang (64.2%). Desa Kalongliud sendiri memiliki persentase lebih besar dibanding Desa Hambaro dalam jumlah anggota keluarga yang termasuk ke dalam keluarga kecil. Keraganya ini menunjukkan bahwa di Desa Kalongliud mempunyai karakteristik besar keluarga yang lebih kecil dibandingkan Desa Hambaro.

Sementara itu, berdasarkan usia kepala rumah tangga hasil penelitian juga menunjukkan bahwa terdapat 3,8% kepala rumah tangga responden di kedua desa lokasi penelitian yang tidak sekolah. Persentase terbesar terdapat pada kepala rumah tangga yang tidak tamat SD dan bisa baca tulis yaitu 44,6% dan 42,9% menamatkan pendidikannya hingga tingkat SD.

Tabel 2 berikut ini menyajikan rata-rata pengeluaran rumah tangga/kapita/bulan di kedua desa lokasi penelitian. Hasil penelitian menunjukkan bahwa di Desa Kalongliud, pengeluaran rumah
tangga/kapita/bulan lebih besar dibandingkan dengan Desa Hambaro. Begitu juga dengan rata-rata pengeluaran pangan/kapita/bulan, Desa Kalongliud lebih besar dibandingkan Desa Hambaro. Rata-rata persentase pengeluaran rumah tangga/bulan untuk pangan, beras, minyak tanah, rokok, dan pendidikan dari keseluruhan pengeluaran rumah tangga paling banyak dialokasikan untuk pangan (55.9%), untuk beras 20.9%, untuk rokok 11.9%, dan untuk minyak tanah 0.1%. Penelitian ini menemukan bahwa pengeluaran untuk rokok mencapai hampir 12 persen, bahkan melebihi proporsi pengeluaran untuk pendidikan.

Tabel 2. Rata-rata pengeluaran rumah tangga/kapita/bulan Studi 2

<table>
<thead>
<tr>
<th>Desa</th>
<th>Rata-rata pengeluaran rumah tangga/kapita/bulan (Rp)</th>
<th>Rata-rata pengeluaran pangan rumah tangga/kapita/bulan (Rp)</th>
<th>Rata-rata persentase pengeluaran rumah tangga/bulan (%)</th>
<th>untuk pangan (%)</th>
<th>untuk beras (%)</th>
<th>untuk minyak tanah (%)</th>
<th>untuk rokok (%)</th>
<th>untuk pendidikan (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kalongliud</td>
<td>Rp 381,710.46</td>
<td>Rp 172,062.69</td>
<td></td>
<td>55.0</td>
<td>19.1</td>
<td>0.2</td>
<td>11.0</td>
<td>8.7</td>
</tr>
<tr>
<td>Hambaro</td>
<td>Rp 193,818.44</td>
<td>Rp 99,955.99</td>
<td></td>
<td>56.9</td>
<td>22.6</td>
<td>0.1</td>
<td>12.8</td>
<td>6.2</td>
</tr>
<tr>
<td>Total</td>
<td>Rp 287,764.45</td>
<td>Rp 136,009.34</td>
<td></td>
<td>55.9</td>
<td>20.9</td>
<td>0.1</td>
<td>11.9</td>
<td>7.4</td>
</tr>
</tbody>
</table>

Berdasarkan deskripsi karakteristik sosial ekonomi yang dijelaskan antara kedua studi, terlihat bahwa dalam hal jumlah anggota keluarga, rumah tangga miskin baik di wilayah perdesaan maupun perkotaan mempunyai karakteristik yang sama dalam hal jumlah anggota keluarga. Sementara itu, meskipun tingkat pendidikan sama-sama rendah, namun kepala rumah tangga di perdesaan mempunyai tingkat pendidikan yang lebih rendah dibandingkan dengan perkotaan. Demikian halnya dengan pengeluaran rumah tangga/kapita/bulan menunjukkan bahwa proporsi pengeluaran pangan dan beras masih lebih tinggi pada rumah tangga pedesaan dibandingkan perkotaan meskipun dominasi pengeluaran pangan masih besar pada alokasi pengeluaran rumah tangga.

Kualitas Tumbuh Kembang Anak Responden

Seperti yang disajikan dalam bagian metode penelitian, kualitas tumbuh kembang anak pada rumah tangga miskin yang diukur adalah status gizi dan kematangan sosial anak. Pada Studi 1, penilaian status gizi balita responden menggunakan indeks status gizi gabungan (BB/U, TB/U, dan BB/TB). Tabel 3 menyajikan tabulasi silang antara status gizi balita dan ketahanan pangan rumah tangga.
Hasil yang tersaji pada Tabel 1 menunjukkan bahwa rumah tangga miskin di Kelurahan Kedung Jaya dan Kelurahan Tajur sebagian besar mempunyai balita yang berada dalam status gizi normal dan berasal dari rumah tangga miskin tahan pangan (Tabel 3). Meskipun begitu, hasil analisis tersebut juga menemukan bahwa rumah tangga miskin yang tahan pangan justru mempunyai balita yang mengalami kekurangan gizi ringan pada saat ini maupun terlihat normal namun mengalami kekurangan gizi di masa lalu (Tabel 3). Kondisi ini menunjukkan adanya variabel lain yang berhubungan dengan status gizi anak, di luar kondisi ketahanan pangan rumah tangga. Masih adanya balita anggota rumah tangga miskin responden yang masuk dalam kategori kekurangan gizi ringan (20.0% di Kelurahan Kedung Jaya dan 18.2% di Kelurahan Tajur) maupun kategori normal namun mengalami kekurangan gizi di masa lalu (20.0% di Kelurahan Kedung Jaya dan 27.3% di Kelurahan Tajur), menunjukkan perlunya perlindungan anak agar dapat memenuhi hak untuk bertumbuh dengan baik.


### Tabel 3. Kondisi status gizi balita (berdasarkan indeks status gizi gabungan) menurut kondisi ketahanan pangan rumah tangga miskin responden pada Studi 1

<table>
<thead>
<tr>
<th>Kelurahan</th>
<th>Kategori status gizi</th>
<th>Kondisi ketahanan pangan rumah tangga</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Tidak tahan</td>
<td>Tahan</td>
</tr>
<tr>
<td>Kedung Jaya</td>
<td>Kekurangan gizi ringan</td>
<td>13.3</td>
<td>6.7</td>
</tr>
<tr>
<td></td>
<td>Tampak normal, mengalami kekurangan gizi di masa lalu</td>
<td>13.3</td>
<td>6.7</td>
</tr>
<tr>
<td></td>
<td>Normal</td>
<td>46.7</td>
<td>6.7</td>
</tr>
<tr>
<td></td>
<td>Normal, tinggi</td>
<td>6.7</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>Gizi lebih tapi tidak obes</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>Obesitas</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td>80.0</td>
<td>20.0</td>
</tr>
<tr>
<td>Tajur</td>
<td>Kekurangan gizi ringan</td>
<td>9.1</td>
<td>9.1</td>
</tr>
<tr>
<td></td>
<td>Tampak normal, mengalami kekurangan gizi di masa lalu</td>
<td>9.1</td>
<td>18.2</td>
</tr>
<tr>
<td></td>
<td>Normal</td>
<td>36.4</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>Normal, tinggi</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>Gizi lebih tapi tidak obes</td>
<td>9.1</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>Obesitas</td>
<td>9.1</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td>72.7</td>
<td>27.3</td>
</tr>
</tbody>
</table>
Hasil yang tersaji pada Tabel 4 menunjukkan bahwa anak yang perkembangan sosial emosinya baik merupakan anak yang berasal dari keluarga dengan status sosial ekonomi relatif lebih baik, sedangkan anak yang perkembangan sosial emosinya kurang baik berasal dari keluarga dengan status sosial ekonomi relatif lebih rendah. Dilihat berdasarkan umur anak terlihat adanya hubungan antara umur anak dengan perkembangan sosial emosinya. Anak dengan perkembangan sosial emosi baik merupakan anak dengan rata-rata usia lebih tua yaitu 10 tahun lebih, sebaliknya anak dengan perkembangan sosial emosi rendah merupakan anak dengan rata-rata usia lebih muda, yaitu 5.5 tahun. Selain itu, hasil penelitian ini menunjukkan bahwa tidak ada perbedaan antara anak dengan perkembangan sosial emosi baik dan rendah dalam hal tingkat pendidikan ibunya, karena sebagian besar keluarga responden penelitian ini mempunyai tingkat pendidikan kurang dari 6 tahun atau setara dengan pendidikan Sekolah Dasar atau kurang.


<table>
<thead>
<tr>
<th>Karakteristik</th>
<th>Perkembangan Sosial Emosi Baik (&gt;60%)</th>
<th>Perkembangan Sosial Emosi Kurang Baik (≤60%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Kalongliud</td>
<td>Hambaro</td>
</tr>
<tr>
<td>Besar Kluarga (org)</td>
<td>5.6 ± 1.8</td>
<td>5.8 ± 1.6</td>
</tr>
<tr>
<td>Pengeluaran/kap/bln  (Rp/kap/bln)</td>
<td>395,508.92 ± 808,652,77</td>
<td>195,368.46 ± 125,617.89</td>
</tr>
<tr>
<td>Umur anak (tahun)</td>
<td>10.0 ± 4.8</td>
<td>10.8 ± 4.5</td>
</tr>
<tr>
<td>Lama pendidikan ibu (tahun)</td>
<td>5.6 ± 2.3</td>
<td>5.8 ± 1.3</td>
</tr>
</tbody>
</table>

Oleh karenanya, perlu ada solusi yang dapat dilakukan oleh rumah tangga dan komunitas miskin agar dengan segala keterbatasan yang dimiliki masih dapat berfungsi untuk memenuhi hak anak untuk tumbuh dan berkembang. Salah satu yang dapat dilakukan adalah mengembangkan solusi-solusi alternatif berbentuk perlindungan sosial. Sebagai sebuah gerakan yang menyandarkan pada kekuatan hubungan sosial maka salah satu modal yang harus dikuatkan adalah modal sosial yang ada di masyarakat. Pada bagian berikut ini akan disajikan hasil analisis modal sosial pada kedua Studi yang dapat dijadikan kekuatan bagi pengembangan program perlindungan sosial pada anak-anak miskin.

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Keberadaan Modal Sosial dalam Menggerakkan Sumber Daya Rumah Tangga Miskin untuk Optimalisasi Status Gizi dan Kematangan Sosial Anak

Seiring dengan pemikiran Bourdieu akan modal sosial, yang mana modal sosial dapat dijadikan sumberdaya untuk menciptakan modal ekonomi (Winter, 2000), maka penelitian yang disajikan dalam makalah ilmiah ini, secara teoritis menggunakan kerangka pemikiran Bourdieu untuk menelaah kemungkinan modal sosial dalam menguatketahuan pangan rumah tangga miskin di lokasi penelitian yang dalam kondisi tertentu dapat diubah menjadi modal ekonomi. Selain itu, berdasarkan pada pendapat Warren et al. (2003) yang menyebutkan bahwa kondisi ekonomi yang rendah cenderung akan menyebabkan rendahnya tanggung jawab terhadap anak, maka penelitian yang dilakukan juga menggunakan kerangka konseptual pemikiran Coleman tentang modal sosial, bahwa modal sosial dalam jaringan keluarga dan komunitas merupakan sumberdaya bagi modal manusia (Winter, 2000). Penguatan modal sosial, dengan ketiga pilarnya, diharapkan mampu menggerakkan modal ekonomi (materi) dan juga modal manusia yang ada rumah tangga dan komunitas miskin untuk menciptakan komunitas dengan perlindungan sosial yang baik bagi terpenuhinya hak anak untuk tumbuh dan berkembang secara baik.

Membahas modal sosial, tentu saja masih tertinggal dalam ingatan kita bahwa negeri ini sebenarnya kaya dengan stok modal sosial. Tradisi-tradisi yang bersifat lokalitas seperti gotong royong merupakan sebuah stok modal sosial yang dapat dijadikan aset menguntungkan dalam mengatasi resiko yang terjadi akibat kemiskinan. Salah satu contohnya adalah tradisi “rereongan surupi” yang terdapat di Propinsi Jawa Barat (Hikmat, 2001). “Rereongan surupi” yang dimanifestasikan dalam bentuk kerja sama dan gotong royong dalam pembangunan sosial, musyawarah dalam memecahkan masalah-masalah kemasyarakatan, saling menolong antartetangga, dan saling mengingatkan apabila ada tetangga yang berbuat hal-hal yang merugikan masyarakat merupakan contoh bekerjanya stok modal sosial di dalam masyarakat. Contoh lain adalah tradisi “beas parelek” di Jawa Barat yang melibatkan aktivitas berupa pengumpulan beras sekitar satu sendok (satu “canting”) setiap bulan. Hasil pengumpulan tersebut akan digunakan untuk menghadapi musim paceklik, menolong anggota masyarakat lainnya termasuk fakir miskin, mengatasi kelaparan, dan permasalahan sosial lainnya yang membutuhkan dana dan sarana yang siap pakai (Hikmat 2001). Tradisi-tradisi tersebut tentu saja sarat dengan nilai-nilai kepercayaan (trust), norma sosial (social norms), dan bahkan juga jaringan sosial (social networks) yang dapat dimanfaatkan dalam menghadapi krisis ekonomi akibat kemiskinan, khususnya dalam mengatasi kerawanan yang dialami oleh rumah tangga miskin. Berbagai tradisi tersebut secara turun-temurun telah diwariskan dalam sistem sosial budaya kita, namun semakin lama stok modal sosial semakin menipis tergeser oleh nilai-nilai individualis.

Oleh karenanya, berikut ini akan disajikan hasil analisis tentang peran modal sosial yang sampai saat ini sebenarnya masih dapat diandalkan untuk mendorong hubungan sosial yang terbangun di dalam masyarakat. Martin (2004) menemukan bahwa modal sosial pada tingkat komunitas berhubungan signifikan dengan penurunan resiko kelaparan pada rumah tangga miskin berpendapatan rendah. Hasil penelitian pada Studi 1, menemukan bahwa rumah tangga miskin dengan tingkat kepercayaan (trust), jaringan sosial (social networks), dan norma sosial (social norms) yang rendah maka akan cenderung berada dalam kondisi tahan pangan. Sebaliknya, apabila rumah tangga mempunyai tingkat kepercayaan tinggi maka akan cenderung berada dalam kondisi tahan pangan. Kondisi tersebut mengindikasikan bahwa “berkah” modal sosial (social capital endowment) yang tinggi dalam komunitas rumah tangga miskin, khususnya yang tinggal di daerah perkotaan, dapat berguna untuk meningkatkan ketahanan pangan rumah tangga miskin.

Analisis uji korelasi menunjukkan bahwa semakin baiknya kepercayaan keluarga dalam menjalin hubungan di lingkungannya tanpa rasa saling curiga (r=0,392, α=0,01), kepercayaan keluarga untuk dapat menjaga lingkungannya tetap berjalan (r=0,315, α=0,05), jumlah hubungan sosial
yang dimiliki keluarga \((r=0.289, \alpha=0.05)\) berhubungan signifikan dengan semakin membaiknya kondisi ketahanan pangan pada keluarga miskin. Selain itu, semakin baik hubungan pertetanggaan yang ada dalam masyarakat khususnya berupa pengetahuan rumah tangga terhadap kebiasaan tetangganya dalam mengasuh balitanya bila ditinggal pergi atau bekerja, semakin baik kualitas lingkungan pengasuhan keluarga miskin di perkotaan \((r=0.486, \alpha=0.05)\). Temuan tersebut membuktikan bahwa modal sosial yang bekerja di lingkungan keluarga miskin di perkotaan berhubungan dengan membaiknya kondisi ketahanan pangan dan pengasuhan oleh keluarga yang menjadi faktor penentu kualitas status gizi balita.

Mekanisme yang dapat dijelaskan dari hasil penelitian pada Studi 1 adalah meskipun dihadapkan pada persoalan kemampuan ekonomi rumah tangga yang lebih rendah namun rumah tangga miskin dapat memelihara ketahanan pangan yang cukup baik karena masih terjadi tolong menolong antartetangga. Seperti yang telah dijelaskan sebelumnya, bahwa sebagian besar rumah tangga hidup berdekatan dengan keluarga besar. Selain itu, observasi di lokasi penelitian menunjukkan bahwa kepercayaan yang cukup tinggi juga tercermin dari mekanisme “hutang ke warung” ketika rumah tangga belum memiliki uang untuk membeli kebutuhan pangan juga mencerminkan adanya tingkat kepercayaan yang cukup tinggi di dalam komunitas. Namun tradisi “beas parelek” yang dikemukakan Hikmat (2001) tidak ditemukan dalam penelitian ini meskipun sama-sama di wilayah Jawa Barat. Selain itu, dukungan tetangga dan keluarga luas untuk membantu pengasuhan balita dalam bentuk menitipkan anak apabila ada keperluan atau mengasuh anak secara bersama-sama dapat menjadi pendorong bagi rumah tangga miskin untuk memberikan lingkungan pengasuhan yang lebih baik untuk mengoptimalkan praktek pengasuhan yang dapat meningkatkan status gizi balita.

Studi 2 yang juga merupakan penyempurnaan instrumentasi modal sosial, modal sosial juga ditinjau dari tiga pilar utamanya, yaitu tingkat kepercayaan \((trust)\) keluarga, tingkat jaringan sosial keluarga, dan tingkat norma sosial keluarga dalam menjaga empat nilai utama, yaitu kejujuran, sikap amanah \((menjaga komitmen dan bertanggung jawab)\), tolong menolong, dan saling menghargai. Hasil penelitian seperti yang disajikan pada Tabel 3 menunjukkan bahwa dimensi jaringan sosial mempunyai persentase skor terendah diantar ketiga dimensi, baik di masing-masing desa lokasi maupun keseluruhan rata-rata. Sementara itu, keberadaan norma di dalam keluarga dalam menjaga nilai-nilai kejujuran, sikap amanah \((menjaga komitmen dan bertanggung jawab)\), tolong menolong, dan saling menghargai mempunyai persentase skor tertinggi.

<table>
<thead>
<tr>
<th>No</th>
<th>Dimensi</th>
<th>Rataan persentase skor ± SD</th>
<th>Desa Kalonliud</th>
<th>Desa Hambaro</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Tingkat kepercayaan (trust)</td>
<td>72.6 ± 15.0</td>
<td>72.6 ± 10.9</td>
<td>72.6 ± 13.1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Tingkat jaringan sosial</td>
<td>61.8 ± 12.3</td>
<td>62.2 ± 13.4</td>
<td>62.0 ± 12.9</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Tingkat norma</td>
<td>82.8 ± 9.6</td>
<td>80.8 ± 13.8</td>
<td>81.8 ± 11.9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rata-rata keseluruhan dimensi</td>
<td>72.4 ± 8.7</td>
<td>71.9 ± 7.4</td>
<td>72.1 ± 8.07</td>
<td></td>
</tr>
</tbody>
</table>

Berdasarkan perbandingan antar kedua lokasi, Tabel 5 menunjukkan bahwa keadaan modal sosial yang terkait dengan berjalannya hubungan sosial lebih baik kondisinya di Desa Hambaro. Sementara itu, dimensi/pilar modal sosial yang terkait dengan kapasitas keluarga dalam membasiskan nilai-nilai di dalam keluarga lebih baik keadaannya pada keluarga contoh di Desa Kalonliud. Dua kondisi berbeda tersebut menunjukkan bahwa di Desa Hambaro hubungan sosial antar warga lebih baik kondisinya, sedangkan di Kalonliud kualitas keluarga dalam membasiskan
Dapat Doll, memperoleh Hambaro hubungan bekerjanya mengembangkan Dharmawan gizi Desa (1). Engle, yang nilai bekerjanya Dharmawan jalan geografis perlindungan Kalongliud. dengan pada Hambaro, Kalongliud bekerja Desa Kedua IMPLIKASI/REKOMENDASI KEBIJAKAN pendidikan mendorong dan lebih pada Desa Kedua Kalongliud lebih tinggi dibandingkan Desa Hambaro. Karacteristik inilah yang menyebabkan Desa Hambaro lebih kental nuansa kebersamaan antar warganya, namun keluarga di Desa Kalongliud mempunyai kualitas pembiasaan nilai yang lebih baik karena keterbukaan dan pendidikan yang lebih baik.

IMPLIKASI/REKOMENDASI KEBIJAKAN

Kedua penelitian tersebut menegaskan bahwa modal sosial yang baik yang dimiliki berhubungan dengan kemampuan keluarga miskin untuk mempunyai ketahanan pangan dan kualitas pengasuhan yang lebih baik, yang pada akhirnya akan berpengaruh terhadap optimalisasi status gizi dan perkembangan sosial emosi anak. Oleh karenanya, rekomendasi dalam mengembangkan perlindungan sosial untuk memberikan lingkungan yang kondusif bagi tumbuh kembang anak pada keluarga miskin adalah melalui upaya-upaya yang dapat mendorong dan memelihara bekerjanya modal sosial di masyarakat. Beberapa hal yang dapat direkomendasikan dalam mengembangkan perlindungan sosial yang menyandarkan pada bekerjanya modal sosial adalah: (1) mendorong keluarga miskin untuk lebih membuka jaringan sosial yang lebih luas, untuk memperoleh dukungan sosial yang lebih baik khususnya dalam melakukan praktek pengasuhan yang lebih baik; (2) mengembangkan program perlindungan sosial berbasis komunitas yang dikelola dengan pilar kepercayaan, norma sosial, dan jaringan sosial yang baik; dan (3) mendorong bekerjanya modal nonmateri yang dapat diandalkan untuk memperkuat sumberdaya yang dimiliki guna menguatkan ketahanan pangan pengasuhan yang lebih baik pada keluarga miskin, sehingga dapat berperan optimal dalam menumbuhkembangkan anak secara baik.

DAFTAR PUSTAKA


Notulensi Hari II, Tema 1:
Dimensions of Child Poverty
Wednesday, 11 September 2013

Rapporteur: Anna Winoto

Presenter 1:
Name : Dr. Saykham Voladet
Title : The Economic Consequences of Malnutrition in LAO PDR

Highlights of Conclusions and Recommendations:
• Measuring the economic impact of malnutrition is important for advocating better nutrition investment in the future.
• Malnutrition can be an economic burden to a country because:
  1. It can reduce the current and future labor productivity, and in the end it will hamper economic activity and reduce economic growth.
  2. Malnutrition can also increase healthcare costs.
• Preliminary findings in Lao PDR: Malnutrition increases mortality and lost in future productivity.

Presenter 2:
Name : Avita A. Usfar
Title : Double Burden of Malnutrition as a Consequence of Poverty Co-Exists in the Same Households in East Indonesia: Analysis of IFLS East 2012 data

Highlights of Conclusions and Recommendations:
• Double Burden of Malnutrition (DBM) is the co-existence of undernutrition and overnutrition within the same population, household or individual. Indonesian DBM condition is as follows:
  - Children under 5: 36% stunted vs. 14% overnourished (WFH)
  - Adult women: 12% underweight vs. 11% overweight & 16% obese
• This study aims to complement Indonesia DBM profile (currently still using WB assessment criteria) with other DBM assessment criteria, Asian DMB criteria.
• The findings of this study are:
  In all categories, Indonesia prevalence of DBM using Asian cut off is higher than using World Bank DBM cut off. This fact implies that the use of Asian cut-off yields many more Double Burden Malnutrition households and highlights some potential contributing factors.
**Presenter 3:**  
Name: Anis Catur Adi  
Title: Balita Keluarga Miskin di Wilayah Prioritas Kerawanan Pangan di Indonesia Lebih Rentan Mengalami Gangguan Gizi

**Highlights of Conclusions and Recommendations:**
- Program pengentasan kemiskinan hendaknya melihat daerah rawan pangan sebagai daerah prioritas karena daerah rawan memiliki resiko malnutrisi lebih besar dan kondisi ekonomi lebih buruk.

**Presenter 4:**  
Name: Alfiasari  
Title: Penguatan Modal Sosial untuk Perlindungan Sosial Ruamah Tangga Miskin dalam Mengoptimalkan Status Gizi dan Perkembangan Sosial Emosi Anak

**Highlights of Conclusions and Recommendations:**
- The role of environmental factors is very critical to safeguard the quality of growth and the development of children. These factors include family size, employment, health status, food consumption, frequency of pregnancy, etc.
- In addition to human, natural, physical and financial capital, social capital needs to be considered in poverty reduction programs. However, the most important capital is that the poor has financial capital in households.

**Discussant’s comments:**  
Name: Dr. Minarto, MPS.

**Highlights of Conclusions and Recommendations:**
- This conference has succeeded in identifying several problems related to malnutrition and poverty, and especially those related to child poverty. The next step we have to take is to design a better policy regarding these issues. The problems in Indonesia are sometimes policy making process takes too much time in its legalization process at the House of Representatives (DPR). The political aspect of policy making will always challenge us to deliver better programs.
- The second challenge is quality of data. The quality of data (e.g. RISKESDAS) is still far from satisfactory. Improving our quality of data will ensure better poverty reduction program in the future.
A recent research by the University of Indonesia (UI) using longitudinal data shows that stunted children at 1 year can catch up (become normal in terms of nutrition) by age 5.

The two key factors that determine the quality of program (e.g. health) are the coverage and the data quality. The challenge is how to integrate nutrition to other social protection such as PNPM, etc.

Different strategy will rise when we use another angle. Social capital maybe one of the answers, but how can we integrate and design such concept in a program ready to be launched?

We need qualitative approach to better design future social protection programs especially those related to malnutrition problem.

Questions and Answers:

Q: Burhanudin, BKKBN
Keluarga miskin cenderung memiliki banyak anak. Di lain pihak banyak penelitian mengatakan bahwa keluarga miskin cenderung memiliki tingkat pendidikan lebih rendah. Perlu ada eksplorasi lebih lanjut mengenai hubungan antara kemiskinan dan kualitas intelektual.

FINAL CONCLUSIONS & RECOMMENDATIONS:

- Masalah gizi sangat kompleks, faktor yang mempengaruhi gizi anak sangat luas, termasuk faktor kemiskinan dan faktor regional. Perbaikan gizi harus memperhatikan faktor regional.
- Kekurangan nutrisi pada anak lebih banyak terjadi di keluarga miskin dan pada anak yang tinggal di daerah rawan pangan.
- Terkait dengan kondisi gizi balita, modal sosial yang baik dapat meningkatkan kepedulian keluarga dan masyarakat. Dengan demikian modal sosial dapat menjadi salah satu strategi untuk meningkatkan kualitas gizi dan mengurangi kemiskinan. Ketahanan dipengaruhi oleh modal sosial.
- Kekurangan gizi dapat membawa dampak buruk ekonomi jangka pendek dan jangka panjang. Oleh karena itu kekurangan gizi sebagai bentuk dari kemiskinan multi dimensi harus diperhatikan pemerintah di semua tingkat.
- Tantangan tidak hanya dari sisi teknis tetapi juga dari sisi politis yang mendukung berjalannya program.
LATAR BELAKANG


**Tabel 1. Ringkasan Ukuran Kemiskinan dan Kesejahteraan Rumah Tangga di Indonesia Tahun 2008-2012**

<table>
<thead>
<tr>
<th>Tahun</th>
<th>Garis Kemiskinan (Rupiah)</th>
<th>Persentase Penduduk Miskin</th>
<th>Rasio Gini</th>
<th>Indeks Kedalaman Kemiskinan</th>
<th>Indeks Kejaringan Kemiskinan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Kota</td>
<td>Desa</td>
<td>Kota</td>
<td>Desa</td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>204896</td>
<td>161831</td>
<td>11,65</td>
<td>18,93</td>
<td>0,35</td>
</tr>
<tr>
<td>2009</td>
<td>222123</td>
<td>179835</td>
<td>10,72</td>
<td>17,35</td>
<td>0,37</td>
</tr>
<tr>
<td>2010</td>
<td>232989</td>
<td>192354</td>
<td>9,87</td>
<td>16,56</td>
<td>0,38</td>
</tr>
<tr>
<td>2011</td>
<td>263594</td>
<td>223181</td>
<td>9,09</td>
<td>15,59</td>
<td>0,41</td>
</tr>
<tr>
<td>2012</td>
<td>267408</td>
<td>229226</td>
<td>8,78</td>
<td>15,12</td>
<td>0,41</td>
</tr>
</tbody>
</table>

Sumber: BPS, 2012  
Catatan: Referensi waktu untuk seluruh data adalah Maret, kec 2011 (September)

Ukuran kemiskinan dan kesejahteraan rumah tangga tersebut menunjukkan bahwa persentase penduduk miskin masih cukup tinggi, meningkatnya tingkat ketidakmerataan dan ketimpangan rata-rata pengeluaran penduduk miskin baik untuk rumah tangga yang bertempat tinggal di wilayah perkotaan ataupun perdesaan.

Banyak ahli yang menyatakan kurang tepat atau tidak cukup jika hanya menggunakan ukuran distribusi pendapatan untuk mengevaluasi tingkat kesejahteraan masyarakat atau kondisi ekonomi rumah tangga pada kurun waktu tertentu. Salah satunya adalah Kuznets (1966) yang menyatakan bahwa dalam dua distribusi pendapatan masyarakat yang identik, mungkin sangat berbeda dalam makna tingkat kesejahterannya, karena adanya mobilitas atau perpindahan posisi individu dalam distribusi tersebut, dan masyarakat dengan mobilitas lebih besar akan memiliki tingkat kesejahteraan yang lebih baik. Untuk itu dalam mengkaji tingkat kesejahteraan masyarakat dengan memperhatikan kedalaman distribusi variabel yang menjadi tolak ukurnya antar waktu tertentu atau mobilitasnya dapat digunakan ukuran kemiskinan yang relatif.

Perubahan nilai konsumsi rumah tangga yang juga mengindikasikan perubahan pendapatan, akan memberikan dampak pada perubahan struktur jenis barang atau jasa yang dikonsumsi. Rumah tangga dengan proporsi pengeluaran yang lebih besar untuk konsumsi makanan mengindikasikan rumah tangga yang berpenghasilan rendah. Makin tinggi tingkat penghasilan rumah tangga, makin kecil proporsi pengeluaran untuk makanan terhadap seluruh pengeluaran rumah tangga (Rahman, 2001). Perubahan nilai konsumsi ataupun struktur jenis barang dan jasa yang dikonsumsi oleh suatu rumah tangga akan memberikan dampak pada kondisi dan perkembangan anak-anak. Selain itu, perubahan pendapatan rumah tangga juga dapat menjadi tolak ukur tingkat kesejahteraan...

**IDENTIFIKASI DAN BATASAN MASALAH**


Di Indonesia, aktualisasi kajian kemiskinan anak dituangkan dalam penghitungan indeks komposit kemiskinan anak yang dirumuskan oleh Badan Perencanaan Pembangunan Nasional (BAPPENAS). Indeks tersebut mencerminkan anak yang hidup dalam kondisi serba kekurangan dalam berbagai dimensi. Indeks komposit kemiskinan anak terbentuk dari lima dimensi meliputi pendidikan, kesehatan, tempat tinggal, lingkungan dan sanitasi serta ekonomi. Dengan rincian indikator dari masing-masing dimensi adalah sebagai berikut:

<table>
<thead>
<tr>
<th>Tabel 2. Ringkasan dimensi dan indikator kemiskinan anak</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dimensi</strong></td>
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<td>Pendidikan</td>
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<tr>
<td>Kesehatan</td>
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<td>Tempat tinggal</td>
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<td></td>
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<tr>
<td>Lingkungan dan sanitasi</td>
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<td></td>
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<tr>
<td>Ekonomi</td>
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</tbody>
</table>
Berbagai kajian serta teori menyatakan bahwa perkembangan pengetahuan dan kemampuan anak secara fisik ataupun psikis terjadi sangat cepat dan mengesankan pada periode emas yaitu saat anak berusia kurang dari 5 tahun. Para ilmuwan sosial telah menyelidiki hubungan antara kemiskinan keluarga dan pencapaian anak pada tahapan hidup selanjutnya selama beberapa dekade. Penelitian dalam ilmu saria dan psikologi perkembangan juga menunjukkan bahwa kemiskinan di awal kehidupan seorang anak mungkin sangat berbahaya karena pesatnya perkembangan otak anak-anak namun sensitif (dan rentan) dengan kondisi lingkungan (Duncan dan Magnuson, 2011). Persentase penduduk per kelompok umur disajikan dalam grafik berikut:

![Grafik Persentase Penduduk Menurut Kelompok Umur 2010](image)

Data tersebut menyatakan bahwa penduduk dengan usia kurang dari lima tahun memiliki persentase yang cukup tinggi, pun dihubungkan dengan peran mereka pada masa bonus demografi. Sehingga kondisi pembangunan serta pengelolaan sumber daya manusia pada usia tersebut menjadikan sangat penting untuk diperhatikan.

Berdasarkan indikator dari ukuran kemiskinan anak, tingkat pengeluaran rumah tangga, jangka waktu kemiskinan yang dialami anak serta untuk merumuskan kebijakan anti kemiskinan yang menyentuh kepentingan anak pada usia dini, maka dikaji gambaran kemiskinan anak balita berdasarkan karakteristik kepala rumah tangga (KRT) dan ibu pada rumah tangga dengan rata-rata pengeluaran di kuantil pertama tahun 2008-2010. Tujuan dari penelitian ini adalah untuk memberikan gambaran kemiskinan anak yang berusia kurang dari lima tahun (balita) dilihat dari sisi pencapaian kebutuhan dasarnya, seperti pengakuan anak secara hukum melalui kepemilikan akte kelahiran, pemberian ASI eksklusif, pemberian imunisasi lengkap dan pendidikan pra sekolah berdasarkan karakteristik orang tua di perkotaan dan perdesaan. Serta untuk mengetahui keterkaitan karakteristik orang tua dan wilayah tempat tinggal dengan penukuan hak anak balita.

**TINJAUAN LITERATUR**

**KEMISKINAN**

Berdasarkan standar penilaianannya, kemiskinan diberikan menjadi kemiskinan relatif dan kemiskinan absolut. Standar penilaian kemiskinan relatif merupakan standar kehidupan yang ditentukan dan ditetapkan secara subyektif sangat tergantung pada pola distribusi pendapatan penduduk dalam suatu wilayah. Kemiskinan ini merupakan kondisi miskin karena pengaruh...
kebijakan pembangunan yang belum mampu menjangkau seluruh lapisan masyarakat sehingga menyebabkan ketimpangan distribusi pendapatan. Kelompok penduduk miskin relatif biasanya merupakan kelompok penduduk 20 persen atau 40 persen lapisan terendah dari total penduduk yang diurutkan menurut pendapatan atau pengeluaran (BPS, 2010).

Kemiskinan secara absolut ditentukan berdasarkan ketidakhmampuan untuk mencukupi kebutuhan pokok minimum seperti makanan dan non-makanan yang diperlukan untuk bisa hidup dan bekerja. Nilai kebutuhan minimum kebutuhan dasar disebut dengan garis kemiskinan, sehingga penduduk yang pendapatannya dibawah garis kemiskinan digolongkan sebagai penduduk miskin.

Di Indonesia, penghitungan garis kemiskinan didekati dengan menggunakan pengeluaran minimum makanan yang setara dengan 2.100 kilokalori per hari ditambah kebutuhan dasar minimum non-makanan seperti sandang, kesehatan, perumahan dan pendidikan.

Perbedaan standar penilaian garis kemiskinan menyebabkan perbedaan penggunaan dari keduanya. Garis kemiskinan relatif cukup baik jika digunakan untuk mengidentifikasi dan menentukan sasaran penduduk miskin, sedangkan garis kemiskinan absolut digunakan untuk membandingkan tingkat kemiskinan antar wilayah.

**DEFINISI ANAK DAN ANAK USIA DINI**


**KEMISKINAN ANAK**


karena itu, memperluas definisi kemiskinan anak di luar konseptualisasi tradisional, seperti pendapatan rumah tangga rendah atau tingkat konsumsi yang rendah, menjadi sangat penting. Namun, kemiskinan anak jarang dibedakan dari kemiskinan rumah tangga dan konsep kemiskinan anak juga masih kurang dikenal.

Secara umum mengidentifikasi dan mengukur kemiskinan anak dengan menggunakan ukuran moneter sedang diperdebatkan dan dibandingkan oleh pendekatan multidisiplin lainnya, seperti pendekatan berbasis pemenuhan hak asasi manusia, pemenuhan kebutuhan dasar pendekatan, dan pendekatan kemampuan anak. Berikut ringkasan UNICEF (2006) mengenai definisi kemiskinan anak dari berbagai organisasi dan lembaga:

<table>
<thead>
<tr>
<th>Organisasi/Lembaga</th>
<th>Definisi</th>
<th>Pendekatan</th>
<th>Tahun</th>
</tr>
</thead>
<tbody>
<tr>
<td>IDASA</td>
<td>Kemiskinan anak merupakan kondisi anak yang mengalami ketidakcukupan pendapatan dan kurangnya peluang mendapatkannya, kurangnya peluang untuk mengembangkan diri, ketidaknyamanan secara fisik dan ekonomi, serta ketidakberdayaan.</td>
<td>Pendekatan Hak asasi</td>
<td>2000</td>
</tr>
<tr>
<td>CCF</td>
<td>Anak yang mengalami kemiskinan merupakan anak yang tidak terpenuhi kebutuhan dasar hidupnya, diperlakukan tidak sama dan merasa tidak aman dengan lingkungan tumbuh mereka.</td>
<td>Tangible Component (Moneter yang didekati diproksi dengan menggunakan pendapatan atau pengeluaran untuk pemenuhan barang dan jasa) Intangible Component (rasa aman, terhindar dari pelecehan dan kekerasan serta pengucilan sosial dalam masyarakat)</td>
<td>2002</td>
</tr>
<tr>
<td>Save The Children</td>
<td>Anak yang mengalami kemiskinan merupakan anak yang tinggal dalam keluarga yang miskin</td>
<td>Moneter dan mendukung pendekatan HAM dalam mengatasi kemiskinan anak</td>
<td>2003</td>
</tr>
<tr>
<td>CHIP</td>
<td>Kemiskinan anak merupakan keadaan dimana anak dan orang muda tumbuh tanpa akses ke berbagai jenis sumber daya yang penting bagi kesejahteraan dan pemenuhan potensi mereka.</td>
<td>Pendekatan moneter dan pengkontribusikan pemenuhan HAM</td>
<td>2004</td>
</tr>
<tr>
<td>CIDA</td>
<td>Kemiskinan anak merupakan keadaan yang mencegah anak dapat mencapai potensi penuh mereka, tidak memberikan hak-dasar seperti pendidikan, kesehatan dan gizi, dsb</td>
<td>Moneter dan mendukung pendekatan HAM dalam mengatasi kemiskinan anak</td>
<td>2004</td>
</tr>
<tr>
<td>UNICEF</td>
<td>Anak-anak yang hidup dalam kemiskinan [adalah mereka yang] mengalami perempasan material, sumber daya spiritual dan emosional yang diperlukan untuk bertahan hidup, mengembangkan diri dan berkembang, sehingga mereka tidak dapat menikmati hak-hak mereka, mencapai potensi penuh mereka atau berpartisipasi sebagai anggota penuh dan setara dalam masyarakat</td>
<td>Pendekatan moneter dan pengkontribusikan pemenuhan HAM</td>
<td>2006</td>
</tr>
</tbody>
</table>

Dari berbagai definisi kemiskinan anak diatas maka dapat disimpulkan bahwa kemiskinan anak merupakan keadaan tidak tercukupinya semua kebutuhan dasar anak, baik kebutuhan secara moneter ataupun non-moneter, termasuk bagi anak dengan usia kurang dari lima tahun.
Terdapat 4 prinsip dasar hak anak yang terkandung di dalam konvensi hak anak, yaitu non diskriminasi, kepentingan yang terbaik bagi anak, hak untuk hidup, kelangsungan hidup, dan perkembangan serta penghargaan terhadap pendapat anak. Menurut prinsip dasar hak anak yang ketiga, terdapat hak anak untuk hidup serta tumbuh dan berkembang. Hak hidup pertama kali yang harus terpenuhi dalam siklus hidup anak adalah pengakuan identitas yang dituangkan dalam pencatatan kelahirannya dengan sebuah akte kelahiran, karena pengakuan tersebut akan berimbas pada pemenuhan hak sipil ataupun politik sebagai warga negara. Selain itu, hak dasar ketiga juga mengandung pemenuhan hak tumbuh dan berkembang anak yang berkaitan dengan pemenuhan kebutuhan ‘asah, asih, asu’ (Wijaya, 2006). Kebutuhan asuh atau fisik-biologis, antara lain nutrisi dan imunisasi dasar lengkap. Kebutuhan nutrisi terdiri kebutuhan dari nutrisi sejak dalam kandungan, air susu ibu yang lengkap (ASI Eksklusif) serta menu makanan yang seimbang. Sedangkan hak asih maupun asuh mengandung arti pemenuhan kebutuhan atas pendidikan dan pengasuhan. Berdasarkan hal tersebut, untuk anak yang berusia kurang dari lima tahun beberapa hak dasar yang harus terpenuhi, antara lain pemberian akte kelahiran, pemenuhan ASI Eksklusif, pemberian imunisasi lengkap dan pemenuhan pendidikan pra sekolah. Sehingga untuk anak yang tidak mendapatkan hal tersebut dapat dikelompokkan sebagai anak yang mengalami kemiskinan.

**PENELITIAN TERKAIT**


Duncan dan Magnuson (2011) menyatakan bahwa kemiskinan pada anak usia dini memberikan dampak yang sangat hebat karena otaknya berkembang dengan sangat cepat dan mengesankan, namun juga sensitif terhadap kondisi lingkungannya, sehingga kemiskinan dapat memberikan dampak buruk yang spesifik. Hasil kajian tersebut antara lain menyebutkan secara umum anak usia taman kanak-kanak (kindergarten) yang hidup dalam rumah tangga miskin, mengalami nilai yang kurang pada kemampuan membaca dan berhitung dibandingkan anak lain seusianya.

Berbagai fungsi otak pada anak usia anak dini mempunyai hubungan dengan status sosial ekonomi rumah tangga. Selain itu, jangka waktu berada dalam kondisi miskin, lingkungan sekolah yang tidak memadai dan orang tua tunggal akan memperburuk kondisi dan perkembangan otak pada anak usia dini. Berdasarkan data PSID (Duncan dan Magnuson, 2011) menyatakan terdapat asosiasi kemiskinan pada awal kehidupan (dari sebelum lahir s.d usia 5 tahun) dengan pencapaian

Selain dari sisi pendidikan, kemiskinan anak usia kurang dari lima tahun dikaitkan dengan pemenuhan hak untuk memperoleh akte kelahiran, imunisasi lengkap dan ASI eksklusif. Berikut diberikan ringkasan penelitian yang terkait dengan determinan dalam pemenuhan hak anak tersebut.


METODOLOGI

Berdasarkan latar belakang dan kajian pustaka, maka tujuan kajian ini untuk mendeskripsikan kemiskinan anak usia kurang dari lima tahun dilihat dari sisi pemenuhan hak dasarnya, seperti pengakuan anak secara hukum melalui kepemilikan akte kelahiran, pemberian ASI eksklusif, pemberian imunisasi lengkap dan pendidikan pra sekolah berdasarkan karakteristik orang tua. Karakteristik orang tua yang digunakan dalam penelitian ini antara lain pendidikan KRT, pendidikan ibu, status bekerja KRT, status bekerja ibu, lapangan usaha KRT, lapangan usaha ibu serta untuk mengetahui keterkaitan karakteristik orang tua dengan pemenuhan hak anak yang berusia kurang dari lima tahun.

Data yang digunakan dalam penelitian ini merupakan data Survei Sosial Ekonomi Nasional untuk rumah tangga panel (SUSENAS panel) tahun 2008 sampai dengan 2010. Unit penelitian dalam kajian ini adalah rumah tangga yang memiliki rata-rata pengeluaran per bulan berada pada kuantil pertama selama 2008 s.d 2010 dan memiliki anak yang berusia kurang dari lima tahun.

HASIL DAN PEMBAHASAN

Pencapaian pemenuhan hak dasar bagi anak balita pada rumah tangga dengan rata-rata pengeluaran yang terletak pada kuantil pertama selama tahun 2008 s.d 2010 disajikan sebagai berikut:


<table>
<thead>
<tr>
<th>INDIKATOR</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DESA</td>
<td>KOTA</td>
<td>DESA</td>
</tr>
<tr>
<td>KEPEMILIKAN AKTE LAHIR</td>
<td>14.3</td>
<td>37.5</td>
<td>17.9</td>
</tr>
<tr>
<td>ASI EKSKLUSIF</td>
<td>21.6</td>
<td>23.6</td>
<td>28.8</td>
</tr>
<tr>
<td>IMUNISASI</td>
<td>83.6</td>
<td>88.9</td>
<td>83.5</td>
</tr>
<tr>
<td>PENDIDIKAN PRA SEKOLAH</td>
<td>6.10</td>
<td>5.80</td>
<td>5.40</td>
</tr>
</tbody>
</table>

Proporsi tersebut menunjukkan kenaikan pada masing-masing indikator baik di wilayah perdesaan dan perkotaan, kecuali untuk pemenuhan pendidikan pra sekolah di wilayah perdesaan.

KEPEMILIKAN AKTE KELahirAN

Pencatatan kelahiran anak yang direalisasikan dengan pemberian akte kelahiran mempunyai fungsi ganda yaitu sebagai langkah efektif dalam registrasi penduduk serta pemenuhan hak atas nama dan kewarganegaraan anak. Sehingga pemahaman akan pentingnya kedua fungsi akte tersebut yang mendorong orang tua memberikan akte kelahiran kepada anaknya. Berdasarkan hasil pengolahan data (tabel 5 dan tabel 6), diketahui bahwa proporsi terbesar anak yang memiliki akte adalah anak yang memiliki ibu dan ayah berpendidikan sekolah menengah pertama (SMP) dan sekolah menengah atas (SMA). Perbedaan proporsi kepemilikan akte kelahiran anak menurut pendidikan orang tua merupakan perbedaan yang signifikan (tingkat signifikansi 5%). Hal tersebut mengindikasikan adanya hubungan antara pemberian akte kelahiran anak dengan tingkat

### Tabel 5. Persentase Anak Balita dengan Kepemilikan Akte Kelahiran Berdasarkan Tingkat Pendidikan Ibu, Tahun 2008-2010

<table>
<thead>
<tr>
<th>TAHUN</th>
<th>TINGKAT PENDIDIKAN IBU</th>
<th>KEPEMILIKAN AKTE KELAHIRAN</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>PUNYA</td>
</tr>
<tr>
<td>2008</td>
<td>TIDAK SEKOLAH &amp; SD</td>
<td>14.66</td>
</tr>
<tr>
<td></td>
<td>SMP &amp; SMA ATAU SEDERAJAT</td>
<td>31.56</td>
</tr>
<tr>
<td></td>
<td>LEBIH DARI SMA</td>
<td>13.64</td>
</tr>
<tr>
<td>2009</td>
<td>TIDAK SEKOLAH &amp; SD</td>
<td>16.84</td>
</tr>
<tr>
<td></td>
<td>SMP &amp; SMA ATAU SEDERAJAT</td>
<td>35.61</td>
</tr>
<tr>
<td></td>
<td>LEBIH DARI SMA</td>
<td>8.77</td>
</tr>
<tr>
<td>2010</td>
<td>TIDAK SEKOLAH &amp; SD</td>
<td>18.10</td>
</tr>
<tr>
<td></td>
<td>SMP &amp; SMA ATAU SEDERAJAT</td>
<td>39.53</td>
</tr>
<tr>
<td></td>
<td>LEBIH DARI SMA</td>
<td>19.48</td>
</tr>
</tbody>
</table>

### Tabel 6. Persentase Anak Balita dengan Kepemilikan Akte Kelahiran Berdasarkan Tingkat Pendidikan Ayah, Tahun 2008-2010

<table>
<thead>
<tr>
<th>TAHUN</th>
<th>TINGKAT PENDIDIKAN IBU</th>
<th>KEPEMILIKAN AKTE KELAHIRAN</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>PUNYA</td>
</tr>
<tr>
<td>2008</td>
<td>TIDAK SEKOLAH &amp; SD</td>
<td>14.61</td>
</tr>
<tr>
<td></td>
<td>SMP &amp; SMA ATAU SEDERAJAT</td>
<td>31.85</td>
</tr>
<tr>
<td></td>
<td>LEBIH DARI SMA</td>
<td>5.00</td>
</tr>
<tr>
<td>2009</td>
<td>TIDAK SEKOLAH &amp; SD</td>
<td>15.77</td>
</tr>
<tr>
<td></td>
<td>SMP &amp; SMA ATAU SEDERAJAT</td>
<td>35.84</td>
</tr>
<tr>
<td></td>
<td>LEBIH DARI SMA</td>
<td>6.67</td>
</tr>
<tr>
<td>2010</td>
<td>TIDAK SEKOLAH &amp; SD</td>
<td>18.36</td>
</tr>
<tr>
<td></td>
<td>SMP &amp; SMA ATAU SEDERAJAT</td>
<td>38.01</td>
</tr>
<tr>
<td></td>
<td>LEBIH DARI SMA</td>
<td>25.00</td>
</tr>
</tbody>
</table>

Gambar 2 mendeskripsikan proporsi kepemilikan akte lahir anak berdasarkan status bekerja ibu dan ayah yang tidak berbeda signifikan (tingkat signifikansi 5%). Tabel 7 menggambarkan proporsi terkecil anak yang memiliki akte lahir mempunyai orang tua yang bekerja di bidang primer dan bidang lainnya. Berdasarkan lapangan usaha orang tua perbedaan proporsi anak berdasarkan kategori kepemilikan akte lahir signifikan.

Tabel 7. Persentase Anak Balita Menurut Lapangan Usaha Orang Tua dan Kepemilikan Akte Kelahiran, Tahun 2008-2010

<table>
<thead>
<tr>
<th>TAHUN</th>
<th>LAPANGAN USAHA Ibu</th>
<th>KEPEMILIKAN AKTE LAHIR</th>
<th>LAPANGAN USAHA AYAH</th>
<th>KEPEMILIKAN AKTE LAHIR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PUNYA</td>
<td>TIDAK DITUNJUKKAN</td>
<td>TIDAK PUNYA</td>
<td>TIDAK TAHU</td>
</tr>
<tr>
<td>2008</td>
<td>PRIMER</td>
<td>18.00</td>
<td>5.35</td>
<td>74.80</td>
</tr>
<tr>
<td></td>
<td>SEKUNDER</td>
<td>28.30</td>
<td>9.43</td>
<td>60.38</td>
</tr>
<tr>
<td></td>
<td>TERSIER</td>
<td>21.52</td>
<td>13.92</td>
<td>63.29</td>
</tr>
<tr>
<td></td>
<td>LAINNYA</td>
<td>17.33</td>
<td>5.33</td>
<td>74.67</td>
</tr>
<tr>
<td>2009</td>
<td>PRIMER</td>
<td>13.64</td>
<td>4.96</td>
<td>78.51</td>
</tr>
<tr>
<td></td>
<td>SEKUNDER</td>
<td>33.96</td>
<td>7.55</td>
<td>56.60</td>
</tr>
<tr>
<td></td>
<td>TERSIER</td>
<td>40.43</td>
<td>15.96</td>
<td>43.62</td>
</tr>
<tr>
<td></td>
<td>LAINNYA</td>
<td>27.74</td>
<td>9.25</td>
<td>61.99</td>
</tr>
<tr>
<td>2010</td>
<td>PRIMER</td>
<td>21.51</td>
<td>7.27</td>
<td>68.90</td>
</tr>
<tr>
<td></td>
<td>SEKUNDER</td>
<td>34.00</td>
<td>12.00</td>
<td>54.00</td>
</tr>
<tr>
<td></td>
<td>TERSIER</td>
<td>45.05</td>
<td>16.48</td>
<td>38.46</td>
</tr>
<tr>
<td></td>
<td>LAINNYA</td>
<td>18.75</td>
<td>6.25</td>
<td>73.44</td>
</tr>
</tbody>
</table>

PEMBERIAN ASI EKSKLUSIF

Air susu ibu merupakan makan utama bagi bayi yang belum dapat mencerna makanan, dan pemberian ASI selama 6 bulan penuh pada bayi tanpa makanan tambahan didefinisikan sebagai


<table>
<thead>
<tr>
<th>TAHUN</th>
<th>TINGKAT PENDIDIKAN IBU</th>
<th>ASI EKSKLUSIF</th>
<th>TINGKAT PENDIDIKAN AYAH</th>
<th>ASI EKSKLUSIF</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TIDAK SEKOLAH &amp; SD</td>
<td>79.25</td>
<td>20.75</td>
<td>77.59</td>
</tr>
<tr>
<td></td>
<td>SMP &amp; SMA ATAU SEDERAJAT</td>
<td>71.72</td>
<td>28.28</td>
<td>76.21</td>
</tr>
<tr>
<td></td>
<td>LEBIH DARI SMA</td>
<td>80.68</td>
<td>19.32</td>
<td>90.00</td>
</tr>
<tr>
<td>2008</td>
<td>TIDAK SEKOLAH &amp; SD</td>
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<td>31.12</td>
<td>69.92</td>
</tr>
<tr>
<td></td>
<td>SMP &amp; SMA ATAU SEDERAJAT</td>
<td>68.71</td>
<td>31.29</td>
<td>66.89</td>
</tr>
<tr>
<td></td>
<td>LEBIH DARI SMA</td>
<td>68.42</td>
<td>31.58</td>
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<td>TIDAK SEKOLAH &amp; SD</td>
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<td>29.21</td>
<td>70.16</td>
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<td>32.56</td>
<td>69.00</td>
</tr>
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<td></td>
<td>LEBIH DARI SMA</td>
<td>67.53</td>
<td>32.47</td>
<td>50.00</td>
</tr>
</tbody>
</table>

Pemberian ASI eksklusif juga tidak dapat dibedakan menurut lapangan pekerjaan orang tua. Pada rumah tangga dengan rata-rata pengeluaran yang terletak pada kuantil pertama, pemenuhan ASI eksklusif tidak berbeda signifikan meskipun memiliki berbagai latar belakang lapangan usaha.

Tabel 9. Persentase Anak Balita Menurut Lapangan Usaha Orang Tua dan Status ASI Eksklusif, Tahun 2008-2010

<table>
<thead>
<tr>
<th>TAUN</th>
<th>LAPANGAN USAHA IBU</th>
<th>ASI EKSKLUSIF TIDAK</th>
<th>ASI EKSKLUSIF YA</th>
<th>LAPANGAN USAHA AYAH</th>
<th>ASI EKSKLUSIF TIDAK</th>
<th>ASI EKSKLUSIF YA</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>PRIMER</td>
<td>77.15</td>
<td>22.85</td>
<td>PRIMER</td>
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<td>21.69</td>
</tr>
<tr>
<td></td>
<td>SEKUNDER</td>
<td>73.58</td>
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<td>SEKUNDER</td>
<td>77.78</td>
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<tr>
<td></td>
<td>TERSIER</td>
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<tr>
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<td>PRIMER</td>
<td>70.09</td>
<td>29.91</td>
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<td></td>
<td>SEKUNDER</td>
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<td>SEKUNDER</td>
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<td>32.57</td>
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<td>TERSIER</td>
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<tr>
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<td>LAINNYA</td>
<td>67.47</td>
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<td>LAINNYA</td>
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<td>31.58</td>
</tr>
<tr>
<td>2010</td>
<td>PRIMER</td>
<td>69.91</td>
<td>30.09</td>
<td>PRIMER</td>
<td>70.55</td>
<td>29.45</td>
</tr>
<tr>
<td></td>
<td>SEKUNDER</td>
<td>66.00</td>
<td>34.00</td>
<td>SEKUNDER</td>
<td>66.03</td>
<td>33.97</td>
</tr>
<tr>
<td></td>
<td>TERSIER</td>
<td>70.33</td>
<td>29.67</td>
<td>TERSIER</td>
<td>68.81</td>
<td>31.19</td>
</tr>
<tr>
<td></td>
<td>LAINNYA</td>
<td>67.19</td>
<td>32.81</td>
<td>LAINNYA</td>
<td>83.33</td>
<td>16.67</td>
</tr>
</tbody>
</table>

PEMBERIAN IMUNISASI


Tabel 10. Persentase Anak Balita Menurut Tingkat Pendidikan Orang Tua dan Imunisasi, Tahun 2008-2010

<table>
<thead>
<tr>
<th>TAUN</th>
<th>TINGKAT PENDIDIKAN IBU</th>
<th>IMUNISASI TIDAK</th>
<th>IMUNISASI YA</th>
<th>TINGKAT PENDIDIKAN AYAH</th>
<th>IMUNISASI TIDAK</th>
<th>IMUNISASI YA</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>TIDAK SEKOLAH &amp; SD</td>
<td>15.44</td>
<td>84.56</td>
<td>TIDAK SEKOLAH &amp; SD</td>
<td>16.17</td>
<td>83.83</td>
</tr>
<tr>
<td></td>
<td>SMP &amp; SMA ATAU SEDERAJAT</td>
<td>10.66</td>
<td>89.34</td>
<td>SMP &amp; SMA ATAU SEDERAJAT</td>
<td>8.06</td>
<td>91.94</td>
</tr>
<tr>
<td></td>
<td>LEBIH DARI SMA</td>
<td>12.50</td>
<td>87.50</td>
<td>LEBIH DARI SMA</td>
<td>10.00</td>
<td>90.00</td>
</tr>
<tr>
<td>2009</td>
<td>TIDAK SEKOLAH &amp; SD</td>
<td>16.67</td>
<td>83.33</td>
<td>TIDAK SEKOLAH &amp; SD</td>
<td>14.63</td>
<td>85.37</td>
</tr>
<tr>
<td></td>
<td>SMP &amp; SMA ATAU SEDERAJAT</td>
<td>5.04</td>
<td>94.96</td>
<td>SMP &amp; SMA ATAU SEDERAJAT</td>
<td>9.56</td>
<td>90.44</td>
</tr>
<tr>
<td></td>
<td>LEBIH DARI SMA</td>
<td>12.28</td>
<td>87.72</td>
<td>LEBIH DARI SMA</td>
<td>6.67</td>
<td>93.33</td>
</tr>
<tr>
<td>2010</td>
<td>TIDAK SEKOLAH &amp; SD</td>
<td>13.08</td>
<td>86.92</td>
<td>TIDAK SEKOLAH &amp; SD</td>
<td>12.62</td>
<td>87.38</td>
</tr>
<tr>
<td></td>
<td>SMP &amp; SMA ATAU SEDERAJAT</td>
<td>3.49</td>
<td>96.51</td>
<td>SMP &amp; SMA ATAU SEDERAJAT</td>
<td>2.95</td>
<td>97.05</td>
</tr>
<tr>
<td></td>
<td>LEBIH DARI SMA</td>
<td>5.19</td>
<td>94.81</td>
<td>LEBIH DARI SMA</td>
<td>8.33</td>
<td>91.67</td>
</tr>
</tbody>
</table>


Tabel 11 mengilustrasikan keadaan tahun 2009-2010, persentase tertinggi anak balita yang mendapatkan imunisasi adalah anak balita yang ibunya bekerja di lapangan usaha tersier (perdagangan, transportasi, keuangan, administrasi dan jasa). Berdasarkan lapangan usaha ayah, persentase tertinggi anak balita yang mendapatkan imunisasi bervariasi yaitu di bidang sekunder (tahun 2008), di bidang lainnya (tahun 2009 dan 2010). Hasil pengolahan data memberikan informasi bahwa persentase balita yang mendapat imunisasi menurut lapangan usaha orang tua berbeda signifikan (tingkat signifikansi 5%).
Tabel 11. Persentase Anak Balita Menurut Lapangan Usaha Orang Tua dan Imunisasi, Tahun 2008-2010

<table>
<thead>
<tr>
<th>TAHUN</th>
<th>LAPANGAN USAHA IBU</th>
<th>IMUNISASI</th>
<th>LAPANGAN USAHA AYAH</th>
<th>IMUNISASI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>TIDAK</td>
<td>YA</td>
<td>TIDAK</td>
</tr>
<tr>
<td>2008</td>
<td>PRIMER</td>
<td>14.23</td>
<td>85.77</td>
<td>PRIMER</td>
</tr>
<tr>
<td></td>
<td>SEKUNDER</td>
<td>18.87</td>
<td>81.13</td>
<td>SEKUNDER</td>
</tr>
<tr>
<td></td>
<td>TERSIER</td>
<td>7.59</td>
<td>92.41</td>
<td>TERSIER</td>
</tr>
<tr>
<td></td>
<td>LAINNYA</td>
<td>14.67</td>
<td>85.33</td>
<td>LAINNYA</td>
</tr>
<tr>
<td>2009</td>
<td>PRIMER</td>
<td>18.39</td>
<td>81.61</td>
<td>PRIMER</td>
</tr>
<tr>
<td></td>
<td>SEKUNDER</td>
<td>7.55</td>
<td>92.45</td>
<td>SEKUNDER</td>
</tr>
<tr>
<td></td>
<td>TERSIER</td>
<td>4.26</td>
<td>95.74</td>
<td>TERSIER</td>
</tr>
<tr>
<td></td>
<td>LAINNYA</td>
<td>7.53</td>
<td>92.47</td>
<td>LAINNYA</td>
</tr>
<tr>
<td>2010</td>
<td>PRIMER</td>
<td>11.63</td>
<td>88.37</td>
<td>PRIMER</td>
</tr>
<tr>
<td></td>
<td>SEKUNDER</td>
<td>2.00</td>
<td>98.00</td>
<td>SEKUNDER</td>
</tr>
<tr>
<td></td>
<td>TERSIER</td>
<td>1.10</td>
<td>98.90</td>
<td>TERSIER</td>
</tr>
<tr>
<td></td>
<td>LAINNYA</td>
<td>6.25</td>
<td>93.75</td>
<td>LAINNYA</td>
</tr>
</tbody>
</table>

Pada rumah tangga dengan rata-rata pengeluaran yang terletak pada kuantil pertama tahun 2008-2010, secara umum kepedulian orang tua dalam pemberian imunisasi kepada anak balita terlihat cukup baik. Fenomena tersebut nampak dari proporsi anak yang diberikan imunisasi sudah cukup besar.

PENDIDIKAN PRA SEKOLAH

Pendidikan pra sekolah sebagai sarana tumbuh kembang untuk membentuk kesiapan anak memasuki tahap pendidikan dasar merupakan hal yang penting untuk diperhatikan. Berdasarkan tabel 13 berikut, diketahui persentase anak balita yang tidak mendapatkan pendidikan pra sekolah tahun 2009-2010 di wilayah perdesaan ataupun perkotaan lebih dari 90%. Kondisi ini menggambarkan belum adanya perhatian pada pentingnya memberikan stimulan pendidikan pada anak usia dini.


<table>
<thead>
<tr>
<th>TAHUN</th>
<th>WILAYAH TEMPAT TINGGAL</th>
<th>PEND. PRA SEKOLAH</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>YA, PERNAH</td>
</tr>
<tr>
<td>2008</td>
<td>PERDESAAN</td>
<td>1.90</td>
</tr>
<tr>
<td></td>
<td>PERKOTAAN</td>
<td>0.90</td>
</tr>
<tr>
<td>2009</td>
<td>PERDESAAN</td>
<td>1.20</td>
</tr>
<tr>
<td></td>
<td>PERKOTAAN</td>
<td>2.40</td>
</tr>
<tr>
<td>2010</td>
<td>PERDESAAN</td>
<td>1.20</td>
</tr>
<tr>
<td></td>
<td>PERKOTAAN</td>
<td>2.30</td>
</tr>
</tbody>
</table>
Berdasarkan hasil pengolahan data rumah tangga dengan rata-rata pengeluaran yang terletak pada kuantil pertama yang disajikan pada tabel 14, diketahui proporsi terbesar anak balita yang sedang atau pernah mendapatkan pendidikan pra sekolah merupakan anak yang memiliki orang tua berpendidikan lebih dari SMA. Berdasarkan tingkat pendidikan orang tua, proporsi anak balita yang mendapatkan pendidikan pendidikan pra sekolah tidak berbeda signifikan (tingkat signifikansi 5%). Hasil tersebut menunjukkan bahwa pendidikan pra sekolah anak tidak berhubungan dengan tingkat pendidikan ibu maupun ayah.

Tabel 14. Persentase Anak Balita Menurut Tingkat Pendidikan Orang Tua dan Pendidikan Pra Sekolah, Tahun 2008-2010

<table>
<thead>
<tr>
<th>TAHUN</th>
<th>TINGKAT PENDIDIKAN Ibu</th>
<th>PEND. PRA SEKOLAH</th>
<th>TINGKAT PENDIDIKAN AYAH</th>
<th>PEND. PRA SEKOLAH</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>YA, PERNAH</td>
<td>YA, SEDANG</td>
<td>TIDAK</td>
<td>YA, PERNAH</td>
</tr>
<tr>
<td>2008</td>
<td>TIDAK SEKOLAH &amp; SD</td>
<td>0.94</td>
<td>5.3</td>
<td>93.76</td>
</tr>
<tr>
<td></td>
<td>SMP &amp; SMA ATAU SEDERAJAT</td>
<td>3.28</td>
<td>2.87</td>
<td>93.85</td>
</tr>
<tr>
<td></td>
<td>LEBIH DARI SMA</td>
<td>0</td>
<td>3.41</td>
<td>96.59</td>
</tr>
<tr>
<td>2009</td>
<td>TIDAK SEKOLAH &amp; SD</td>
<td>1.53</td>
<td>3.57</td>
<td>94.9</td>
</tr>
<tr>
<td></td>
<td>SMP &amp; SMA ATAU SEDERAJAT</td>
<td>2.16</td>
<td>6.47</td>
<td>91.37</td>
</tr>
<tr>
<td></td>
<td>LEBIH DARI SMA</td>
<td>1.75</td>
<td>7.02</td>
<td>91.23</td>
</tr>
<tr>
<td>2010</td>
<td>TIDAK SEKOLAH &amp; SD</td>
<td>1.08</td>
<td>3.94</td>
<td>94.98</td>
</tr>
<tr>
<td></td>
<td>SMP &amp; SMA ATAU SEDERAJAT</td>
<td>3.1</td>
<td>6.59</td>
<td>90.31</td>
</tr>
<tr>
<td></td>
<td>LEBIH DARI SMA</td>
<td>1.3</td>
<td>10.39</td>
<td>88.31</td>
</tr>
</tbody>
</table>

Berdasarkan status bekerja orang tua, proporsi anak balita yang tidak mendapatkan pendidikan pra sekolah menunjukkan perbedaan yang tidak signifikan (Gambar 5). Hal tersebut mengindikasikan pendidikan pra sekolah tidak mempunyai hubungan dengan status bekerja orang tua.

Lapangan usaha ibu merupakan variabel yang mempunyai hubungan dengan proporsi anak yang diberikan pendidikan pra sekolah tahun 2008 dan 2010, namun tidak untuk tahun 2009 dan lapangan usaha ayah.

**Tabel 15. Persentase Anak Balita Menurut Lapangan Usaha Orang Tua dan Pendidikan Pra Sekolah, Tahun 2008-2010**

<table>
<thead>
<tr>
<th>TAHUN</th>
<th>LAPANGAN USAHA IBU</th>
<th>PEND. PRA SEKOLAH</th>
<th>LAPANGAN USAHA AYAH</th>
<th>PEND. PRA SEKOLAH</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>YA, PERNAH</td>
<td>YA, SEDANG</td>
<td>TIDAK</td>
</tr>
<tr>
<td>2008</td>
<td>PRIMER</td>
<td>1.44</td>
<td>4.05</td>
<td>94.52</td>
</tr>
<tr>
<td></td>
<td>SEKUNDER</td>
<td>1.89</td>
<td>9.43</td>
<td>88.68</td>
</tr>
<tr>
<td></td>
<td>TERSIER</td>
<td>2.53</td>
<td>6.33</td>
<td>91.14</td>
</tr>
<tr>
<td></td>
<td>LAINNYA</td>
<td>0.00</td>
<td>4.00</td>
<td>96.00</td>
</tr>
<tr>
<td>2009</td>
<td>PRIMER</td>
<td>1.24</td>
<td>3.51</td>
<td>95.25</td>
</tr>
<tr>
<td></td>
<td>SEKUNDER</td>
<td>1.89</td>
<td>5.66</td>
<td>92.45</td>
</tr>
<tr>
<td></td>
<td>TERSIER</td>
<td>6.38</td>
<td>9.57</td>
<td>84.04</td>
</tr>
<tr>
<td></td>
<td>LAINNYA</td>
<td>1.03</td>
<td>4.79</td>
<td>94.18</td>
</tr>
<tr>
<td>2010</td>
<td>PRIMER</td>
<td>1.45</td>
<td>4.22</td>
<td>94.33</td>
</tr>
<tr>
<td></td>
<td>SEKUNDER</td>
<td>2.00</td>
<td>6.00</td>
<td>92.00</td>
</tr>
<tr>
<td></td>
<td>TERSIER</td>
<td>3.30</td>
<td>7.69</td>
<td>89.01</td>
</tr>
<tr>
<td></td>
<td>LAINNYA</td>
<td>1.56</td>
<td>12.50</td>
<td>85.94</td>
</tr>
</tbody>
</table>

**HUBUNGAN INDIKATOR PEMENUHAN HAK ANAK USIA BALITA DENGAN KARAKTERISTIK ORANG TUA**

Pada rumah tangga dengan pengeluaran rata-rata di kuantil terendah selama tahun 2008-2010, kondisi pemenuhan hak dasar anak usia kurang dari lima tahun cukup memprihatinkan dikarenakan 8,28% anak sama sekali tidak mendapatkan keempat hak dasar mereka. Keterkaitan karakteristik orang tua dengan kemiskinan anak usia kurang dari lima tahun yang dipandang dari sisi pemenuhan hak dasarnya, dapat dianalisa dari besar hubungan variabel karakteristik orang tua dengan kondisi terpenuhi atau tidaknya hak dasar anak yang disajikan pada tabel berikut:

<table>
<thead>
<tr>
<th>KARAKTERISTIK ORANG TUA</th>
<th>TAHUN</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Chi-Square</td>
<td>df</td>
<td>p-value</td>
<td>Hub.</td>
</tr>
<tr>
<td>STATUS BEKERJA Ibu</td>
<td>0.227</td>
<td>1</td>
<td>0.634</td>
<td>Tidak</td>
</tr>
<tr>
<td>STATUS BEKERJA Ayah</td>
<td>0.515</td>
<td>1</td>
<td>0.473</td>
<td>Tidak</td>
</tr>
<tr>
<td>PENDIDIKAN Ibu</td>
<td>7.265</td>
<td>2</td>
<td>0.026</td>
<td>Ada</td>
</tr>
<tr>
<td>PENDIDIKAN Ayah</td>
<td>12.221</td>
<td>2</td>
<td>0.022</td>
<td>Ada</td>
</tr>
<tr>
<td>LAPANGAN USAHA Ibu</td>
<td>5.697</td>
<td>2</td>
<td>0.127</td>
<td>Tidak</td>
</tr>
<tr>
<td>LAPANGAN USAHA Ayah</td>
<td>10.04</td>
<td>3</td>
<td>0.018</td>
<td>Ada</td>
</tr>
<tr>
<td>WILAYAH TINGGAL</td>
<td>11.436</td>
<td>1</td>
<td>0.001</td>
<td>Ada</td>
</tr>
</tbody>
</table>

Dengan menggunakan tingkat signifikansi 5%, maka dapat dinyatakan selama kurun waktu 2008-2010 variabel status bekerja ayah tidak mempunyai keterkaitan dengan pemenuhan hak anak balita, begitu juga untuk variabel status bekerja ibu dan lapangan usaha ibu pada tahun 2008.

Berdasarkan hubungan antara karakteristik orang tua dengan pemenuhan hak dasar anak usia kurang dari lima tahun, maka dapat disusun model persamaan regresi logistik setiap tahun untuk mengetahui pengaruh dan kecenderungan variabel karakteristik orang tua dan wilayah tempat tinggal dengan pemenuhan hak dasar anak balita tersebut.

**PENGARUH KARAKTERISTIK ORANG TUA DAN KECENDERUNGAN TERHADAP PEMENUHAN HAK ANAK USIA BALITA**

**Model persamaan regresi logistik tahun 2008**

Model persamaan regresi logistik untuk menyatakan peluang terpenuhinya hak dasar anak balita pada tahun 2008 adalah:

\[
\begin{align*}
pe\text{luang (terpenuhi kebutuhan)} & = \frac{Exp(1.748 + 0.166E_{\text{Ayah}(1)} + 1.217E_{\text{Ayah}(2)} + 0.572L_{\text{Ayah}(3)} - 1.597L_{\text{Ayah}(2)} + 0.240L_{\text{Ayah}(3)} - 0.644W_{\text{tinggal}})}{1 + Exp(1.748 + 0.166E_{\text{Ayah}(1)} + 1.217E_{\text{Ayah}(2)} + 0.572L_{\text{Ayah}(3)} - 1.597L_{\text{Ayah}(2)} + 0.240L_{\text{Ayah}(3)} - 0.644W_{\text{tinggal}})}
\end{align*}
\]

dengan:

- E_{\text{Ayah}(1)} : Tingkat pendidikan ayah tidak sekolah atau SD,
- E_{\text{Ayah}(2)} : Tingkat pendidikan ayah SMP atau SMA,
- L_{\text{Ayah}(1)} : Lapangan pekerjaan ayah di bidang usaha primer,
- L_{\text{Ayah}(2)} : Lapangan pekerjaan ayah di bidang usaha sekunder,
- L_{\text{Ayah}(3)} : Lapangan pekerjaan ayah di bidang usaha tersier,
- Wilting : Wilayah tempat tinggal rumah tangga di perdesaan.
Berdasarkan model tersebut, maka pemenuhan hak dasar anak balita pada rumah tangga dengan rata-rata pengeluaran yang terletak pada kuantil pertama tahun 2008 dipengaruhi oleh tingkat pendidikan ayah, lapangan usaha ayah serta wilayah tempat tinggal. Maka:

- kecenderungan seorang anak balita dengan tingkat pendidikan ayahnya SD atau tidak sekolah untuk terpenuhi kebutuhan dasarnya adalah 1,180 kali dibandingkan anak balita yang ayahnya berpendidikan lebih tinggi dari SMA
- kecenderungan seorang anak balita dengan tingkat pendidikan ayahnya SMP atau SMA untuk terpenuhi kebutuhan dasarnya adalah 3,378 kali dibandingkan anak balita yang ayahnya berpendidikan lebih tinggi dari SMA
- kecenderungan seorang anak balita yang ayahnya bekerja dibidang primer untuk terpenuhi kebutuhan dasarnya adalah 1,772 kali dibandingkan anak balita yang ayahnya bekerja di bidang lainnya
- kecenderungan seorang anak balita yang ayahnya bekerja dibidang sekunder untuk terpenuhi kebutuhan dasarnya adalah 1,772 kali dibandingkan anak balita yang ayahnya bekerja di bidang lainnya
- kecenderungan seorang anak balita yang ayahnya bekerja dibidang tersier untuk terpenuhi kebutuhan dasarnya adalah 4,940 kali dibandingkan anak balita yang ayahnya bekerja di bidang lainnya
- kecenderungan seorang anak balita dengan lapangan usaha sekunder untuk terpenuhi kebutuhan dasarnya adalah 1,272 kali dibandingkan anak balita yang ayahnya bekerja di bidang lainnya
- kecenderungan seorang anak balita yang tinggal diperdesaan untuk terpenuhi kebutuhan dasarnya adalah 0,525 kali dibandingkan anak balita yang tinggal di perkotaan.

Sehingga, bisa disimpulkan bahwa karakteristik anak yang cenderung tidak terpenuhi hak dasarnya adalah anak yang memiliki ayah berpendidikan lebih dari SMA, anak yang memiliki ayah bekerja dibidang lainnya dan anak yang tinggal di perdesaan.

**Model persamaan regresi logistik tahun 2009**

Model persamaan regresi logistik untuk menyatakan peluang terpenuhinya hak dasar anak balita pada tahun 2009 adalah:

\[
\text{peluang (terpenuhi kebutuhan)} = \frac{\exp(3.218 + 0.415 Wibu(1) - 0.754 Elbu(1) + 0.396 Elbu(2) - 0.898 Wilting)}{1 + \exp(3.218 + 0.415 Wibu(1) - 0.754 Elbu(1) + 0.396 Elbu(2) - 0.898 Wilting)}
\]

dengan:

- Wibu : Status bekerja ibu,
- Elbu(1) : Tingkat pendidikan ibu tidak sekolah atau SD,
- Elbu(2) : Tingkat pendidikan ibu SMP atau SMA,
- Wilting : Wilayah tempat tinggal rumah tangga di perdesaan.

Berdasarkan model tersebut, maka pemenuhan hak dasar anak balita pada rumah tangga dengan rata-rata pengeluaran yang terletak pada kuantil pertama tahun 2009 dipengaruhi oleh status bekerja ibu, tingkat pendidikan ibu, dan wilayah tempat tinggal. Maka

- kecenderungan seorang anak balita yang ibunya tidak bekerja untuk terpenuhi kebutuhan dasarnya adalah 1,515 kali dibandingkan anak balita yang ibunya
• kecenderungan seorang anak balita dengan tingkat pendidikan ibunya SD atau tidak sekolah untuk terpenuhi kebutuhan dasarnya adalah 0,470 kali dibandingkan anak balita yang ibunya berpendidikan lebih tinggi dari SMA
• kecenderungan seorang anak balita dengan tingkat pendidikan ibunya SMP dan SMA untuk terpenuhi kebutuhan dasarnya adalah 1,485 kali dibandingkan anak balita yang ibunya berpendidikan lebih tinggi dari SMA
• kecenderungan seorang anak balita yang tinggal diperdesaan untuk terpenuhi kebutuhan dasarnya adalah 0,407 kali dibandingkan anak balita yang tinggal di perkotaan

Sehingga, bisa disimpulkan bahwa karakteristik anak yang cenderung tidak terpenuhi hak dasarnya adalah anak yang memiliki ibu bekerja, anak yang memiliki ibu dengan tingkat pendidikan SD ke bawah atau yang lebih tinggi dari SMA dan anak yang tinggal di perdesaan.

**Model persamaan regresi logistik tahun 2010**

Model persamaan regresi logistik untuk menyatakan peluang terpenuhinya hak dasar anak balita pada tahun 2010 adalah:

\[
\text{peluang(terpenuhi kebutuhan}) = \frac{\text{Exp}(4.055 + 2.065E_{Ayah}(1) + 3.226E_{Ayah}(2) - 1.371E_{Ibu}(1) - 0.306E_{Ibu}(2) - 3.159W_{Wilting})}{1 + \text{Exp}(4.055 + 2.065E_{Ayah}(1) + 3.226E_{Ayah}(2) - 1.371E_{Ibu}(1) - 0.306E_{Ibu}(2) - 3.159W_{Wilting})}
\]

dengan:

- \(E_{Ayah}(1)\) : Tingkat pendidikan ayah tidak sekolah atau SD,
- \(E_{Ayah}(2)\) : Tingkat pendidikan ayah SMP atau SMA,
- \(E_{Ibu}(1)\) : Tingkat pendidikan ibu tidak sekolah atau SD,
- \(E_{Ibu}(2)\) : Tingkat pendidikan ibu SMP atau SMA,
- \(W_{Wilting}\) : Wilayah tempat tinggal rumah tangga di perdesaan.

Berdasarkan model tersebut, maka pemenuhan hak dasar anak balita pada rumah tangga dengan rata-rata pengeluaran yang terletak pada kuantil pertama tahun 2010 dipengaruhi oleh tingkat pendidikan ayah, tingkat pendidikan ibu serta wilayah tempat tinggal. Maka:

• kecenderungan seorang anak balita dengan tingkat pendidikan ayahnya SD atau tidak sekolah untuk terpenuhi kebutuhan dasarnya adalah 8,129 kali dibandingkan anak balita yang ayahnya berpendidikan lebih tinggi dari SMA
• kecenderungan seorang anak balita dengan tingkat pendidikan ayahnya SMP atau SMA untuk terpenuhi kebutuhan dasarnya adalah 25,187 kali dibandingkan anak balita yang ayahnya berpendidikan lebih tinggi dari SMA
• kecenderungan seorang anak balita dengan tingkat pendidikan ibunya SD atau tidak sekolah untuk terpenuhi kebutuhan dasarnya adalah 0.254 kali dibandingkan anak balita yang ibunya berpendidikan lebih tinggi dari SMA
• kecenderungan seorang anak balita dengan tingkat pendidikan ibunya SMP atau SMA untuk terpenuhi kebutuhan dasarnya adalah 0.736 kali dibandingkan anak balita yang ibunya berpendidikan lebih tinggi dari SMA
• kecenderungan seorang anak balita yang tinggal diperdesaan untuk terpenuhi kebutuhan dasarnya adalah 0,41 kali dibandingkan anak balita yang tinggal di perkotaan

Sehingga, bisa disimpulkan bahwa karakteristik anak yang cenderung tidak terpenuhi hak dasarnya adalah anak yang memiliki ibu dengan tingkat pendidikan lebih tinggi dari SMA, anak
yang memiliki ayah dengan tingkat pendidikan SMA ke bawah atau tidak sekolah dan anak yang tinggal di perdesaan.

**KESIMPULAN**

Berdasarkan pembahasan hasil penelitian, maka dapat ditarik beberapa kesimpulan sebagai berikut:


2. Terdapat 8,24% dari anak balita pada rumah tangga dengan pengeluaran rata-rata yang terletak di kuantil pertama selama tahun 2008-2010 yang belum terpenuhi keempat dari hak dasarnya

3. Variabel yang memengaruhi pemenuhan hak dasar anak balita pada rumah tangga dengan pengeluaran rata-rata yang terletak di kuantil pertama tahun 2008 adalah tingkat pendidikan ayah, lapangan usaha ayah serta wilayah tempat tinggal

4. Variabel yang memengaruhi pemenuhan hak dasar anak balita pada rumah tangga dengan pengeluaran rata-rata yang terletak di kuantil pertama tahun 2009 adalah status bekerja ibu, tingkat pendidikan ibu, dan wilayah tempat tinggal.

5. Variabel yang memengaruhi pemenuhan hak dasar anak balita pada rumah tangga dengan pengeluaran rata-rata yang terletak di kuantil pertama tahun 2010 adalah tingkat pendidikan ayah, tingkat pendidikan ibu serta wilayah tempat tinggal.

**IMPLIKASI KEBIJAKAN**


Berdasarkan temuan penelitian dan literatur diatas, rujukan kebijakan untuk anak balita pada pada rumah tangga dengan pengeluaran rata-rata yang terletak di kuantil pertama antara lain:

1. regulasi pemberian akte kelahiran secara otomatis dan gratis untuk bayi yang baru lahir pada rumah tangga miskin atau sangat miskin,

2. peningkatan kegiatan promotif pemberian ASI eksklusif oleh tenaga kesehatan profesional dan pengawasan teratur oleh lembaga terkait,

3. memberikan bantuan operasional pendidikan pra sekolah atau pendidikan anak usia dini,

4. melakukan pengawasan dan evaluasi berkala atas efekfitas dan manfaat program bantuan pemerintah yang telah dilaksanakan seperti Program Keluarga Harapan dan Bantuan Langsung,

5. menerapkan jam kerja ataupun pengupahan yang memihak pada ibu dan anak,
6. percepatan pembangunan wilayah desa terutama dalam penyediaan fasilitas kesehatan dan pendidikan pra sekolah.

DAFTAR PUSTAKA


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Abstrak


Kata kunci : kerentanan, anak, miskin, panel
I. Latar Belakang Penelitian


Kemiskinan merupakan suatu kondisi yang mudah dilihat bahkan dirasakan, tetapi cukup sulit untuk didefinisikan. Manusia dapat merasakan adanya kemiskinan dari apa yang dialaminya atau dialami tetangganya, atau lebih luas lagi, dialami oleh bangsanya. Secara formal, kemiskinan dapat didefinisikan sebagai kondisi kekurangan serta ketidakmampuan dalam memenuhi kebutuhan-kebutuhan dasar kehidupan manusia yang selayaknya dapat dimiliki. Ketidakmampuan ini umumnya tidak hanya tergantung secara materi tetapi juga secara psikologis dapat menimbulkan perasaan rendah diri pada individu yang mengalaminya. Gejala serta dampak-dampak kemiskinan yang tergantung tersebut menunjukkan bahwa masalah kemiskinan telah berdampak luas di berbagai aspek kehidupan hingga ke tata pemerintahan.


tangga, ataupun kondisi merugikan lain, dapat mengakibatkan penduduk menjadi miskin pada periode tertentu. Dengan demikian, jelas terlihat adanya unsur ketidakpastian serta kemungkinan perubahan status miskin dalam kehidupan penduduk.


Dengan demikian, analisis dinamika kemiskinan serta pengukuran kerentanan kemiskinan perlu dilakukan. Melalui penelitian ini, tujuan umum yang ingin dicapai adalah mengkaji gambaran dinamika kemiskinan serta kerentanan rumah tangga terhadap kemiskinan yang selanjutnya dapat dijadikan dasar untuk melindungi anak-anak dari bahaya kemiskinan. Hal ini merupakan salah satu ikhtiar untuk mencapai tujuan akhir yaitu memutus rantai kemiskinan.


**II. Tinjauan Literatur**

Kemiskinan dan kerentanan kemiskinan merupakan dua hal yang berbeda, namun saling terkait. Keterkaitan antara keduanya tidak bisa dilepaskan pula dengan adanya dinamika kemiskinan. Hal
ini disebabkan kemiskinan merupakan suatu kondisi yang dinamis. Seseorang dapat masuk ke dalam kemiskinan dan keluar dari kemiskinan sepanjang waktu karena berbagai sebab. Oleh karena itu, pada setiap titik waktu seseorang memiliki peluang untuk jatuh miskin.


untuk memvalidasi hasil estimasi kerentanan.\(^1\) Hasilnya mengindikasikan bahwa metode yang dibangun untuk memprediksi kemiskinan rumah tangga di masa depan cukup akurat pada berbagai sub-populasi data.

Berdasarkan beberapa metode pengukuran yang telah dibangun oleh para peneliti sebelumnya, maka dalam penelitian ini akan diterapkan konsep pengukuran yang dibangun oleh Chaudhuri yaitu *Vulnerability as Expected Poverty* (VEP). Namun, penerapannya akan dikembangkan dengan menggunakan data panel.

**Kemiskinan Anak**

Anak yang lahir dan dibesarkan dalam rumah tangga miskin kronis, memiliki kemungkinan 35 persen lebih tinggi untuk tetap miskin saat dewasa dibandingkan anak yang lahir dan dibesarkan dalam rumah tangga yang tidak miskin kronis (Pakpahan et al. 2009). Kemiskinan kronis menyebabkan individu dan keluarga terperangkap dalam lingkaran kemiskinan, sehingga investasi sumberdaya manusia yang dilakukan kurang. Kemiskinan tersebut akhirnya diturunkan kepada generasi selanjutnya karena rendahnya kualitas sumberdaya manusia yang dihasilkan dalam keluarga pada generasi berikutnya (CPRC 2008).


Anak-anak yang hidup dalam kemiskinan juga kemungkinan akan mengalami penyalahgunaan secara fisik oleh orang tuanya yang hidup dalam lingkungan yang penuh tekanan akibat kesengsaraan secara ekonomi. Insiden, durasi, dan kekronisan kemiskinan pada anak-anak juga akan berdampak kepada perlambatan perkembangan IQ anak, prestasi pendidikan, dan rendahnya produktivitas ketika mereka dewasa sebagaimana terukur dengan rendahnya upah dan jam kerja mereka. Bahkan, mereka pun akan kehilangan akses untuk mendapatkan penghidupan yang layak yang pada gilirannya akan semakin menambah beban ketergantungan kepada orang lain. Implikasinya, dengan tingginya tingkat deprivasi ekonomi yang dialami anak-anak akan menyebabkan lestarinya kemiskinan ketika mereka dewasa nantinya.

Pertumbuhan fisik yang tidak maksimal, kondisi kesehatan yang rendah, pendidikan yang tidak terarah praktis membentuk anak-anak berkembang seadanya. Kerasnya perlakuan yang diterima anak-anak secara psikologis bisa mengajari anak untuk melakukan hal negatif mengingat sifat anak yang suka meniru apa yang dilihatnya.

**III. Metodologi**

Pengukuran kerentanan kemiskinan membutuhkan beberapa langkah pendahuluan yang melibatkan teknik inferensia statistik, yaitu permodelan pengeluaran konsumsi, kemudian menghitung peluang rumah tangga untuk jatuh miskin. Mengenai inferensia statistik, menurut

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\(^1\) Mini-Susenas tahun 1998 merupakan survei yang dilakukan kepada 10.000 rumah tangga. Pada tahun 1999, dilakukan survei mini-Susenas dengan mewawancara kembali 75 persen dari 10.000 rumah tangga tersebut.
Tahapan Pengukuran Kerentanan Kemiskinan dan Spesifikasi Model Penelitian

Untuk menghasilkan suatu ukuran kerentanan kemiskinan, dilakukan tahapan yang secara terperinci dipaparkan dalam uraian berikut.

Membangun Model Pengeluaran Konsumsi

Model regresi merupakan salah satu metode analisis dependensi, artinya terdapat variabel (variabel tak bebas) yang dipengaruhi variabel lain (variabel bebas). Dalam penelitian ini, variabel tak bebas yang digunakan adalah pengeluaran konsumsi per kapita. Ke depannya pengeluaran konsumsi ini akan dijadikan dasar dalam pembentukan fungsi peluang, sehingga variabel pengeluaran konsumsi diharuskan mengikuti suatu distribusi tertentu misalnya distribusi normal. Namun, pengeluaran konsumsi antar individu atau antar rumah tangga nilainya akan sangat bervariasi dan tentunya akan sulit mengikuti distribusi normal. Oleh karena itu, dalam pendekatan VEP pengeluaran konsumsi diasumsikan berdistribusi lognormal sehingga dengan mentransformasi pengeluaran konsumsi dalam bentuk logaritma natural (Ln), maka Ln pengeluaran konsumsi diasumsikan berdistribusi normal.
Terdapat 15 variabel bebas yang digunakan membangun model. Di antara 15 variabel ini, terdapat variabel yang tidak bisa diperoleh langsung nilainya sehingga membutuhkan suatu simulasi untuk mendapatkan nilainya.

Variabel shock inflasi diperoleh melalui suatu simulasi yang sederhana. Untuk wilayah perkotaan, pertama-tama berdasarkan data Indeks Harga Konsumen (IHK) bulanan menurut kota, dihitung inflasi year on year, yaitu inflasi bulanan terhadap bulan yang sama tahun sebelumnya.

\[
\text{Inflasi}_{\text{year on year}} = \frac{\text{IHK}_{\text{bulan setelah}} - \text{IHK}_{\text{bulan sebelumnya}}}{\text{IHK}_{\text{bulan sebelumnya}}} \times 100\%
\]


Model regresi perkotaan dan perdesaan yang diajukan dalam penelitian ini adalah

\[
\ln K_{\text{konsumsi}} = f(\text{umur, pendidikan, ...}, \text{jarak})
\]

Atau jika dijabarkan, model tersebut menjadi:

\[
\ln K_{\text{konsumsi}} = \alpha - \beta_1 \text{umur}_i + \beta_2 \text{dik}_i + \beta_3 \text{ukuran}_i + \beta_4 \text{prop. kerja}_i + \beta_5 \text{kredit}_i + \beta_6 \text{lantai}_i + \beta_7 \text{laluan}_i + \beta_8 \text{listrik}_i + \beta_9 \text{akun}_i + \beta_{10} \text{kerja}_i + \beta_{11} \text{inflasi}_i + \beta_{12} \text{gea}_i + \beta_{13} \text{lahin}_i + \beta_{14} \text{lahin2}_i + \beta_{15} \text{info}_i + \beta_{16} \text{jarak}_i
\]

di mana
\[
\alpha : \text{intersep} \\
\beta_j : \text{koefisien regresi variabel ke-} j, j = 1, 2, \ldots, 15 \\
i = 1, 2, \ldots, 13.999 \text{ (perkotaan)} \text{ dan } i = 1, 2, \ldots, 14.138 \text{ (perdesaan)} \\
t = 2008, 2009, 2010
\]

Berdasarkan model regresi di atas, dapat diketahui variabel-variabel yang memengaruhi pengeluaran konsumsi per kapita rumah tangga (walaupun pengeluaran konsumsi sudah dalam bentuk logaritma natural, tetapi nilai yang dihasilkan masih searah).

**Mengestimasi Nilai Harapan, Varian Pengeluaran Konsumsi, serta Menentukan Garis Kemiskinan**

Pendekatan VEP mensyaratkan estimasi nilai harapan dan varian pengeluaran konsumsi setelah model terbentuk. Nilai harapan menggambarkan prospek pengeluaran konsumsi pada masa mendatang atau dalam hal ini pada tahun depan. Nilai harapan dan varian diperoleh melalui formula:
\[ E[\ln K_{n}] = X_{1}\beta \]
\[ \sigma[\ln K_{n}] = E[X_{1}V_{1}] \]

Akan dihasilkan sebanyak \( N \times 3 \) nilai harapan dan \( N \) varian pengeluaran konsumsi. Dengan demikian setiap rumah tangga memiliki tiga nilai harapan pengeluaran konsumsi.

Selanjutnya, peluang rumah tangga miskin dinyatakan melalui fungsi peluang berikut:

\[ p[K_{n+1} < G_{k+1}] \]

dengan menerapkan transformasi yang telah dilakukan serta asumsi mengenai distribusi normal, maka

\[ \text{Kerentanan}_{t} = p[\ln K_{t+1} < \ln G_{k+1}] \]
\[ = p \left[ \frac{\ln K_{t+1} - E[\ln K_{n}]}{\sqrt{\text{Var}[\ln K_{n}]}}, \frac{\ln G_{k+1} - E[\ln K_{n}]}{\sqrt{\text{Var}[\ln K_{n}]}}, \left. \ln K_{t+1} \right\} \right] \]
\[ = p \left[ Z < \frac{\ln G_{k+1} - E[\ln K_{n}]}{\sqrt{\text{Var}[\ln K_{n}]}}, \left. \ln K_{t+1} \right\} \right] \]
\[ = \Phi \left[ \frac{\ln G_{k+1} - E[\ln K_{n}]}{\sqrt{\text{Var}[\ln K_{n}]}}, \left. \ln K_{t+1} \right\} \right] \]

Peluang rumah tangga untuk jatuh miskin pada tahun depan, merupakan fungsi kepadatan kumulatif (Cumulative Distribution Function/CDF) dari distribusi normal baku.


**Menghitung Peluang Rumah Tangga untuk Jatuh Miskin pada Tahun Mendatang**


**Menghitung Kerentanan Kemiskinan**

Apabila peluang setiap rumah tangga untuk jatuh miskin telah dihitung, selanjutnya rumah tangga-rumah tangga tersebut dikategorikan menjadi rentan miskin atau tidak. Untuk itu,

<table>
<thead>
<tr>
<th>Tabel Batas (Threshold) Kerentanan Kemiskinan Menurut Daerah, 2008-2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daerah</td>
</tr>
<tr>
<td>-----------------------</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Perkotaan</td>
</tr>
<tr>
<td>Perdesaan</td>
</tr>
</tbody>
</table>

**IV. Temuan dan Analisis**


Tingkat kemiskinan rumah tangga pada suatu tahun menunjukkan banyaknya rumah tangga yang mengalami kekurangan dari sisi ekonomi untuk memenuhi kebutuhan dasarnya. Namun, analisis mengenai kemiskinan tidak berhenti hanya pada tingkat kemiskinan. Dari tahun ke tahun, dengan tingkat kemiskinannya masing-masing, terjadi pergeseran status kemiskinan rumah tangga. Terdapat rumah tangga yang masuk dalam kemiskinan, keluar dari kemiskinan, maupun tetap
berada dalam kemiskinan. Kondisi ini menunjukkan adanya suatu dinamika dalam kemiskinan. Terjadi pergerakan dalam kemiskinan, yaitu rumah tangga yang saat ini miskin dapat berubah menjadi tidak miskin pada tahun berikutnya, demikian juga sebaliknya.


Pada kurun waktu berikutnya, yaitu Maret 2009 ke Maret 2010 terjadi pola pergeseran status kemiskinan yang hampir sama dengan periode sebelumnya, baik untuk daerah perkotaan maupun perdesaan. Sebanyak 55,5 persen rumah tangga miskin daerah perkotaan berhasil keluar dari kemiskinan. Artinya, terdapat 44,5 persen rumah tangga miskin yang belum bisa keluar dari kemiskinan. Di sisi lain, terdapat rumah tangga yang menjadi miskin pada tahun 2010. Sebanyak 20,3 persen rumah tangga hampir miskin, 8,9 persen rumah tangga hampir tidak miskin, dan 1,5 persen rumah tangga tidak miskin, jatuh ke dalam kemiskinan.

Sementara itu, pada daerah perdesaan sebesar 55,8 persen rumah tangga miskin keluar dari kemiskinan, sedangkan 44,2 persen rumah tangga belum bisa keluar dari kemiskinan. Di sisi lain, 20,2 persen rumah tangga hampir miskin, 10,3 persen rumah tangga hampir tidak miskin serta 3,8 persen rumah tangga tidak miskin bergeser menjadi miskin pada tahun 2010.

Dinamika kemiskinan yang terjadi pada daerah perkotaan dan perdesaan menunjukkan pergerakan dalam kemiskinan, tetapi tidak mengubah tingkat kemiskinan dalam kedua daerah itu. Pergerakan tersebut menggambarkan sifat dan karakteristik kemiskinan di Pulau Jawa. Besarnya persentase rumah tangga yang tidak dapat keluar dari kemiskinan (lebih dari 40 persen) selama dua periode pada daerah perkotaan dan perdesaan menunjukkan bahwa banyak rumah tangga yang tidak berdaya dengan kemiskinannya. Bagaimanapun kondisi perekonomian pada dua periode tersebut, tidak mengubah kondisi rumah tangga miskin.

Selain rumah tangga yang tidak dapat keluar dari kemiskinan, karakteristik kemiskinan di Pulau Jawa juga ditunjukkan oleh besarnya persentase rumah tangga yang awalnya tidak miskin, kemudian masuk dalam kemiskinan. Dinamika kemiskinan yang terjadi di Pulau Jawa menunjukkan adanya volatilitas dalam pendapatan rumah tangga yang dalam hal ini juga tercermin pada pengeluaran rumah tangga. Volatilitas pengeluaran rumah tangga inilah yang membuat rumah tangga dapat mengalami perubahan status kemiskinan. Selain itu, volatilitas pengeluaran rumah tangga menunjukkan tingkat kerentanan rumah tangga terhadap kemiskinan. Dengan menganalisis faktor-faktor yang memengaruhi volatilitas pengeluaran rumah tangga, nantinya dapat digunakan untuk mengukur kerentanan kemiskinan rumah tangga. Faktor-faktor yang memengaruhi volatilitas pengeluaran konsumsi rumah tangga di perkotaan dan perdesaan dapat diketahui melalui model pengeluaran konsumsi rumah tangga.
Model Pengeluaran Konsumsi Rumah Tangga

Berdasarkan model regresi data panel dengan pendekatan Random Effect, model pengeluaran konsumsi per kapita rumah tangga perkotaan yang terbentuk adalah:

\[
\ln K_{i} = 12,6876 - 0,0006 \, umur_{i} + 0,3214 \, dili1_{i} - 0,098 \, ukuran_{i} + \\
0,2204 \, prop_{i} + 0,0238 \, kredit1_{i} + 0,1905 \, lantai1_{i} + \\
0,0015 \, luas_{i} + 0,1484 \, listrik_{i} + 0,0514 \, air1_{i} + \\
0,1112 \, kerja2_{i} - 0,157 \, inflasi2_{i} - 0,0758 \, geol_{i} + \\
0,2585 \, info1_{i} - 0,0059 \, jarak_{i}
\]

Sementara pada daerah perdesaan, diperoleh model pengeluaran konsumsi per kapita rumah tangga sebagai berikut.

\[
\ln K_{i} = 12,628 - 0,0014 \, umur_{i} + 0,2435 \, dili1_{i} - 0,0977 \, ukuran_{i} + \\
0,0838 \, prop_{i} - 0,1149 \, kredit1_{i} + 0,1911 \, lantai1_{i} + \\
0,0011 \, luas_{i} - 0,2091 \, listrik_{i} - 0,0079 \, air1_{i} + \\
0,0423 \, kerja2_{i} - 0,1513 \, inflasi2_{i} + 0,0195 \, geol_{i} - \\
0,0912 \, lalin1_{i} - 0,1014 \, lalin2_{i} + \\
0,0199 \, info1_{i} - 0,0007 \, jarak_{i}
\]

Selanjutnya mengenai pengujiann statistik, dilakukan Uji Wald Chi square yang digunakan untuk mengetahui pengaruh variabel bebas terhadap pengeluaran konsumsi rumah tangga secara bersama-sama (overall) di dalam model regresi. Berdasarkan hasil pengujian dengan menggunakan STATA 11 untuk daerah perkotaan, diperoleh nilai statistik Chi square dengan derajat bebas 14 adalah 12.703,26 dan p-value 0,0000. p-value yang jauh lebih kecil dari 0,05 tersebut menunjukkan bahwa minimal terdapat satu variabel bebas yang memengaruhi pengeluaran konsumsi per kapita rumah tangga. Sementara untuk daerah perdesaan, diperoleh nilai statistik Chi square dengan derajat bebas 16 adalah 9.162,33 dan p-value 0,000. Sama halnya dengan model perkotaan, p-value yang jauh lebih kecil dari 0,05 tersebut menghasilkan kesimpulan bahwa minimal terdapat satu variabel bebas yang memengaruhi pengeluaran konsumsi per kapita rumah tangga.

Selain pengujian secara overall, terdapat pula pengujian secara parsial dengan menggunakan statistik uji z (normal). Variabel signifikan memengaruhi pengeluaran per kapita rumah tangga ketika variabel lain dianggap konstan atau tidak mengalami perubahan. Secara parsial, keseluruhan variabel bebas yang digunakan dalam model perkotaan signifikan memengaruhi pengeluaran konsumsi per kapita rumah tangga (pada tingkat signifikansi 1 persen). Sedangkan pada model perdesaan, dari 15 variabel yang digunakan, 12 variabel signifikan memengaruhi pengeluaran konsumsi rumah tangga pada tingkat signifikansi 1 persen. Variabel sumber air minum dan letak geografis wilayah tidak signifikan pada tingkat signifikansi 5 persen tetapi signifikan dalam tingkat signifikansi 10 persen. Sementara itu, variabel lalu lintas ke dan dari wilayah untuk kategori 1 (darat) signifikan pada tingkat signifikansi 5 persen, sedangkan kategori 2 (air) tidak signifikan bahkan pada tingkat signifikansi 10 persen.
Pengaruh Faktor Demografi terhadap Pengeluaran Konsumsi Rumah Tangga

Hasil pendugaan parameter menunjukkan bahwa aspek demografi, dalam hal ini umur KRT, memiliki koefisien regresi negatif baik pada model perkotaan maupun perdesaan. Semakin meningkat umur KRT, pengeluaran per kapita rumah tangga semakin kecil. Kondisi demikian mengindikasikan keterkaitan aspek umur dengan produktivitas KRT.

Ukuran rumah tangga dalam analisis kemiskinan berkaitan dengan besarnya tanggungan yang dimiliki suatu rumah tangga. Berdasarkan nilai koefisien regresi, jika ART bertambah satu orang dan variabel lain tetap, maka pengeluaran per kapita rumah tangga baik di perkotaan maupun di perdesaan turun. Semakin besar jumlah ART, di mana setiap ART memiliki kebutuhan hidup yang harus dipenuhi, makin besar pula tanggungan yang dimiliki rumah tangga.

Pengaruh Faktor Pendidikan terhadap Pengeluaran Konsumsi Rumah Tangga

Ditinjau dari aspek pendidikan, suatu rumah tangga yang memiliki KRT dengan tingkat pendidikan yang tinggi memiliki tingkat kesejahteraan lebih baik. Tingkat pendidikan dan pengetahuan berperan dalam keputusan-keputusan yang diambil oleh KRT untuk rumah tangganya. Kesejahteraan yang lebih baik tersebut tercermin dari nilai koefisien regresi pada model perkotaan dan perdesaan. Apabila suatu rumah tangga di perkotaan memiliki KRT dengan pendidikan SMP ke atas serta variabel lain konstan, maka pengeluaran per kapita rumah tangganya relatif lebih tinggi dari rumah tangga yang memiliki KRT berpendidikan di bawah SMP. Pada rumah tangga di daerah perdesaan, apabila KRT berpendidikan tertinggi SMP ke atas dan variabel lain tidak berubah, maka pengeluaran per kapita rumah tangganya relatif lebih tinggi dari rumah tangga yang memiliki KRT berpendidikan lebih rendah.

Pengaruh Faktor Ekonomi terhadap Pengeluaran Konsumsi Rumah Tangga

Kekuatan suatu rumah tangga dari sisi ekonomi dapat ditunjukkan melalui jumlah ART yang bekerja relatif terhadap jumlah ART. ART yang bekerja ini dapat mengusahakan atau melakukan strategi perbaikan perekonomian rumah tangga apabila rumah tangga mengalami shock-shock yang merugikan. Dengan demikian, semakin besar proporsi ART yang bekerja dalam suatu rumah tangga, perekonomian rumah tangga relatif lebih kuat. Pada rumah tangga perkotaan, jika jumlah ART yang bekerja bertambah satu orang, relatif terhadap jumlah ART serta variabel lain konstan, maka pengeluaran konsumsi per kapita rumah tangga cenderung naik. Sementara pada rumah tangga perdesaan, tingkat kenaikan pengeluaran konsumsi per kapita rumah tangga lebih rendah.

Pengaruh Faktor Kepemilikan Aset (Perumahan) terhadap Pengeluaran Konsumsi Rumah Tangga

Selain aspek demografi serta aspek yang menunjukkan kekuatan perekonomian rumah tangga, aspek perumahan juga turut berperan dalam menentukan besarnya pengeluaran konsumsi rumah tangga. Jika dilihat dari jenis lantai terluas yang dimiliki rumah tangga, maka rumah tangga di perkotaan maupun perdesaan yang rumahnya berlantai bukan tanah (bisa berupa keramik, ubin, dan sebagainya), mempunyai pengeluaran per kapita rumah tangga 19 persen lebih tinggi dari rumah tangga yang rumahnya berlantai tanah. Setelah jenis lantainya, luas lantai juga signifikan berpengaruh terhadap pengeluaran konsumsi rumah tangga. Pada rumah tangga perkotaan, jika...
luas lantai bertambah 1 \( m^2 \), pengeluaran per kapita rumah tangga relatif meningkat. Sementara pada rumah tangga perdesaan, apabila luas lantai bertambah 1 \( m^2 \), pengeluaran per kapita rumah tangga juga relatif meningkat.

Selain jenis dan luas lantai, sumber penerangan dan sumber air minum turut memengaruhi pengeluaran konsumsi per kapita rumah tangga. Suatu rumah tangga di perkotaan yang menggunakan listrik, memiliki pengeluaran per kapita relatif lebih tinggi dari rumah tangga yang menggunakan sumber penerangan bukan listrik seperti petromak, sentir, dan sebagainya. Lain halnya dengan di perdesaan, rumah tangga yang menggunakan listrik sebagai sumber penerangan, memiliki pengeluaran per kapita relatif lebih tinggi dari rumah tangga yang menggunakan sumber penerangan bukan listrik. Sementara untuk sumber air minum yang dikonsumsi rumah tangga, konsumsi air bersih menunjukkan kesejahteraan yang lebih tinggi. Rumah tangga di daerah perkotaan yang memiliki sumber air minum bersih, mempunyai pengeluaran per kapita relatif lebih tinggi dari rumah tangga dengan sumber air minum tidak bersih. Untuk daerah perdesaan, air minum yang bersih juga mengindikasikan pengeluaran per kapita yang lebih tinggi (koefisien regresi positif) walaupun pengaruhnya tidak tampak nyata dalam taraf nyata 5 persen.

**Pengaruh Karakteristik Wilayah terhadap Pengeluaran Konsumsi Rumah Tangga**

Karakteristik wilayah yang pertama adalah letak geografis. Indonesia merupakan negara kepulauan sehingga terbentuk dua wilayah yaitu wilayah pesisir yang langsung berbatasan dengan laut, serta wilayah bukan pesisir. Secara umum, wilayah pesisir merupakan pintu gerbang perdagangan yang menghubungkan penduduk suatu pulau dengan pulau lain, sehingga semestinya aktivitas ekonomi dapat lebih tumbuh di wilayah pesisir. Namun, berdasarkan hasil penelitian ini, rumah tangga yang tinggal di wilayah pesisir perkotaan, memiliki pengeluaran per kapita relatif lebih rendah dari rumah tangga yang tinggal di wilayah bukan pesisir. Sementara pada daerah perdesaan, rumah tangga yang tinggal di wilayah pesisir memiliki pengeluaran per kapita yang lebih tinggi walaupun pengaruhnya tidak tampak nyata (pada tingkat signifikansi 5 persen).

Selanjutnya, aksesibilitas merupakan aspek penting dalam kaitannya dengan aktivitas ekonomi rumah tangga serta hubungan dengan daerah lain. Akses transportasi dan jarak dengan pusat kota (ibukota) dapat memengaruhi distribusi barang dan jasa dari dan ke luar wilayah. Baik di daerah perkotaan maupun perdesaan, semakin jauh jarak mengakibatkan rendahnya tingkat kesejahteraan rumah tangga. Apabila jarak wilayah tempat tinggal rumah tangga perkotaan dengan ibukota kabupaten/kota meningkat 1 km, maka pengeluaran per kapita rumah tangga relatif turun, begitu pula pada rumah tangga perdesaan.

**Pengaruh Shock yang dialami Rumah Tangga terhadap Pengeluaran Konsumsi Rumah Tangga**

Di sisi lain, penulis menyadari bahwa masih ada aspek-aspek lain yang juga penting dalam memengaruhi pengeluaran konsumsi rumah tangga. Namun, banyak dari aspek-aspek tersebut belum memiliki standar pengukuran yang baku, seperti shock bencana alam, kebakaran, banjir, dan sebagainya yang secara nyata merupakan suatu shock bagi perekonomian rumah tangga. Selain itu, keterbatasan data juga menjadi kendala tersendiri bagi penelitian ini, seperti data mengenai aset yang dimiliki rumah tangga.

Kerentanan Kemiskinan di Pulau Jawa


Peluang yang dimiliki setiap rumah tangga per tahunnya selanjutnya dibandingkan dengan batas (threshold) yang telah ditetapkan untuk menentukan rentan tidaknya suatu rumah tangga terhadap kemiskinan. Batas (threshold) yang digunakan pada penelitian ini adalah tingkat kemiskinan rumah tangga dalam populasi pada waktu yang sama (fraksi kemiskinan).


antara status kemiskinan rumah tangga dengan kerentanan kemiskinan menunjukkan pola yang sama, yaitu apabila suatu rumah tangga berstatus miskin, maka kecenderungannya menjadi rentan miskin lebih besar dibandingkan rumah tangga tidak miskin. Hal ini diperlihatkan oleh nilai Odds Ratio sebesar 4,78 yang mengandung arti rumah tangga miskin di perkotaan pada tahun 2010 memiliki kecenderungan untuk menjadi rentan miskin 4,78 kali rumah tangga tidak miskin. Dengan demikian, pada daerah perkotaan, rumah tangga yang miskin lebih rentan terhadap kemiskinan daripada rumah tangga yang tidak miskin.


Setelah analisis mengenai kerentanan kemiskinan dilakukan, penting untuk mengetahui gambaran ketepatan ukuran kerentanan yang telah dibangun. Salah satu cara yang digunakan adalah dengan membandingkan antara prediksi tingkat kemiskinan dan tingkat kemiskinan yang telah diukur (Chaudhuri, 2002). Rumah tangga yang rentan miskin adalah rumah tangga yang memiliki peluang tinggi untuk jatuh miskin pada waktu mendatang. Dengan demikian, rumah tangga yang rentan miskin merupakan rumah tangga yang diperkirakan menjadi miskin pada tahun mendatang. Berdasarkan tinjauan tersebut, maka penilaian ketepatan pengukuran kerentanan kemiskinan dalam penelitian ini dilakukan dengan mentabulasi silangkan antara kerentanan kemiskinan pada tahun “t” dengan status kemiskinannya pada tahun “t+1”. Hal ini memungkinkan untuk dilakukan mengingat data yang digunakan merupakan data panel di mana rumah tangga yang sama diambil informasinya selama beberapa periode.


Pada daerah perdesaan, ketepatan pengukuran kerentanan kemiskinan rumah tangga pada tahun baru mencapai 69,82 persen. Sedang ketepatan pengukuran kerentanan kemiskinan tahun berikutnya, yaitu tahun 2009 hanya mencapai 59,39 persen.
Profil Kemiskinan Anak pada Rumah Tangga Rentan Miskin di Pulau Jawa

Menurut BPS (2008), ketersediaan profil kemiskinan sangat penting agar kebijakan program penanggulangan kemiskinan menjadi tepat sasaran dan dapat difokuskan sesuai dengan kebutuhan penduduk atau rumah tangga miskin. Begitu pula dengan profil kemiskinan anak pada rumah tangga rentan miskin. Pemahaman mengenai karakteristik sosial, demografi, ekonomi, kesehatan, dan pendidikan anak pada rumah tangga rentan miskin diharapkan mampu membantu perencanaan, pengawasan, dan evaluasi dari program pencegahan kemiskinan yang efektif dan efisien.

Hasil penelitian memperlihatkan rata-rata jumlah anak pada rumah tangga rentan miskin di daerah perkotaan dan perdesaan. Berdasarkan informasi mengenai jumlah anak, terlihat bahwa rata-rata jumlah anak pada rumah tangga rentan miskin di perkotaan pada tahun 2008, 2009, dan 2010 berturut-turut adalah 2,09; 1,98; dan 1,92. Sementara itu, rumah tangga rentan miskin di perdesaan memiliki rata-rata jumlah anak berturut-turut sebanyak 1,91; 1,75; dan 1,75. Angka ini mengandung makna rumah tangga rentan miskin di perkotaan dan perdesaan pada umumnya memiliki hingga satu hingga tiga anak.


V. Rekomendasi Kebijakan

Hingga saat ini, berbagai program telah digalakkan dan dilaksanakan oleh pemerintah untuk mengentaskan kemiskinan. Program-program itu diantaranya adalah Program Keluarga Harapan (PKH), Bantuan Langsung Tunai (BLT), pemberian dana Bantuan Operasional Sekolah (BOS), dan Gerakan Nasional Orang Tua Asuh (GNOTA). Keempat program tersebut tujuannya mengarah pada peningkatan kesejahteraan rumah tangga dan pemenuhan hak dasar anak dalam hal pendidikan. Namun, sayangnya program-program tersebut belum dapat berjalan sesuai dengan yang semestinya. Berbagai masalah timbul seperti penyelewengan, salah sasaran, dan penyimpangan-penyimpangan lainnya yang terjadi dalam pelaksanaannya. Walaupun belum sepenuhnya menunjukkan hasil yang optimal, keberadaan program tersebut masih sangat diharapkan oleh masyarakat untuk menanggulangi masalah kemiskinan di Indonesia, setidaknya dapat mengurangi kemiskinan meski belum sampai tuntas.

Upaya pengentasan kemiskinan telah dilakukan bertahun-tahun namun belum mampu menuntaskan masalah kemiskinan. Hal itu menunjukkan betapa peliknya masalah kemiskinan tersebut. Ironisnya, dampak negatif kemiskinan bahkan sampai menjangkau anak-anak yang merupakan aset berharga bangsa ini. Kemiskinan benar-benar merupakan masalah multidimensi yang memerlukan kebijakan dan program intervensi multidimensi. Pengentasan kemiskinan
bukan hanya tanggung jawab pemerintah tetapi beban kemiskinan ada di pundak kita semua. Semua harus mengambil peran baik masyarakat maupun pemerintah.


Dari sisi lain, tentunya masyarakat pun tak boleh menutup mata, telinga, dan hati terhadap apa yang terjadi pada lingkungan sekitarnya. Tentu masih teringat kasus seseorang yang meninggal karena kelaparan. Bahkan tetangganya pun tak tahu hal tersebut, sungguh sangat memprihatinkan. Masyarakat seharusnya dapat lebih peka melihat fenomena kemiskinan ini. Tidak hanya terus mengkritisi kebijakan yang ditetapkan pemerintah tetapi juga turut serta dalam program pengentasan kemiskinan. Salah satu hal yang bisa dilakukan masyarakat yaitu merekomendasikan rumah tangga yang benar-benar miskin sebagai penerima bantuan dari pemerintah, bukan atas dasar kekeluargaan ataupun ada kepentingan lainnya. Berkaitan dengan kemiskinan anak, masyarakat yang berada pada golongan ekonomi atas dapat menjadi orang tua asuh bagi anak-anak yang berada pada rumah tangga miskin. Tentu hal tersebut sangat membantu dalam hal pemenangan hak-hak anak-anak utamanya pendidikan dan kesehatannya.

Saling mendukung antara pemerintah dan masyarakat adalah kunci utama dalam pengentasan kemiskinan. Tentunya hal yang tak boleh dilupakan bahwa rumah tangga rentan miskin merupakan rumah tangga yang berpeluang lebih besar untuk jatuh miskin pada periode selanjutnya. Sehingga memberi perhatian khusus terhadap rumah tangga miskin sama halnya melakukan pencegahan terjadinya kemiskinan pada waktu yang mendatang. Secara otomatis, hal tersebut juga berdampak positif pada anak dimana hak-hak dasarnya seperti pendidikan dan kesehatan dapat terpenuhi dengan baik. Anak-anak adalah calon pemimpin negara di masa depan, maka sudah sepatutnya mereka diajaga dengan baik.
Notulensi Hari II, Theme 1b: Dimensions of Child Poverty
Wednesday, 11 September 2013

Rapporteur: Erlangga A. Ladiyanto (UNICEF Indonesia)

Presenter 1:
Name: Usha Mishra Hayes (UNICEF Cambodia)
Title: Targeting the Poorest Children in Cambodia: Who and Where Are They? Reaching the Poorest Children in Cambodia: A Multi-deprivation Analysis

- This study looks at why children go to school, identifies children who are unable to go to school, and the reason why they drop out or not attending school.
- In Cambodia, poverty rate drops 5-6%. Overall, Cambodia is good in maintaining poverty reduction.
- In many human development indicators Cambodia is doing well, but nutrition is still a challenge. Education sector suffers lack of attention, especially attention to the primary achiever, namely lower secondary. Despite free education and economic productivity, the expected number of students not completing lower grade is higher.
- From age 6-17 there is a high prevalence of child labor among the poorest, but there are also 12.5% children from the upper middle class who are child labor.
- This study has a set of explanatory variables for dependent variables whether a child is in school. Other than the demand side there are variables from supply side, including: location of household and school. The distance to the lower secondary school is farther than the distance to primary school.

Highlights of Conclusions and Recommendations:
- Continue household cash transfer program and scholarship for the poor
- Low wage – low secondary education -> higher economic productivity (macroeconomic aspect in Cambodia should be improved) to increase wage, thus increased need for higher education.

Presenter 2:
Name: Novi Hidayat (STIS)
Title: Kemiskinan Anak Usia Kurang dari Lima Tahun pada Rumah Tangga dengan Rata-Rata Pengeluaran yang Terletak pada Kuantil Pertama Tahun 2008-2010 di Indonesia / Under-Five Poverty in Households in First Quintile Based on Average Expenditure (Indonesia, 2008-2010)

- Penyelesaian pendidikan anak dalam kemiskinan ekstrim lebih rendah.
- Peningkatan kesejahteraan: tingkat kemiskinan turun, tetapi Gini rasio naik 0,4.
• Persentase anak <5 tahun ke bawah dalam populasi penduduk sangat besar.
• Persentil terbawah mengalami peluang mobilitas yang lambat untuk bisa pindah ke kuintil 2-5.
• Karakteristik anak dalam rumah tangga kuintil terendah.
  - Kepemilikan akte – kunci regristasi penduduk di Indonesia positif
    o anak yang orang tuanya bekerja di sektor pertanian dan pertambangan paling rendah persentasenya
  - ASI eksslusif positif
    o Dipengaruhi oleh pendidikan dan status bekerja ibu
  - Imunisasi positif
    o Pendidikan ibu/ayah dan status bekerja ibu
    o Perentase tertinggi untuk ibu yang bekerja di perdagangan, administrasi dan jasa
  - Pendidikan pra sekolah menurun 5,4% di perdesaan
    o Orang tua dengan pendidikan tinggi (lebih dari SMA) signifikan mempengaruhi anak pra sekolah.

### Highlights of Conclusions and Recommendations:
• Regulasi pemberian akte kelahiran ditekankan pada pemberian secara gratis untuk rumah tangga miskin dan sangat miskin
• Menerapkan jam kerja atau pengubahan jam kerja yang memihak pada ibu dengan anak
• Percepatan pembangunan wilayah desa untuk fasilitas kesehatan dan pendidikan pra sekolah

### Presenter 3:
**Name**: Armelina Zukma Kumala, SST (BPS Sulawesi)
**Title**: Dinamika Kemiskinan dan Pengukuran Kerentanan Kemiskinan dalam Upaya Melindungi Anak-Anak dari Dampak Kemiskinan/The Dynamics of Poverty and The Measuring of Poverty Vulnerability In Effort To Protect Children from Poverty Impact

• Kemiskinan identik dengan ketidakmampuan. Pada tahun 2010, 31 juta penduduk Indonesia mengalami pergeseran status kemiskinan sehingga kemiskinan dinamis dan stokastik.

• Terdapat lebih banyak penduduk yang rentan terhadap kemiskinan karena hidup di sekitar garis kemiskinan.

• Pengukuran rentan kemiskinan adalah pengukuran sesuatu yang belum terjadi, atau memperkirakan garis kemiskinan untuk tahun depan.

• Mengkaji dinamika data yang ideal, yaitu data panel 2008-2010.

• Penurunan kemiskinan berjalan lambat karena adanya pergantian status kemiskinan.

• Hasil studi: 44% rumah tangga di pedesaan rentan miskin pada 2010, artinya 44% rumah tangga tersebut memiliki peluang besar untuk menjadi miskin pada tahun 2011.

• Berdasarkan profil anak dari 44% rumah tangga tersebut, jika 40% dari 6 juta rumah tangga tersebut memiliki anak, maka 1,3 juta anak mempunyai keluhan kesehatan tapi tidak mampu melakukan pengobatan rawat jalan. Dalam 44% rumah tangga tersebut juga banyak rumah
tangga yang tidak mampu melakukan persalinan dengan bantuan tenaga medis dan anak di rumah tangga tidak mendapat imunisasi lengkap. Pergeseran peran anak, seperti pekerja rumah tangga dan perkawinan usia anak, terjadi pada rumah tangga rentan miskin.

**Highlights of Conclusions and Recommendations:**

- Program penanggulangan kemiskinan harus lebih terintegrasi agar tidak tumpang tindih dan lebih tepat sasaran
- Pemberdayaan masyarakat harus dilakukan secara lebih intensif.

**Presenter 4:**
**Name**: Martin Evans (UNICEF Head Quarters, US)
**Title**: Integrating Monetary and Non-Monetary Measures of Child Poverty and Deprivation

- Much deprivation incidence extends to the levels of household consumption that are considerably above the NPL poverty line.
- Poverty in both deprivations (monetary and non monetary) cause essential for social protection.
- Looking at the monetary and non-monetary, then we capture:
  - Input: consumption, income, earning, transfer from other family member
  - Output: consumption patterns and access to services
  - Outcome: educational outcome, nutrition (maltreated, stunting, wasting)
- Children at risk: 40% of population, 51% of them are poor.
- Monetary deprivation should be considered as continuous deprivation. Overcrowding and monetary poverty – deprived household is near the poverty line.
- Water deprived households have low consumption; sanitation deprived households have low consumption.
- There is significantly different distribution between deprived and non deprived households. Deprived children mostly are above poverty line --> deprived non poor
- Child poverty should be analyzed in categories: extreme poor, poor, near poor.

**Highlights of Conclusions and Recommendations:**

We should consider children living above the poverty line. This should assure better targeting in social protection because if we are looking at monetary poverty only then we are missing those who are deprived. Children who are not monetary poor are actually deprived in overcrowding, sanitation, etc.
Discussant’s comments:

Name: Sudarno Sumarto (SMERU/TNP2K)

For Armelia: Recommendation to promote efforts preventing people falling from poverty should be inserted. For example, income contribution for children’s education is different among households even with the same level of household income.

Reminding participants that although measurement method such as Bristol and MODA are good to measure child poverty-deprivation, it is very important to have consumption analysis.

Highlights of Conclusions and Recommendations:

- “Correlate not causality”
- Monetary poverty correlates with sanitation, water, education, etc. It is better than which causes what. We are not going to a debate on which one causes the other like chicken and egg.

Questions and Answers:

1. Budi Setiawan, UNICEF Jakarta:
   Q: To Armelia, issues related to vulnerabilities and urban/rural should consider from supply side affecting variable of vaccination rather than the demand side.

   A:
   - OSS from Ministry of Social Welfare is to be provided along with integrated complaint center so that there is evaluation from the supply side. Unfortunately, data for Podes (Village Potential) is limited.
   - The supply side should be in the analysis rather than in the measurement. Using other community data to be integrated with the household survey. Using GIS.
   - Influence people behavior to take out immunization.

2. Sudaru, Agenda:
   Q: The problem is in intra-household inequality on consumption. Underweight/overweight intra-household consumption, further tendencies to overweight, because as the breadwinner he eats more than the rest of the family.

   A:
   - It is difficult to analyze intra-household inequality. Many factors within the household could affect the prevalence of child poverty, such as birth order or male siblings.

FINAL CONCLUSIONS & RECOMMENDATIONS:

1. To analyze further on the supply side of child poverty to complement the demand side.
2. To look at the overlaps of monetary indicators and non monetary (deprivation) indicators
3. Need to bring more discussions on child poverty and provide better understanding.
THEME 2
Child-Sensitive Social Protection and Poverty Reduction

1. **Solidaritas Sebagai Strategi Survival Anak Jalanan Studi Kasus di Lempuyangan Yogyakarta/Peer Solidarity as Survival Strategy of Street Children: Case Study in Lempuyangan**
   Soetji Andari (Kementerian Sosial Republik Indonesia)

2. **Ensuring Children’s Access to Right to Education in Areas of Civil Unrest: Role of Youth in World’s Largest Democracy**
   Gunjan Wadhwa (National Commission for Protection of Child Rights, India)

   Rachma Indah Nurbani (SMERU Research Institute, Indonesia)

4. **Contractual Children Savings Accounts in Low Resource Communities: Who Saves?**
   Leyla Karimli (Columbia University, US)
I. PENDAHULUAN

1.1. Latar belakang


Keberadaan anak jalan cenderung bertentangan dengan sistem masyarakat stabil yang menganut nilai, sistem, dan norma hierarki yang berlapis. Anak jalan merupakan bagian masyarakat antistruktur kebanyakan bersifat spontanitas dan bertentangan dengan struktur yang telah mapan. Mereka membentuk kelompok karena mempunyai tendensi dan corak yang sama antarsesama anggota, tetapi tidak dalam hierarkis atau struktur masyarakat luas. Turner beranggapan bahwa sebuah kelompok cenderung bersifat substantive humanistic, nilai-nilai kehendak dan kesadaran bukan bersifat instingtif dan emosional saja, tetapi anak

1 Graham Tipple,Suzanne Speak, 2009, The hidden millions: homelessness in developing countries, New York, Publisher, Routledge, hlm 213

2 Data Penyandang Masalah Kesejahteraan Sosial (PMKKS) Potensi dan Kesejahteraan Sosial (PSKS) Tahun 2011, Pusat Data dan Informasi Kementerian Sosial RI
jalanan memiliki kesamaan tujuan, pandangan yang terbentuk dari konsekuensi logis. Konsekuensi logis yang dialami oleh anak jalanan, sebagai kelompok yang terpinggirkan, mengalami berbagai dimensi penyuntingan seperti diskriminasi dan eksploitasi di dalam kehidupan sosial, ekonomi, dan politik kota.


Aparat pemerintah memberi stigma negatif terhadap anak jalanan sebagai upaya "menyelesaikan" persoalan melalui penertiban, razia dan penangkapan terhadap anak jalanan. Mereka juga menjadi korban pemererasan atau "pungli" dari orang-orang bukan saja oleh anak jalanan lain tetapi juga oleh preman dan juga aparat. Merekatetap eksis meskipun dalam kondisi terancam. Hal itu terjadi merupakan refleksi solidaritas antar anak jalanan. Mereka menjalin interaksi dengan kuat sebagai bagian dari anak jalanan yang tidak terpisahkan untuk mampu bertahan hidup ditengah hiruk pikuk kota besar.

1.2. Masalah penelitian

Dari uraian latar belakang masalah yang telah digambarkan di muka, tentang kehidupan anak jalanan yang berada di sekitar Lempuyangan. Anak jalanan untuk dapat bertahan hidup karena memiliki ikatan solidaritas sebagai mekanisme perlawanannya dari berbagai ancaman yang selalu

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4 P. C. Shukla, 2005, Street Children and the Asphalt Life: Delinquent street children, New Delhi, Isha Book. hlm.8
5 Parsudi suparlan, 2004, Masyarakat dan kehidupan perkotaan: Perspektif Antropologi Perkotaan, Yayasan Pengembangan Kajian Ilmu Kepolisian, hlm 54
7 Ibid, hlm 79
mengintai di jalan. Berdasarkan latar belakang tersebut, pertanyaan penelitian ini “bagaimanakah solidaritas yang terjadi pada anak jalanan di Lempuyangan yogyakarta sehingga mereka mampu bertahan hidup?” Pertanyaan yang diuraikan menjadi dua pertanyaan yang hendak dipahami dinamikanya secara empiris yakni:
   a. Bagaimanakah bentuk solidaritas anak jalanan agar mampu bertahan hidup?
   b. Bagaimanakah soliditas anak jalanan dalam mempertahankan solidaritas dari berbagai tekanan eksternal?

1.3. Maksud dan tujuan penelitian

Tujuan penelitian berdasarkan latar belakang dan rumusan di atas berupaya mengungkap solidaritas yang terjalin pada anak jalanan yang hidup di wilayah kumuh perkotaan, sehingga mengetahui kehidupan anak jalanan agar mampu mempertahankan diri. Meskipun mereka tidak memiliki akses jaminan sosial untuk dapat hidup, tumbuh dan berkembang dari pemerintah maupun masyarakat. Selain itu, penelitian ini menggambarkan dinamika solidaritas yang terjalin pada anak jalanan sehingga mereka mampu mempertahankan soliditas untuk dapat hidup sesuai dengan norma dan nilai sosial yang mereka miliki. Penelitian ini berupaya mengungkap kompleksitas solidaritas yang terjadi pada anak jalanan secara empiris untuk mempertahankan hidup di jalanan.

1.4. Metode penelitian

Penelitian ini pada dasarnya merupakan penelitian kualitatif yang meneliti karakteristik anak jalanan dan solidaritas yang dibangun untuk mempertahankan hidupnya di lingkungan sekitar stasiun kereta api Lempuyangan. Penelitian ini menggunakan pendekatan studi kasus. Studi kasus mengkaji ada tidaknya faktor-faktor tertentu yang memberikan ciri khas pada tingkah laku sosial yang kompleks, dengan cara memahami relasi antar kelompok jalanan secara eksploratif dan analisis sehingga tercapai keutuhan dari objek sebagai suatu keseluruhan yang terintegrasi (kartono 1980; vredenbregt 1983).


II. Kajian pustaka

Anak jalanan dapat dikelompokkan ke dalam beberapa kategori. Berdasarkan hasil penelitian yang dilakukan Depsos RI dan UNDP pada tahun 1996¹⁰, diperoleh temuan kelompok-kelompok anak jalanan.

1. anak yang hidup/tinggal di jalan dan tidak ada hubungan dengan keluarganya (children of the street). Menurut unicef anak jalan dalam kategori ini secara fungsional sama sekali tidak memperoleh dukungan keluarga.

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¹⁰ Departemen Sosial RI, 1998.h.5,

3. Anak yang rentan menjadi anak jalanan dan masih berhubungan teratur/tinggal dengan orangtuanya (vulnerable to be street children). Anak jalanan dalam kategori ini, anak-anak yang bekerja di jalanan, namun hidup dengan keluarga mereka.


The largest category, children at high risk is defined as boys and girls who live in absolute poverty. This group lives at home in highly deprived environment without the basic necessities of life. These children generally receive inadequate parental supervision due to the “latchkey” phenomenon of working parent(s) who have no access to daycare. Most live in slums without public services, adequate local schools, or community programs ( Lusk, 1989).


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Skema Latar Belakang Anak Turun Ke Jalan

Berdasarkan skema di atas faktor-faktor yang memengaruhi munculnya anak jalanan berkaitan erat latar belakang anak turun ke jalanan akibat kondisi kemiskinan, keluarga, masyarakat, dan kondisi anak jalan itu sendiri. Kemiskinan memberikan gambaran sebagai sebuah rangkaian ketidakberdayaan dan kendala untuk menjangkau sumber-sumber pemenuhan kebutuhan pokok. Masalah kemiskinan yang dialami sebuah keluarga bukan saja berakibat tidak terpenuhinya kebutuhan anak, melainkan juga memberikan dampak yang lebih luas bagi peran anggota kelompok anak dalam keluarga. Anak terpaksa terlibat dalam kegiatan usaha yang produktif secara ekonomis untuk menambah pendapatan keluarga.


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14 Childhope Asia, A Guidebook for Community Based Programs Among Street Children and Their families, National Project on Street Children, Philippines.
Pada tabel 1. Tipologi anak jalanan, model, dan fungsi intervensi upaya penanganan anak jalanan, yang terdiri dari ada 3 model penanganan anak jalanan antara lain : penanganan berbasis jalanan (street based), penanganan anak jalanan terpusat (center based), dan penanganan anak jalanan berbasis komunitas atau masyarakat (community based). Dalam prakteknnya lebih banyak menerapkan model street based dan center based, padahal model community based tidak kalah pentingnya dibandingkan pendekatan yang lainnya karena masing-masing pendekatan mempunyai kelemahan dan kelebihan.16

<table>
<thead>
<tr>
<th>Kategori anak jalanan</th>
<th>Model intervensi</th>
<th>Fungsi intervensi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anak yang mempunyai risikottinggi menjadi anak jalanan (children at high risk)</td>
<td>Community based</td>
<td>Preventif</td>
</tr>
<tr>
<td>Anak yang bekerja di jalanan (children in the street)</td>
<td>Street based</td>
<td>Street education</td>
</tr>
<tr>
<td>Anak yang hidup di jalan (children of the street)</td>
<td>Center based</td>
<td>Rehabilitatif</td>
</tr>
</tbody>
</table>

Sumber: lusk15 (1989, 67-74)

Potret solidaritas sosial dalam konteks masyarakat dapat muncul dalam berbagai kategori atas dasar karakteristik sifat atau unsur yang membentuk solidaritas itu sendiri. Veeger, k.j. (1992) mengutip pendapat Durkheim yang membedakan solidaritas sosial dalam dua kategori/tipe; pertama, solidaritas mekanis, terjadi dalam masyarakat yang diciri-khaskan oleh keseragaman pola-pola relasi sosial, yang dilatarbelakangi kesamaan pekerjaan dan kedudukan semua anggota. Individualitas tidak berkembang karena dilumpuhkan oleh tekanan aturan/hukum yang bersifat represif. Sifat hukuman cenderung mencerminkan dan menyatakan kemaahan kolektif yang muncul atas penyimpangan atau pelanggaran kesadaran kolektif dalam kelompok sosialnya. Solidaritas mekanik yang terjadi dilatarbelakangi fakta sosial, Durkheim sampai pada kesimpulan...

Solidaritas yang terjadi pada anak jalan bukan hanya terjadi karena perubahan sosial dari masyarakat tradisional ke masyarakat moderen, akan tetapi mereka merupakan bagian dari masyarakat moderen yang tersingkirkan akibat perubahan kebijakan menjadikan mereka tidak mampu bersaing. Mereka termarjinalkan akibat berbagai kebijakan pemerintah yang tidak memihak dan menyebabkan mereka menjadi sub-masyarakat dominan. Meskipun mereka berada pada kompleksitas masyarakat moderen di perkotaan, namun cenderung memiliki ikatan solidaritas, yang menurut Durkheim disebut sebagai solidaritas mekanik. Pelanggar akan dihukum atas pelanggarannya terhadap sistem moral kolektif. Pada solidaritas mekanik menekankan bahwa setiap pelanggaran hukum dianggap sebagai ancaman bagi kelompoknya sehingga harus ditekan, diharapkan tidak terjadi lagi.

Solidaritas mekanik yang terjadi pada anak jalan, di dasarkan atas kerjasama di dalam kelompok, dalam pemahaman ini, bukanlah kepatuhan terhadap nilai-nilai bersama (conformity) semata, melainkan prinsip saling menguntungkan secara timbal-balik (reciprocalità). Suatu kerjasama antaragen-antaragen rasional bisa berlangsung hanya jika masing-masing pihak yang terlibat merasa diuntungkan. Anak jalanan memiliki ikatan solidaritas atas dasar kesepakatan atau kerjasama pada awalnya bersifat alamiah, namun hal tersebut mudah sekali hancur jika salah satu anggota kelompok yang terlibat merasa tidak lagi diuntungkan bahkan dikhianati.

22 Ibid, hlm 15
III. HASIL PENELITIAN


Tabel 2. kegiatan sehari-hari (daily activities) anak-anak jalan Lempuyangan (dalam jam)

<table>
<thead>
<tr>
<th></th>
<th>Frekuensi</th>
</tr>
</thead>
<tbody>
<tr>
<td>tidur/istirahat</td>
<td>4</td>
</tr>
<tr>
<td>bermain</td>
<td>8</td>
</tr>
<tr>
<td>bekerja</td>
<td>5</td>
</tr>
<tr>
<td>begadang</td>
<td></td>
</tr>
</tbody>
</table>

Sumber : data primer


Anak jalanan menghabiskan waktu untuk bekerja sekitar 5 jam, biasanya dilakukan pada pagi sekitar puluh 8 pagi dan puluh 3 sore hari hingga malam hari, hal tersebut dilakukan untuk menghindari panas teriknya matahari. Pekerjaan yang dilakukan anak jalanan Lempuyangan hampir setengahnya merangkap sebagai pengamen dengan menggunakan alat untuk mendapatkan uang di jalanan, di dalam kereta. Mereka juga bekerja sebagai pengasong, dengan menjual koran, minuman dalam botol. Pekerjaan anak jalanan biasa dilakukan sesuai dengan keterampilan yang dimiliki. Anak jalanan yang mengamen biasanya dilakukan bersama-sama dengan menggunakan gitar, ukulele, dan "pongo" semacam alat pulu seperti kendang. Sedangkan yang mengemis dengan alat sekadarnya seperti tutup botol atau bertepuk tangan meminta uang di jalanan.

Usia anak jalanan di sekitar Lempuyangan paling banyak berusia sekitar 10–17 tahun, hal ini menunjukkan bahwa anak jalanan yang berada di Lempuyangan merupakan anak-anak jalanan

Bentuk solidaritas serta faktor yang menyebabkan solidaritas sangat erat di Lempuyangan, karena seringnya berkumpul menyebabkan rasa kesetiakawanan yang erat. Mereka cenderung memiliki ciri solidaritas sosial yang mekanistik, berdasarkan kebersamaan. Sebagai contoh, bila ada yang anak jalan sakit mereka akan bergotong royong mencari bantuan dengan anak jalan lainnya untuk membantu mengobati atau merujuk ke petugas kesehatan. Bila ada seorang anak jalan yang tertangkap, karena terdesak dengan biaya yang tidak cukup untuk mengeluarkannya, mereka akan minta bantuan aparat penertiban untuk merazia mereka semua bersama-sama. Meskipun mereka merupakan individu yang sulit diatur karena pengaruh lingkungan dan kebiasaan hidup di jalan tanpa ada aturan yang mengekang, rasa kebersamaan tetap ada. Anak jalan tumbuh dan berkembang dengan latar kehidupan jalan dan akrab dengan kemiskinan, penganiayaan, dan hilangnya kasih sayang sehingga memberatkan jiwanya dan membuatnya berperlaku negatif. Seperti yang dicentikan oleh nn (16 thn)

“Saya berada di jalan sudah lebih dari lima tahun dan memilih jalan karena saya merasa nyaman bergaul dengan mereka. Tidak ada jarak di antara kami, karena saling membantu dan tidak jarang kami makan dengan piring yang sama tapi juga minum dengan gelas yang sama, selain itu kita selalu bersama dalam melawan berbagai tindak kekerasan di jalanan.”

Berbagai latar belakang anak jalan Lempuyangan dilihat dari tingkat pendidikan rata-rata berpendidikan tingkat sekolah dasar, dari hasil wawancara mereka kebanyakan mengaku tidak memiliki ijazah sekolah dasar. Hal ini menyebabkan kurangnya kemampuan berpikir sesuai dengan usianya, artinya mereka belum terbiasa untuk berpikir kritis dan kreatif, sehingga mereka biasanya mengerjakan sesuatu secara praktis dan dianggap mudah.

Rata-rata penghasilan yang didapat anak jalan dalam satu hari, kurang dari 10.000,- hingga lebih dari 40.000,00 Rupiah. Aktifitas anak jalan di gerbong-gerbong kereta selain mengamen, mengemis juga membersihkan lantai gerbong dengan sapu lidi untuk mendapatkan uang sekedarnya dari para penumpang kereta. Anak jalan yang beraktivitas di jalan, saat lampu menunjukkan warna merah, anak jalan segera bergerak menuju tengah jalan, dengan bermodalkan tepuk tangan, sehingga kain lap yang sudah usang atau membagi amplop pada setiap pengguna jalan, ia berupaya mendapatkan uang receh kepada pengendara dengan tangan menengadah. Memohon para dermawanan memberi selembar uang. Ia cukup senang bila menerima beberapa uang receh maupun selembar uang seribu rupiah. Penghasilan anak jalan tersebut tidak menentu tergantung dari jam kerja di jalan, artinya mereka bisa mendapat uang lebih atau kurang sesuai dengan kondisi jalanan. Paling sedikit penghasilan didapat pada hari minggu dan saat hujan, sedangkan penghasilan paling banyak ketika bulan puasa saat menjelang lebaran.

26 Johan W. Santrock, 2003, Adolescence, Perkembangan Remaja, hlm 47-49
28 Johan W. Santrock., Op.Cit, hlm. 81
29 Hasil wawancara dengan anak jalanan Nn (16 thn) tgl, 25 Juli 2009
Anak jalanan menggunakan penghasilan sehari-hari di jalanan digunakan untuk makan dan menghidupi dirinya sendiri, untuk jajan, membeli rokok dan kesenangan, untuk orang tuanya dan untuk keperluan sekolah. Menariknya dalam hasil penelitian ini semua anak jalanan mengungkapkan bahwa uang hasil jerih payah mereka tersebut tidak ada yang dibelanjakan untuk hal yang negatif. Namun pada kenyataan anak jalanan membelanjakan hasil jerih payah untuk kesenangan, seperti bermain game, minum minuman keras bersama teman-temannya, dibelikan rokok, makanan, pulsa, membeli lem “aibon”, bahkan untuk membayar wanita malam pinggir jalan. Mereka tidak sayang menyiahkan sebagian besar penghasilannya untuk merokok dan mencari kesenangan karena mendapat kenikmatan ketika merokok dan memperoleh kesenangan. Mereka merasa telah mandiri karena tidak meminta uang dari orang tua untuk membeli rokok. Hal inilah yang dijadikan alasan mengapa mereka merasa menjadi dewasa.


Anak jalanan sering mengalami kekerasan yang berkaitan dengan kehidupan jalanan, kekerasan fisik, emosional ataupun penelantaran menjadi bagian dari pengalaman kekerasan anak jalanan sehari-harinya. Mereka mengalami kekerasan, namun di balik itu semua masih memiliki rasa saling mengasihi antar sesama anak jalanan dan memunculkan perasaan dan perilaku yang bersifat positif seperti menolong saat kesakitan, memberi makan saat kelaparan, dan saling membantu. Kehadiran orang-orang yang dipercaya membantu anak jalanan dalam mengatasi permasalahan hidup dan dalam membantu memenuhi kebutuhan hidup mereka. Gambaran solidaritas yang tampak, yaitu rasa saling percaya antar anak jalanan untuk saling melindungi karena pengalaman kekerasan yang dialaminya.

Pengalaman kekerasan yang dialami oleh anak jalanan umumnya tergolong jenis kekerasan fisik dan emosional di mana kekerasan tersebut dilakukan oleh orang-orang di sekitar. Pengalaman kekerasan ini dapat memunculkan berbagai perasaan dan perilaku seperti sedih, kesal, sakit hati, dendam, senang berkelahi, dan menjadi tidak mudah percaya terhadap orang lain. Di dalam diri anak jalanan sendiri juga memiliki faktor yang dapat mempengaruhi dirinya untuk memercayai sumber-sumer kepercayaan, yaitu faktor dispositional kepercayaan, situational parameter, dan history of relationship30. Selain itu pengalaman kekerasan pada anak jalanan menumbuhkan perasaan traumatis dan dendam, yang berpengaruh sikap mal-adaptif, seperti, dis-orientasi, tidak percaya dengan orang lain. Mereka berperilaku menyimpang akan menumbuhkan kepercayaan diri untuk melakukan show of power (dengan berkelahi). Kelompok sebagai wahana untuk memupuk rasa kebersamaan dan publik anak jalanan dapat menggantikan fungsi keluarga. Dalam kelompok inilah rasa kepercayaan mulai tumbuh, akan tetapi hanya sebatas hubungan pertemanan. Di dalam diri anak jalanan memiliki faktor yang dapat memengaruhi dirinya untuk saling mempercaya, hal ini untuk menghadapi berbagai risiko kehidupan jalanan akibat rawan mendapatkan pelecehan, rawan kesehatan disebabkan banyak menghirup polusi udara,

berpotensi menjadi pengkonsumsi minuman keras dan narkoba, berpotensi melakukan tindak kekerasan dan kriminal.


### Tabel 3. Karakteristik anak jalanan Lempuyangan

<table>
<thead>
<tr>
<th>Karakteristik</th>
<th>Hidup di jalanan (children of the street)</th>
<th>Bekerja di jalanan (children on the street)</th>
<th>Rentan menjadi anak jalanan (vulnerable to be street children)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lama di jalanan</td>
<td>24 jam</td>
<td>-12 jam</td>
<td>4-6 jam</td>
</tr>
<tr>
<td>Hubungan Dengan keluarga</td>
<td>Putus Hubungan dengan keluarga</td>
<td>Tidak teratur pulang ke rumah</td>
<td>Tinggal bersama keluarga</td>
</tr>
<tr>
<td>Latar belakang menjadi anak jalanan</td>
<td>Kekeberasan orang tua, dishamoni keluarga, pengaruh teman</td>
<td>Pengaruh teman, mencari kesenangan di jalanan,</td>
<td>Membantu orang tua, pengaruh teman lingkungan rumah.</td>
</tr>
<tr>
<td>Tempat tinggal</td>
<td>Di gerbong-gerbong, dan jalanan</td>
<td>Tinggal bersama orang tua, rumah singgah dan di sekitar stasiun</td>
<td>Masih tinggal Dengan orang tua</td>
</tr>
<tr>
<td>Pendidikan</td>
<td>Tidak sekolah</td>
<td>Sebagian tidak sekolah</td>
<td>Masih sekolah</td>
</tr>
<tr>
<td>Asal anak jalanan</td>
<td>Anak jalanan pendatang dari luar provinsi</td>
<td>Anak jalanan berasal dari sekitar diy</td>
<td>Anak jalanan kota jogyakarta</td>
</tr>
<tr>
<td>Mobilitas</td>
<td>Sangat tinggi, sehingga seringkali berpindah-pindah</td>
<td>Tidak selalu berpindah-pindah</td>
<td>Menetap</td>
</tr>
<tr>
<td>Tipe ikatan</td>
<td>Hubungan antaranak jalanan terjalin erat namun bersifat sementara tidak bertahan lama karena dipengaruhi perubahan lokasi dan perubahan teman karena mobilitas tinggi dan tidak menetap di suatu wilayah</td>
<td>Ikatan antaranak jalanan lebih tahan lama dibandingkan children of the street karena tinggal bersama-sama anak jalanan sebagian pulang ke rumah</td>
<td>Ikatan antaranak jalanan atas dasar kebersamaan, keterpaksaan untuk membantu keluarga, setia kawan dan saling melindungi, selain itu mereka masih ada yang mengawasi.</td>
</tr>
</tbody>
</table>

Sumber: data primer

Tabel 3 menunjukkan karakteristik anak jalanan berdasar hubungan dengan keluarga. Pada mulanya ada dua kategori anak jalanan yang berada di jalanan, yaitu children on the street dan children on the street. Children on the street merujuk pada anak-anak yang masih tinggal dengan orangtuanya atau masih berhubungan dengan keluarganya dan dilihat dari lamanya tinggal di...
jalan dalam satu hari. Sedangkan *children of the street*, yaitu anak jalanan yang benar-benar lepas dari keluarganya, serta hidup sembarangan di jalanan, atau putus hubungan dengan keluarga karena terjadi kekerasan, dan dishonori keluarga. *Vulnerable to be street children*, yaitu anak-anak yang masih sekolah dan karena ketidakmampuan orang tua untuk membiayai maka dilibatkan untuk membantu orang tua mencari uang. Namun, pada perkembangannya ada penambahan kategori, yaitu *children in the street* atau sering disebut juga *children from families of the street*, yaitu anak-anak yang berasal dari keluarga yang hidup di jalanan, yang memang kedua orangtuanya tinggal dan hidup di jalan.

Tipologi anak jalanan yang tinggal di sekitar Lempuyangan pada saat penelitian sebagai berikut:

<table>
<thead>
<tr>
<th>Tabel 4. Tipologi anak jalanan Lempuyangan</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Anak jalanan</strong></td>
</tr>
<tr>
<td></td>
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<tr>
<td></td>
</tr>
<tr>
<td><strong>Tempat tinggal</strong></td>
</tr>
<tr>
<td><strong>Kekerasan selama di jalanan</strong></td>
</tr>
<tr>
<td><strong>Mekanisme pertahanan diri</strong></td>
</tr>
</tbody>
</table>

Sumber data: primer


Anak jalanan berkelompok tidak selalu berdasarkan asal daerah, asal tempat tinggal, ada pula yang berkelompok karena perbedaan satu sama lain baik dari bahasa, budaya maupun kebiasaannya. Mereka memiliki kesamaan kesadaran berkelompok untuk menghindari dari berbagai ancaman. Di yogyakarta mereka menyebut dirinya “tekyan”.31 anak-anak ini tumuh

31 *Tekyan* adalah anak jalanan yang putus hubungan dengan orangtua (*Children Of The Street*)
dengan gaya hidup yang berbeda dengan anak yang tumbuh di dalam keluarga. Mereka biasa tinggal di tempat-tempat umum seperti stasiun kereta api, kolong jembatan, dan semacamnya. Sebelum memutuskan untuk menetap di satu kota, biasanya mereka menetap untuk sementara waktu di beberapa kota sampai menemukan kota yang dianggap cocok.

Aktivitas anak jalanan setelah bekerja di jalanan, mereka berbagi penghasilan yang telah terkumpul dan dibagi rata dengan anggota kelompoknya, walau tak jarang ada yang melakukan kecurangan, tidak menyetor semua penghasilan. Penghasilan tersebut selain untuk mencukupi kebutuhannya, digunakan untuk membeli rokok, lem "aibon", bahkan untuk membayar pelacur jalanan. Bagi anak jalanan merokok dan "ngelem" menjadi hal yang "lumrah", namun kebiasaan bermain dengan pelacur jalanan karena pengaruh teman-teman jalanan yang usianya lebih tua.


**IV. KESIMPULAN DAN REKOMENDASI**

Dari hasil penelitian yang sudah dilakukan dapat diungkapkan temuan tentang perbedaan solidaritas yang ditemukan dalam anak jalanan dengan solidaritas mekanik Durkheim. Solidaritas anak jalanan antar kelompok lain terjadi ketika mereka menghadapi penindasan seperti, razia, pembersihan suatu daerah atau tindak kekerasan yang dilakukan oleh kelompok lain atau kelompok dominan atau penguasa. Solidaritas anak jalanan Lempuyangan merupakan ikatan yang terjalin dalam kelompok sebagai bentuk perlawanan terhadap aparatur preman yang setiap saat mengancam kehidupan mereka di jalan. Solidaritas sebagai kesadaran anak-anak jalanan untuk bersatu, berkelompok dan melawan rasa takut akibat keterpaksainan hidup di jalanan. Selain itu mereka selalu dihantui berbagai ketakutan dan kecemasan selama di jalan. Ikatan solidaritas pada anak jalanan terbentuk sebagai salah satu upaya untuk meredam pertentangan dan pengasanan oleh masyarakat umum. Konsep kesadaran bersama (common consciousness) merupakan hasil keyakinan dan perasaan dari seluruh anak jalanan.

Solidaritas anak jalanan terbentuk berdasarkan atas kepercayaan dan setia kawalan atau conscience collective yaitu suatu sistem kepercayaan dan perasaan yang menyebab merata pada semua anggota kelompok. Anak jalanan di Lempuyangan memiliki individualitas rendah sehingga mereka selalu dalam satu ikatan kelompok, karena dilumputkan oleh tekanan sangat besar untuk konformitas. Solidaritas sosial anak jalanan menunjuk pada satu keadaan hubungan antara individu dan kelompok yang berdasarkan pada perasaan moral dan keyakinan yang dianut

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bersama yang diperkuat oleh perasaan emosional bersama. Solidaritas anak jalanan terjalin bersifat fungsional melalui interaksi sosial dan pergaulan di jalanan, untuk mempertahankan hidup dan berbagai ancaman kekerasan baik yang dilakukan oleh sesama anak jalanan, aparat, keluarga maupun masyarakat. Solidaritas terbentuk akibat berbagai ancaman yang senantiasa terjadi dalam proses perubahan yang ditandai oleh pertentangan terus menerus antara anak jalanan sebagai subordinasi dengan kelompok superordinasi yaitu anak jalanan yang lebih berkuasa, preman maupun aparat. Ikatan solidaritas antarkan jalanan akan semakin kuat apabila berbagai ancaman sering kali mengancam keberadaan mereka.

Ikatan solidaritas anak jalanan dapat dihancurkan melalui penerapan hukum atau peraturan dan pengawasan yang dilakukan oleh panguasa-penguasa di kawasan tersebut. Ikatan solidaritas anak jalanan dapat begitu mudah dihancurkan oleh tekanan penguasa melalui berbagai peraturan dan pengawasan yang ketat, sehingga anak jalanan tidak lagi berada di kawasan tersebut. Hal ini terjadi di kawasan Lempuyangan pada saat sebelum renovasi banyak sekali anak-anak jalanan yang tinggal dan hidup di sekitarnya, setelah terjadi renovasi dan terbangun peraturan baru dan pengawasan yang ketat, keberadaan anak jalanan menghilang karena mereka berpencar dan bergabung dengan anak lain di tempat lebih aman yaitu tempat yang peraturan longgar dan tidak ada pengawasan ketat.

Ikatan solidaritas dapat digunakan untuk penangan anak jalanan, dan memerlukan usaha terpadu oleh pemerintah maupun masyarakat. Salah satu ikatan solidaritas yang dapat dijadikan model penanganan dengan memberi pendampingan terhadap anak jalanan yang dijadikan contoh bagi anak-anak jalanan lain. Pendekatan yang integral yaitu penanganan terhadap anak jalanan berbasis pada perubahan perilaku melalui penguatan kapasitas pendamping, pendekatan outreach atau penjangkaun, drop in centre atau jalanan merupakan pusat penanganan anak jalanan. Ikatan solidaritas anak jalanan dapat dimanfaat sebagai upaya pelaksanaan reintegrasi bagi anak jalanan untuk kembali pada lingkungan keluarga, sekolah dan tempat kerja dengan melibatkan seluruh komponen masyarakat serta upaya pencegahan atau upaya preventif terhadap anak jalanan agar tidak kembali hidup di jalanan. Karena pada dasarnya anak jalanan adalah anak yang memiliki karakteristik tertentu, rentan terhadap penelantaran dan penyiksaan fisik dan seksual dan perilakunya dipengaruhi oleh sesama anak jalanan di kelompoknya. Upaya melindungi anak jalanan dengan menekankan agar tetap dapat hidup, tumbuh dan berkembang sesuai dengan UU No. 23 tahun 2002 tentang perlindungan anak.

1. Rekomendasi ini ditujukan kepada kementerian sosial, kementerian negara pemberdayaan perempuan dan perlindungan anak, dinas sosial provinsi hingga daerah, pemerintah daerah dan kepolisian, terutama dalam penyusunan kebijakan, strategi, dan perencanaan program yang menyangkut anak jalanan.

   a. Memberi pelayanan dan perlindungan terhadap anak-anak jalanan secara berkesinambungan yang dilakukan oleh stakeholders (pemerintah, lembaga swadaya masyarakat, maupun masyarakat) peduli terhadap anak jalanan yang dapat dijangkau, serta terwujudnya kepastian hak anak untuk mendapatkan pendidikan, kesehatan dan hidup tumbuh dah berkembang bagi semua anak jalanan.

   b. Membentuk pusat pelayanan terpadu bagi anak-anak marjinal termasuk anak jalanan yang memiliki akreditasi dan ditunjang oleh tenaga profesional pekerja sosial profesional yang mampu melaksanakan pendampingan terhadap anak-anak jalanan hingga mereka dapat mandiri dan terbebas dari berbagai ancaman. Meniadakan anak jalanan (abolisi) di seluruh kota-kota besar melalui, pemberian jaminan sosial dan pelayanan kebutuhan dasar, pendidikan, kesehatan dan tumbuh kembang anak, karena anak jalanan mempunyai hak untuk tumbuh dan berkembang secara sehat dan wajar baik jasmani,rohani maupun sosial.
c. Menangani anak jalanan melalui reintegrasi keluarga yaitu anak jalanan dikembalikan kepada keluarga, kerabat, atau panti yang menerapkan nilai-nilai keluarga agar mampu hidup tumbuh dan berkembang dengan baik. Reintegrasi bidang pendidikan yaitu dengan mengembalikan anak jalanan ke ruang pendidikan baik secara formal, non formal maupun informal agar mendapatkan pengetahuan dan keterampilan life skill yang berguna bagi kehidupannya. Anak jalanan agar dapat membantu orang tuanya dapat melalui reintegrasi kerja, memberi kesempatan kerja bagi anak-anak tanpa membebani anak dengan waktu dan tenaga berlebihan sehingga anak dapat beraktivitas dalam kehidupan sehari-hari seperti bersekolah dan bermain sesuai dengan usia anak.

d. Mendirikan rumah pelayanan terpadu bagi anak-anak yang terlantar, mengalami kekerasan, maupun anak yang tereksploritasi di setiap kota besar, dengan mendirikan shelter/tempat singgah, maupun pengaduan bagi anak-anak yang mengalami tindak kekerasan yang mudah diakses oleh anak-anak jalanan. Selain itu perlu diadakan pemetaan anak jalanan diseluruh kota besar oleh pemerintah yang dibantu oleh lembaga swadaya masyarakat, agar mengetahui permasalahan yang dihadapinya, akan memudahkan penanganannya seperti: memberi jaminan perlindungan sosial (social protection) dan jaminan agar anak jalanan mampu memenuhi kebutuhan dasar, akses mendapat identitas, sehingga dapat meningkatkan kualitas hidup dan melindungi diri dari situasi-situasi yang eksploitatif dan membahayakan.

2. Rekomendasi bagi komisi nasional perlindungan anak (komnas pa), lembaga perlindungan anak (Ipa), Ism peduli anak, lembaga penyedia layanan bagi perempuan & anak korban kekerasan.

a. Melakukan advocacy melalui relasi yang baik antara pihak-pihak yang bertanggung jawab atas anak jalanan, yang bertujuan mengubah kebijakan agar anak jalanan mendapat perlindungan dan jaminan sosial.

b. Melakukan pendampingan (mentoring) terhadap anak jalanan. Pendampingan anak jalanan merupakan upaya mengentaskan agar dapat mandiri serta mempunyai harkat dan martabat sebagai manusia.

c. Selama pemerintah belum mampu secara menyeluruh melindungi anak-anak yang hidup di jalanan maka perlu merevitalisasi rumah singgah.

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I. Introduction

Background and Rationale

Education is important for development of human capacities (Sen 1992, 1996), economic growth (Adeola, 1996), equality (Gradstein, 2003) and social stability (Ritzen, Easterly & Woolcock, 2000). Increased access to education is linked with the promotion of civil society (Walter, 2004) and shows that the government is concerned with the citizens of the country (Thyne, 2006). Notwithstanding all this, it was only in 2009 that India, the world’s largest democracy, enacted the Right of Children to Free and Compulsory Education (RTE) Act, which provides 8 years of elementary education to every child in the age group of 6-14 years in an age appropriate class. An indication of the enormous demand for education today is that over 95% of the 252 million child population in the 6-14 age group (Census 2001) enrolls into schools in India (192 million in class 1 to 8 as per Statistics of School Education, 2007-08). However, the statistics on retention show that 25.09% of these children drop-out before completing class 5, 42.68% drop-out by class 8 and 56.71% of children drop-out of school before completing class 10. In all, 111 million children are out of school in class 1 to 8 in one of the fastest emerging countries in the world (Statistics of School Education, 2007-08).

The cumulative effect of the above is visible in the percentage of youth reaching secondary and higher education, for which there are no constitutional and legal guarantees. According to the National Family Health Survey 3 (2005-06) only 41% of youth in the 15 to 17 years were attending school. Thus more than half of the adolescents in India are school dropouts. School attendance was lower among girls at 34% than boys at 49%. At age 15-19, the girls’ literacy rate lagged behind the literacy rate of boys by 15% (NFHS-3, 2005-06). These disparities are starker with respect to caste, region, community, gender, income etc. leading to sustained marginalization and an inter-generational cycle of poverty.

To make things worse, the violence caused due to the Naxal insurgency and counter violence by the State forces has brought to a standstill the functioning of educational institutions for children and has left a deep impact on the governance and development of many States across the country, so much so that today Naxalism is the one of the most serious internal threats to India’s
national security. In such situations of civil unrest, the educational institutions either do not function; since these are occupied by the insurgents or military/armed forces and sometimes forced to shut down to undermine State authority; or are not accessed by children and teachers due to fear (NCPCR Report 2010; 2012).

Conceptual Framework

While significant research has taken place to determine the effects of civil war and conflict on educational access, achievements, expenditure and enrolment (Buckland, 2005; Lai and Thyne, 2007; Stermac et al 2012) and vice-versa (Ishiyama and Breuning, 2012), the issue remains gravely under researched in a severely affected nation like India. The literature concerning civil unrest and insurgency in the country offers little understanding on how to effectively reduce the impact of civil unrest on children, prevent it altogether and safeguard their right to education, thereby ensuring their effective access to educational institutions. In the field visits conducted by the National Commission for Protection of Child Rights (NCPCR) to the Naxal insurgency affected States in India, it has been seen that in areas of civil unrest children are the worst hit when left without adult protection as well as institutional care and support. Separation from parents during conflict and death of the caregivers during strife and insurgency make children the most vulnerable and their rights are the first to be compromised totally.

Consequently, this paper attempted to find out the means to effectively reduce the impact of civil unrest on children, prevent it altogether and safeguard their right to education. In doing so, it explored (a) the involvement of community in the functioning of educational institutions to ensure that no child was left behind and out of the purview of education, and (b) the role of youth in mobilizing the community and the government to translate emergency relief in to education. This was addressed through:

(i) review and analysis of the work of 100 youths, from low socioeconomic backgrounds from civil unrest affected States, in tracking children, negotiating with their parents, community, teachers and Naxals, and bringing them back to school;

a. study of the impact of this work on the access of children to their fundamental right to education; and

b. exploring the means for institutionalizing, replicating and scaling this work to benefit all children throughout the country by informing the policies, schemes and programmes of the Government of India.

Positive Deviance

The objective of the paper was to understand if the involvement of community and local government bodies through youth participation and mobilization facilitated in harmonizing societies affected by civil unrest by making a claim for education and child rights. It sought to establish that these youths act as a bridge/link between the children and the institutions and work towards reducing the impact of civil unrest on children, preventing it altogether and safeguarding their right to education. They do not set up parallel structures and instead pressurize the State to provide children their basic rights and entitlements. There is no mindless criticism of the State and constant efforts are made to ensure that the government and the community participate as friends in the process of development of children and not as adversaries.

As a result, rather than documenting the barriers to access of children to education, uncommon but successful interventions to ensure access were analyzed using the positive deviance approach. This approach was pioneered by Zeitlin in nutrition research in the early 1990's (Zeitlin 1991) and
has since been successfully employed to address other issues such as health care and maternal mortality.

**Methodology**

The research focused on qualitative analysis and employed a case-study method to enable the youths to divulge the enabling factors and successful interventions associated with the functioning of educational institutions in the country, particularly in areas affected by civil unrest and insurgency, and how these helped overcome the barriers in accessing the right to education.

This further aided and facilitated the review and analysis of the work of the youths and study of its impact on children’s access to education. Existence of educational institutions, involvement of the community in their functioning, location and outreach of these institutions, presence of basic infrastructure (or lack thereof) and so on are the determining factors which were rigorously examined using a qualitative method, given the multiplicity of these factors identified in the child rights discourse.

For instance, according to NFHS-3 school attendance in rural areas was 37% while in the urban areas it was 51%. Presence of basic infrastructure such as trained teachers, classrooms, furniture, functional toilets, drinking water, boundary wall, etc. critically impact educational access of children. In all of its field visits, the NCPCR found that children, especially girls, dropped out of schools due to lack of functional toilets and boundary walls. Further, recent research by the NCPCR (2011; 2012) has shown that the current infrastructure of schools and hostels can only function without any wastage if a groundswell for community involvement and participation is created. This further leads to zero tolerance for children out of school and an urgent need to bring children back to school, revive closed down and non-functional schools and to run these schools to full capacity.

**Qualitative Component**

The qualitative analysis has documented by use of key informant interviews and focused group discussions the role and importance of youth involvement in effective functioning of educational institutions. This helped examine the impact of youth involvement on community mobilization and participation towards effective functioning of public institutions such as schools, thereby ensuring access of children to the same, in civil-unrest affected four blocks of four districts in the State of Bihar. The blocks were selected on the basis of their size, population, language and the severity of unrest.

The qualitative component also included the following in order to gauge the improvement (or deterioration) in the functioning of educational institutions and increase (or decrease) in the number of children accessing these:

- number of schools (ashram shalas, residential bridge course centres, hostels, Kasturba Gandhi Balika Vidyalayas) revived/reopened/strengthened due to the efforts of the youths and the community;
- number and profile of children brought back to school and readmitted/reenrolled;
- number of teachers reinstated/appointed to teacher-less schools; and
- details (profile) of missing children, migrant children and children married and sent to other villages/Panchayats/States.


II. Areas of Civil Unrest – Issues and Interventions

Context

In the recent years, civil unrest in India has taken an unlikely turn and slowly begun to involve women and children in the conflict in ways more than one. These two vulnerable groups are left exposed during an insurgency and their rights, which ideally should be the best protected, are the first to be violated due to the absence of institutional frameworks which could translate State schemes, policies, and programs in to emergency relief. Further, the States affected by unrest in the country are also areas with difficult terrain (hills; dense forests; rivers), are difficult to reach, have poor connectivity and accessibility with the rest of the country, and have inevitably become grey zones facing State deficit. There is limited or zero presence of administrative authorities in such areas and unwillingness on part of the government to put the rights of children first. The issues of law and order and security are given top priority, compromising the rights of women and children. Even when denial or violation of rights is addressed, the rights of children are often clubbed with the rights of women (mothers) and thus their specific needs and entitlements remain unaddressed. (NCPCR, 2011; 2012; 2013)

Displacement of families, forced migration, separation, and loss of livelihoods bring to halt the services meant for children and hamper the enjoyment of their rights, especially the right to education. Schools and hostels are often the only pucca structures (concrete buildings) found in the remotest of areas in the country. Thus occupying these buildings or destroying them undermines the State authority. Destruction of these structures, which are meant to act as safe havens for these children, in the violence by militant or armed forces scars an entire generation of children. In the absence of any institutional framework and emergency relief for them, children increasingly face the risk of joining the workforce since they provide cheap labor, migrating to other States, being recruited by one of the militant organizations, and trafficked and/or sold. Beyond doubt, extraordinary efforts going beyond routine responses are seen as necessary leading to emergency relief for children. However, this emergency relief is seldom perceived as and provided in the form of —education]. The importance of schools, residential hostels, and other educational institutions is undermined by concerns of survival and these institutions are converted in to relief camps, bringing to an abrupt halt the process of education.

Routine of Children in Areas of Civil Unrest

Children affected by unrest lead a precarious life and become a marginalized group, unable to realize their fullest potential. In the absence of safe institutions for them such schools and hostels, they are forced to lead unsafe and often illegal lives. Pushed out of school and anganwadi centre (AWC) these children become available for the labour force and other illegal activities. They join the informal, unskilled or casual workforce where they are rendered invisible and out of the purview of State policies and programs. In India, the RTE Act, 2009 is only applicable to children in the 6-14 age group and children in the 0-6 and 14-18 age groups have no legal or constitutional guarantees for education. Similarly, the Child Labour (Prohibition and Regulation) Act (CLPRA) 1986 prohibits employment of children only in the 6-14 age group and permits the employment of children in non-hazardous occupations in the 14-18 age group. This limited scope and intent of legislative framework in the country reflects the State’s inability to plan for all children and take a rights-based approach.

As a result, out of the 100 million children in 14-18 age group in India, 32 million are employed in the workforce (Census 2001). They work in farms in their villages; in brick kilns, mines and quarries, sweat shops, and construction sites as migrant labour; are trafficked to work as domestic labour in cities; or sold for sex work and substance abuse. Instead of going through a
sturdy process of education through schools, very sizeable numbers of Indian children have been forced into a routine of drudgery and suffering at the cost of realizing their fullest potential. They are gradually edged out of active participation in any production process and economic activity that involves skills and have no claim to any system of security or insurance and thus are unable to take advantage of State programs and policies as well as market interventions. This further perpetuates and transmits destitution and helplessness and leads to the intergenerational cycle of poverty. Ultimately their fate is sealed by their lack of access to education (S. Sinha; G. Wadhwa, 2013).

**The Bal Bandhu Model**

To counter this, the NCPCR initiated a pilot program for protection of rights of children, called the *Bal Bandhu* (friends of children) Scheme, in five civil unrest affected States wherein 200 youths were identified from within the affected communities and employed to work for child rights through community mobilization. These youths (called *Bal Bandhus*) were heroes themselves – they had managed to reach secondary and higher education by overcoming the barriers to access and were an inspiration for the community. The objective of the Scheme was to de-link the issue of protection of rights of children from the violence and unrest in the affected States, mobilize communities to take responsibility of their children by giving them confidence to access the child centric institutions, interact with the government at the local level (block and district) to respond to the demands of the communities, and finally to ensure that children enjoy all their rights and entitlements including the right to education, health and nutrition, protection etc.

<table>
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<th>District</th>
<th>Block</th>
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<td>Bihar</td>
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<tr>
<td>East Champaran</td>
<td>Patahi Block</td>
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<td>Rohtas</td>
<td>Rohtas Block</td>
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<td>Jamui</td>
<td>Khaira Block</td>
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<td>Sheohar</td>
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<td>Sukma Block</td>
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However, slowly it was realized that these youths were not only mobilizing community and creating a groundswell for children’s education, they also took upon themselves to track each and every child in their village, bring her back to school, ensure functionality of that school by negotiating with the military and the *Naxals*, ensure retention of these children and monitor their progress. Alongside, they delivered vaccinations to the pregnant women, got pensions to the elderly and formed child rights forums and committees. Most importantly, they assumed a twofold responsibility – while they built a momentum for the community to raise demands for children’s education, they pressurized the local governments to respond to these demands effectively. But their —role|| remained largely un-documentated, as has been the case of most of
the best performing youth interventions in the country which lack the evidence of youth responses in terms of research and documentation. What thus began as an experiment had the potential for turning into a successful model for the rest of the country to emulate; given it was not a pilot program for a period of three years beginning 2010.

Routine and Activities of Bal Bandhus

It was recognized that the Bal Bandhus were working in extremely difficult circumstances and it was challenging to get people together under such tense conditions. All these were difficult areas to work in, not because of the unrest alone, but because these were remote areas with little/no public transport, minimal power supply and large areas of abject poverty. Also, migration had happened on a large scale from these districts, and many schools, AWCs had become dysfunctional. However, in the midst of such adverse circumstances, the bal bandhus not just revived institutions, they also engaged the community and the officials to work towards children and their concerns. Bal Bandhus acted as eyes and ears of the government. Despite obstacles they did not let their daily work suffer, ensured that children went to school and AWCs and the process of creating a groundswell with respect to child rights gained momentum. They conveyed that their work required a significant amount of love and patience. Their presence, since they were from within the respective village they worked in, positively influenced the attitude of many towards children and the issue of child rights. The following is the gist of activities under the Bal Bandhu program:

- Conducting household survey in gram panchayats in affected block of all children in the 0-18 year age group.
- Monitoring enrolment of children in school, bringing children back to school, verifying attendance as well as absenteeism with the help of the community, petitioning for reinstating subject-wise teachers in schools, and attending block level trainings as well as orientations.
- Visiting schools regularly and getting involved in various activities of children such as games, music, dance etc to develop a bond with them.
- Visiting the parents of out of school children and motivating them to send the child back to school as well as to send the younger children to AWCs.
- Training of gram panchayats on the provisions of the RTE Act.
- Formation of Bal and Balika Adhikar Suraksha Samiti (Child Rights Protection Forums) and encouraging these to make regular petitions on several matters concerning children and their rights.
- Assessment of the functioning of ashram shalas (schools for children from tribal communities) and Residential Bridge Course camps with support from community and through interaction with the functionaries.
- Meeting and working with the health workers and functionaries at the village level.
- Helping the elderly get their pensions.

Bihar

Rohtas – District Profile
Rohtas is one of the top ten districts in the country affected by civil unrest (Ministry of Home Affairs, Government of India). Areas such as Rohtasgarh have a difficult terrain and are covered by thick forests. Most of the villages in and around the area, especially on the uphill, could be accessed only by foot and this explained the lack of government intervention in the area. Villages like Nagatoli and Budhwa were inaccessible and therefore the block and district administration was seldom able to intervene in these areas. Children’s right to health and education was endangered in this Panchayat. For instance, in Kachuar Primary School, there were 92 students while in the Kachuar Middle School there were 111 students. However, both the schools were located on the hill and teacher absenteeism was a major concern. In Tardi, there was no provision for the education of girls.

25 youths who worked as Bal Bandhus and members of youth groups in Rohtas and Khaira blocks each of Rohtas and Jamui districts respectively were interviewed. They started their work at the village level by sensitizing and mobilizing the community. They made sure that children were regularly attending schools so they could learn consistently. Gradually, they formed Mahila (women’s) groups and youth groups.

In the beginning everyone was skeptical about their work. There was a prevalent belief that the government makes schemes and leaves. There was no implementation of these schemes. Teachers charged money for transfer certificates, enrolment, admissions, Independence Day celebrations etc. The Bal Bandhus involved the Mukhiya (village head) and held a meeting with the teachers. Thereafter, the teachers returned the money to the children. This was their first exercise in trust and confidence building of the community.

Slowly, with the help of rallies, nukkad natak (street plays), and awareness campaigns the Bal Bandhus managed to garner support from the community and achieve clarity on the objectives of the Bal Bandhu scheme. This also led to the creation of demands by the Panchayat leaders and members and all the gram panchayats in the block were receptive and responsive to the program. In a recent campaign organized by the Bal Bandhus in the block, 15,000 persons participated and helped spread the message for protection of children’s rights.

**Status of schools and AWCs in Rohtas Block**

*Middle School Rasulpur, Telcup Gram Panchayat – Public Hearing*

All those close to the children – parents, teachers and other community members – were present in the hearing held at Telcup gram panchayat. The participants also included Panchayat members, ward members, members of Bal Mitra Sangathan (child friendly groups), Bal Bandhus and social workers. The panchayat Mukhiya shared that the Bal Bandhu scheme had created a difference and changed the mindsets of people since the Bal Bandhus had managed to reach every household. The gram panchayat had a population of 6000 and due to rampant poverty and economic problems, literacy had taken a backseat. Children worked in nearby forests, collecting and selling lakdi (wood) for datun and other products. There were 6 brick kilns in Telcup and no provision for children who came there with their parents who worked. These children spent 9-10 months in these brick kilns and had no provision for health and education.

The community members, however, unanimously expressed that the door to door survey of the Bal Bandhus had significantly helped in creating awareness and sensitizing the Panchayat about children’s rights. The schemes and entitlements for children, which even the parents were not aware of, were now being availed by them. The program had created spaces for children and their parents to express themselves. For instance, a young girl who had dropped out of school after
class 8 due to her father being unwell joined the rally/campaign organized by the *Bal Bandhus* and got a chance to share her experience with everyone.
Samhota Gram Panchayat

An interaction with the community members of Samhota showed the concern for children and their education amongst the villagers. The Mukhiya revealed that there were 3 schools and 7 AWCs in the Panchayat and it was a model Panchayat with regard to the functioning of these institutions. However, it was communicated that the pupil teacher ratio was skewed as there were 6 teachers for 600 students. The Panchayat had appointed volunteers to teach children and was paying them salaries. Teacher requirement was noted to be a pressing concern in almost all the schools across the State. The representatives of Baknora gram Panchayat present during the interaction divulged that provision of safe drinking water was problematic in the area due to its proximity to the limestone factories. Provision of mid-day meal was also found to be an issue in this Panchayat.

Visit to Middle School Tardi, Rohtasgarh Gram Panchayat

The middle school in Tardi presented a brighter picture of the schools in the area. It had proper classrooms and furniture and children from nearby villages came to attend classes. An RBC for boys was also running in the school. However, there was a shortage of rooms and 2 to 3 classes had to be combined and taken together due to lack of space. The school was located next to a stream and it became risky for children coming from distant villages during rains. An interaction with the school students disclosed that there was a demand for regular teachers, activity teachers as well as computers in the school. It was also pointed out that there was no high school in the vicinity and children had to travel for 3 hours to attend the nearest high school. There was also no RBC for girls.

In the KGBV in Rohtasgarh GP where 32 girls were studying, there was a requirement for teachers. The girls also demanded activity teachers, since they wanted to practice dance and music, computers as well as sports material. The school had no boundary wall and safety of these girls was at stake. Two female Bal Bandhus were staying with these girls to ensure they were safe at night, due to the absence of a warden. There was no appropriate bedding for the girls as well. All of the girls present during the interaction expressed a desire to study further and wanted a conducive environment for the same.

The Panchayat members of Rohtasgarh expressed a lack of education in the area and attributed the same to the shortage of teachers and absence of hostels/residential facilities for girls. They also complained of teachers subletting their contracts in most of the schools in Rohtasgarh and delay in the appointment of teachers in the State of Bihar. Provision of health services was found to be very problematic in the Panchayat. Due to a difficult terrain and absence of a sub health centre there was an urgent need to hold regular health camps and have mobile health clinics in the area. The nearest primary health centre (PHC) was in Rohtas which was quite a distance for the community to travel.

Jamui – Profile of the District

Gram panchayats in Jamui such as Garhi and Goli were difficult to access and as a result had not witnessed significant government intervention. Goli Panchayat shares its borders with the State of Jharkhand, is heavily forested and Naxal affected, has no roads and thus no mode of conveyance for the community. Children worked in forests or migrated to other States due to lack of provisions for them. Health and education situation was dismal in the area.

The district had very few arrangements for the education of girls. There was no RBC for them, as in Bela Panchayat, and enrolment in high school was very problematic, such as in Garhi
Panchayat. As a result, girls were engaged in bidi making, and worked in forests and farms. Many girls dropped out of school due to non-functional toilets and non-provision of water in the school. The Bal Bandhus were increasingly working towards this end through community mobilization, thereby leading to creation of demands by the community for health and educational institutions, and bridging the gap between administration and community such that the government can adequately respond to these demands.

**Status of schools and AWCs in Khaira Block**

**Visit to Middle School Khaira**

In the middle school Khaira over 200 children were present. However, after analyzing the attendance register of class 7, it was observed that there was a high rate of absenteeism in school in the month of November since only 20 out of 78 children were usually present. It was informed that children worked in farms with their parents during these months and hence missed school for many days altogether. Further, an interaction with the students of class 7 and 8 revealed that there was no uniform for boys in these classes, scholarship money was not being appropriately used, toilets were not functional and there was no electricity in the school. The students also demanded sports material, computers as well as regular picnics/exposure visits for them.

**Visit to Bhujayat Village, Goli Panchayat**

The AWC in Bhujayat village was open and fully functional on the day the visit was made. The parents however disclosed that usually the centre was seldom open and there were irregularities in the provision of supplementary nutrition to children. The quality of nutrition was also not found to be good. Similarly, in the middle school in Bhujayat the children complained about the provision of mid day meal. They informed that the quality of food served was not good and the provision was irregular. The cook informed that her and her helper’s salary had not been paid for a year and the ration was irregular.

There were a large number of complaints against the school Headmaster (HM), accusing him of being irregular in attending school and embezzling funds meant for development of school infrastructure. There was a shortage of classrooms and 3 classes had to be taken together in one room. The construction of new rooms had been stopped due to the absence of the HM and missing of funds. The students seemed happy with their teachers but were upset about the non-distribution of uniforms, scholarships and books.

**Garhi Panchayat – Community Meeting**

In the middle school in Garhi, an interaction was held with the students. It was informed that they had not been served the mid day meal since 3 months. The uniforms were not being distributed and the toilets could not be used by the students. The community members reiterated these issues during the interaction held at Panchayat Bhavan (village hall) in Garhi. They emphasized that health and nutrition facilities in and around the area were non-existent as the AWCs did not function most of the days and there were no doctors in the government hospitals.

With regard to the status of education, there was a pressing need to open a high school in the Panchayat. The community members suggested frequent physical verifications by the block and district officials to ensure proper functioning of institutions. They also requested that a circular be sent by the district administration to the school principals, HMs and teachers directing them to announce entitlements of children such as scholarships, uniform money, mid day meal money etc.
During the community meeting with the District and Block officials it was found that not one of the members raised any other issues of concern that they had and were focused on impeccable functioning of schools, AWCs and other institutions for children by the government. All of them unanimously expressed their concern towards health and education of their children. They felt that government alone could make provision of basic amenities such as food, uniform, furniture, toilet etc and such a faith was indeed inspiring to compel the authorities to provide children with their basic rights and entitlements.

**Interventions**

In Tardi, children tended cattle and collected wood from the forests to sell in the markets. The *Bal Bandhus* found that children were enrolled in school but not attending the same. They motivated these children to go to school and due to this the number of children attending school in Tardi rose significantly. In the 11-14 age group there were 50 students who had never been to school. These children were admitted to the RBC. To tackle teacher absenteeism, a meeting was held with the Mukhiya of the village of all teachers and therefore the teachers started attending the school regularly.

In Rohtasgarh, the pupil teacher ratio (PTR) was severely skewed. The school timing was erratic and teachers were irregular. However, after *Bal Bandhus* held consistent meetings with the teachers, they gradually started coming on time and schools started opening timely.

In many villages in Khaira block in Jamui, the *Bal Bandhus* personally ensured that children attended school. For instance, they helped a severely sick girl to resume schooling and similarly motivated a young girl, who had dropped out of school due to her unwell father, to go back to school. In Dungarkola, the *Bal Bandhus* helped enroll 547 children in school and monitored their attendance. 400 children were found to be regularly attending school.

In certain pockets in Khaira, the *Bal Bandhus* ensured the cleanliness of the vicinity and hygiene of the children. After a lot of struggle and a long intervention, parents started sending their children to school in a proper manner and uniforms. They started bathing them and dressing them appropriately for school. The *Bal Bandhus* worked very hard to this end despite criticisms from the teachers, school authorities and often parents.

In problematic panchayats such Goli and Garhi, the *Bal Bandhus* identified and rescued child labour, listed out children migrating to other States and mapped out schools with issues. They shared this information with the administration and helped it carry forward the task of protection of children’s rights.

It was therefore observed that there was an explosive demand for education by parents and children themselves and they were willing to make tremendous sacrifices to access institutions meant for them. The visit to these areas was made with the assumption that the Naxals (Maoists) did not allow these institutions to function or disrupted their regular functioning. However, this was proven wrong. The schools, hostels and AWCs in these areas did not function because they never opened. The school teachers were either absent, on leave, or not appointed owing to State carelessness or sometimes on the pretext of their security, given that these areas were marred by unrest. Same was the case with anganwadi workers and helpers. Thus the presence of *bal bandhus* was a game-changer! They proved these assumptions wrong, motivated and mobilized the communities by holding innumerable meetings, conducted household surveys, tracked every child in the village, and thereby created a groundswell of demands for child centric institutions, especially schools, hostels, RBCs, ashram shalas, and Kasturba Gandhi Balika Vidyalayas (KGBVs).
East Champaran – Profile of the District

There are nearly 40,000 children in the district of East Champaran who were out of school as per the data collected by the Education Department in September 2010. There are 27 blocks, 26 KGBVs (one per block; one to be opened) and 26 RBCs. A household survey is done every 3 years in the 0-4 age group and data is compiled accordingly. SSA officials informed that uniforms as well notebooks and textbooks were provided to children from class 1 to 8. Provision of cycles to both boys and girls in all government schools had led to a significant change as children could now be seen visiting banks and post offices.

However, the Bal Bandhus divulged that headmasters charged money from students for admission and there were problems of casteism, demand for certificates etc with regard to admission in schools. Children therefore were unable to attend school due to these reasons. Those children who started attending school were often not enrolled or registered for want of fees by the teachers and were constantly dissuaded by the teachers from attending school. There was also a dire need of RBC schools in the block as there were close to 3000 children ready to go to school but no facility to bridge them to an age-appropriate class. The bal bandhus suggested that instead of building new RBCs, additional RBCs could be set up within existing schools or non-residential bridge courses could be set up within regular schools. The bal bandhus conveyed that it took them over 15 days to a month to get children back to school and they did not want this motivation to go to waste. Bal Mitra and Bal Mahila Mitra Sangathan (child and girl friendly groups) had been formed in the panchayats to this end.

During the visit to both the districts of East Champaran and Sheohar, where 25 youths each working as bal bandhus and members of child friendly groups were interviewed, the issues witnessed were similar to a considerable extent. A significant number of children (6-14 years) were out of school and engaged in some form of work or other. Younger children had to be left alone at home if parents went to work due to non-functional aanganwadi centres (AWCs).

Status of schools and AWCs in Patahi Block, East Champaran District

Bhagwanpur Village, Barashankar Panchayat – Public Hearing

The Bal Bandhus shared that children in the village mainly used to work in farms and it was after many rounds of interactions with the parents and due to the motivation given to children a positive response had been received from the community and children were now going to school. There were 307 out-of-school children in the Panchayat and 27 out-of-school children in the tola (hamlet). Noorjahan, a member of the Bal Mitra Sangathan, shared that a lot of improvement could be witnessed post the implementation of the scheme. Teachers had started coming to school regularly and children were now provided with dishes other than khichdi such as daal bhaat etc for their mid-day meal. However, there were 27 children out-of-school because there was still no school in the tola and the nearest school was 2 km away.

On the other hand, a few parents revealed that the scholarship money was not reaching children and while the school is till class 8, there were only 2 bhavans with no space and no separate classrooms. Mid-day meals were stored and served in that same space. A representative of the Mahadalit (lower caste) tola revealed that the school in his area charged money for admission, the Headmaster was never present in the school, teachers were irregular, mid-day meal was not served daily and children were reprimanded if they complained against the school authorities. In a nearby school it was found that there was a severe lack of space and classrooms as children belonging to different age groups and classes were made to sit together. An interaction with the parents, especially mothers, brought to light the fact that many children were denied school and
many others dropped out due to non-provision of uniforms, scholarships, mid-day meal, and books, and not due to the civil unrest in the area. A large number of girls were seen to be out of school.

Champapur Village – Community Meeting

In a Sanskrit school in Champapur village, the issues raised were similar. Girl students shared that there was no provisioning of mid-day meal, uniforms and cycles, no other subjects are taught in the school and corporal punishment was rampant.

An interaction with the community members showed the concern for children and their education amongst the villagers. Chunchun Singh, a member of the community, shared that there were 1166 children in school while only 8 teachers. There was no science or math teacher and those who came were irregular. He suggested that the teachers who were doing well should be rewarded and others reprimanded. There should be a mechanism to interact with the concerned government officials directly and the middle men should be done away with. This would bring about greater transparency in governance as presently the funds for the Panchayat disappeared. Teachers and members of Yuva Bal Mitra Sangathan (youth groups) also shared about how they have been creating awareness on the abovementioned issues. They had brought 182 children to school but since these children were mocked in the classroom, there was a need for RBCs.

Visit to Miagachi Village, Bokatikal Gram Panchayat

Chitralekha, a member of the Bal Mitra Sangathan, communicated that there was no discipline in this school, children used to fight amongst themselves and eventually stopped attending school. Teachers blamed the parents for not cleaning and dressing their children appropriately while parents blamed them for not paying attention in the class and often not admitting children to school. There were no separate classes and the all the students used to sit together. It was after a lot of struggle and a month’s intervention by the bal bandhus that separate classrooms were built, parents sent their children to school in a proper manner and the teachers started taking keen interest in class. The Bal Bandhus worked immensely hard to this end despite criticisms from the teachers, school authorities and parents.

Status of schools and AWCs in Tariyani Block, Sheohar District

Kortha Village, Kurupatti Gram Panchayat – Public Hearing

Members of the Bal Mitra Sangathan revealed that AWC no. 44 had no worker but only a helper. The conditions of the schools were no better as the Bal Bandhus were bringing children, engaged in labour, back to school but there was a lack of teachers in general and trained teachers in specific. The guardians joined the Bal Bandhus and shared that either the teachers were absent or engaged in other activities in school while the students created a ruckus. There were 596 students enrolled in the nearest school out of which only 400 attended, with 8 teachers. There were complaints about the lack of trained teachers. The Mukhiya of the village reiterated the facts shared by the Bal Bandhus and also added that no khichdi (mid-day meal) was being served in the school.

The Navaragaon Panchayat Sarpanch cited that the amount of development that should take place in his village is not happening owing to a significant level of corruption. The paushhtik ahar (supplementary nutrition) is not reaching the AWCs and there is no administrative support from the government.
The students of Rajkiya Urdu Matth Vidyalaya (State Urdu Medium School) unanimously stated that they had never been given uniform by the school authorities. They were aware that the uniform money for the current academic session had reached the authorities but was not being distributed to the students. The students were made to sweep the floor of the school on a daily basis. There was no proper seating or furniture in the school and the students were made to sit on the floor, without electricity. The school had no boundary wall and students were free to wander around. The Headmaster was not present in the school. The students complained that the teachers were irregular and the quality of mid day meal was poor. The AWC visited was in a deplorable condition. It was located in a small house and had no provisions.

Key Issues presented

1. **Enrollment in schools** remains a problem – children who have never been to school are either refused admission by the authorities or are discouraged to attend school by the teachers. For instance, out of 1499 students enrolled in a particular school, only 300 were found to be attending regularly. Teachers, even Headmasters, have often also been accused of charging money for admission, demanding certificates and casteism. In other instances, children who were motivated by *Bal Bandhus* to attend school and were doing so regularly, were not enrolled by the teachers. Thus there is an urgent need for schools with Residential Bridge Courses (RBCs). One kilometer norm is also not being applied in a lot of places and students have to travel for more than two kilometers to attend the nearest school.

2. *Bal Bandhus* are adding children to schools but there is a **lack of teachers** as well as classrooms and adequate infrastructure. In all the schools visited, there was a dire need of trained teachers for subjects such as English, Mathematics and Science. Notebooks, textbooks, and uniforms are not being given to students. There are schools where the uniform and scholarship money has reached the authorities but has not been distributed to children. Children are made to sit on the ground, often in one overcrowded room, and without electricity. Toilets are either inexistent or non-functional and children are themselves in-charge of cleaning the school premises. One school did not have a boundary wall and students were free to roam around.

3. While there was no provision of **mid day meal** in one school, it was reported by the community members that the meal provided in another school could not be consumed by children, and they preferred eating outside than in school. However, there was one school where improvement was made and students were fed a variety of food, other than the regular *khichdi*, everyday.

4. An interaction with the students of all the schools visited revealed an alarming incidence of **corporal punishment**.

5. **Disabled children** still face a challenge since there are no special provisions for them to attend school.

6. Aanganwadi centres are either non-functional or in a pitiable state and there is no CDPO (Child Development Project Officer). An AWC had a helper but not the aanganwadi worker.

7. *Bal Bandhus* have often been threatened by the teachers for creating awareness on issues pertaining to child rights and apparently turning children and their families against them.
Interventions

Interestingly, the bal bandhus mobilized the communities in areas of civil unrest not to bring out faults in the government machinery or gaps and issues, but to instill confidence in the parents and children to access institutions meant for them. It was to strengthen democracy and create democratic spaces at the local level for the communities exercise their rights. It was also an effort to ensure that the village bodies (gram panchayats) took responsibility of their children and felt an onus to bring these children out of labour, back from other States, and send them to schools or AWCs. It was only after these institutions were accessed by the local bodies, parents, children, and communities that the gaps were pointed out to the local governments and administrative authorities in the most non-adversarial ways possible.

Thus on one hand bal bandhus motivated children in order to bring them back to school, formed Bal Mitra Sangathan/Committees (child friendly groups), completed household survey in the block, interacted with the parents and Panchayat Samiti in order to persuade them to send children to school, and visited farms and other areas where children worked as labourers. On the other hand, they held regular meetings with the district and block level officers, informed them of the issues at the grassroots, and enabled them to respond better to the demands of the communities.

They also adopted noteworthy strategies to involve both the communities and the government in the process of protection and promotion of child rights. For instance, the Bal Bandhus presented badhai patra (congratulatory note) as well as shapath patra (oath against child labour and violation of child rights) to the winners of the Panchayat elections (in Patahi). These notes were well received by the village heads and ensured their commitment to child rights.

Instead of ringing the bell inside school premises, the teachers in Tariyani block chose a more encouraging and innovative way to call children to school. They reached half an hour before school hours, carried the bell to the village and rang it to ensure every child came to school! As a result, 185 children of the enrolled 223 children began attending school regularly, as opposed to the poor attendance of 16 earlier!

A tola (hamlet) was visited everyday by the Bal Bandhus in order to check on schools as well as on the attendance of children enrolled by them. Owing to these repeated visits, the schools and other authorities were now forthcoming.

It was disclosed that no attention was being paid to AWCs and as a result children lost interest and stopped visiting these centres. The Child Welfare Department office as well as the CDPO office were closed and reopened only after repeated efforts by the Bal Bandhus. The Bal Bandhus then also conducted a house to house survey to ensure that women received vaccination.
The most interesting fact about Patahi block was that the *bal bandhus* prepared 18 registers to ensure that every child was tracked in the 15 panchayats where the Scheme was functional. These registers were regularly maintained by the headmasters and the *bal bandhus*:

i. For complaints concerning schools and anganwadi centres.

ii. For children going to anganwadi centres (AWCs).

iii. For pregnant and nursing mothers

iv. Containing details of children who have continued with their education after finishing classes 5th and 8th.

v. Containing details of children not going to school and children with disability/special needs.

vi. Containing details of children in the panchayat who are presently studying in classes 5 and 8.

vii. For *baal sansad* (children’s parliament) and *meena manch*.

viii. For bal mitra and women mitra groups.

ix. Containing details of children enrolled.

x. Containing details of children with malnutrition and severe malnutrition.

xi. Containing details of children who dropped out of school after finishing classes 5, 6, 7 and 8.

xii. Containing details of children not going to anganwadi centres.

xiii. For children between the ages of 0 to 6 years in the panchayats.

xiv. Containing details of children studying in classes 1 to 8, in all schools of the panchayats.

xv. For weekly visits to the model school.

xvi. Containing details of children studying outside the panchayat.

xvii. For follow-up of children (who have been long absentees).

xviii. Containing details of meetings conducted.
III. Achievements

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<td>Community Meetings held</td>
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</tr>
<tr>
<td>3</td>
<td>Meeting held with Block Level Officials</td>
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<td>4</td>
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<tr>
<td>5</td>
<td>Children enrolled in School</td>
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</tr>
<tr>
<td>6</td>
<td>Schools made functional</td>
<td>963</td>
</tr>
<tr>
<td>7</td>
<td>Aanganwadi Centres made functional</td>
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</tr>
<tr>
<td>8</td>
<td>Children enrolled in Ashramshalas/RBCs/KGBV</td>
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</tr>
<tr>
<td>9</td>
<td>Schools vacated by police/armed forces</td>
<td>7</td>
</tr>
<tr>
<td>10</td>
<td>Children contacted for support during final exams</td>
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</tr>
<tr>
<td>11</td>
<td>Children tracked and restored to families</td>
<td>400</td>
</tr>
<tr>
<td>12</td>
<td>Rallies, Marches held</td>
<td>389</td>
</tr>
<tr>
<td>13</td>
<td>Orientation on RTE</td>
<td>861</td>
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IV. Success Stories

Closure of Ashram School in Kamangad- Dhanora Block, Gadchiroli District, Maharashtra

The aided ashram school in Kamangad village of Dhanora taluka (block) was being run by a private trust since December 1992 and classes were being held till class 10 with nearly 363 children attending the school. It was in 2009 that the situation of the school deteriorated and a show cause notice was served to the school management by the Tribal Development Department for not providing basic facilities to its students. The management could not provide food as well as proper hostel facilities to the students and therefore the school could not reopen for the academic session of June-July 2011.

The trust was given permission by the Government of Maharashtra to close the ashramshala at Kamangad and shift it to Kurkheda, a village nearly 100 km away from Kamangad, since 1 July 2011. The gram panchayat at Kamangad passed a resolution against shifting of the ashramshala to Kurkheda and for its continuance in the same village. The community too had been protesting the shifting of the school 100 km away from the village since it would have become very inconvenient and impractical for children to go that far. Also, children not only from Kamangad but also from nearby villages attended this ashram school and these areas were dominated by the tribal population, thereby making an ashram school in the area essential. In spite of appeals made by the gram panchayat and the community, the ashram school was allowed to be closed in Kamangad.

It was found that all children who had been pushed out of this school were working as agricultural labourers and on the verge of going into other dangerous paths. It was also found that the parents in Kamangad and all the surrounding villages were anxious about their children’s education and each one of them voiced the importance of education for tribal children.
There were two school teachers who persisted in continuing the school and thus about 80 children from Kamangad and neighboring villages attended the school. Theses school teachers were never paid their salaries by the trust for 3 years and in spite of it they had not given up on teaching children.

During a public hearing with the District and State officials, it was found that not one of the community members present raised any other issues of concern that they had and only focused on reopening of the school by the government. All of them unanimously expressed that the closed down ashram school in Kamangad village should be taken over by the government and revived immediately. Since the school had been shut since the beginning of this session, children had not been able to study and were working as agricultural labourers in fields. Interestingly, the villagers had donated the land for school as well as given grains for food to the school administration during crisis.

The parents and guardians of the children, especially mothers, reiterated that they won’t send their children to school if it is shifted 100 km away from Kamangad to Kurkheda. They all wanted the government to take over this school. An old grandparent conveyed that 3 of his grandchildren had passed out from this school and 3 others were still enrolled and waiting for their education to be completed. He described the present condition of the school as pitiable. He also exposed that 5 students from the school have been abducted by the management, perhaps to Kurkeda and their whereabouts are still not known.

The school alumni revealed that the school has good teachers and should be reopened in its present premises. A Panchayat Samiti member expressed that this ashram school has led to the development of not only children but also of their families. Earlier children as well as their parents could speak only the Gondi language, but now they can also speak Marathi. The students of the school were saddened by its closure and the girls from class 10 disclosed that they now work in fields for sowing and receive Rs 30 per day. They wanted to study and demanded that the school be reopened immediately. They made a plea that the school be taken over by the government.

The teachers working in the school for the past four years revealed that they had not been paid their salary for three years but they still continued to teach children despite the closure of the school.

The demand for the revival of the ashram school and for its takeover by the government was unanimous by the community. They felt that government alone would make provision of basic amenities such as food, uniform, furniture, toilet etc which the previous school administration failed to do. Such a faith in the government was indeed inspiring that could compel the authorities to provide school to these children. Education is now a fundamental right of all children in the country and has to be enjoyed by every child, everyday of her life.

Subsequent to this hearing it was informed that the school was brought under the control of the Department of Tribal Development, Government of Maharashtra and that the Tribal Development Inspector, Project Office Gadchiroli was given charge as Administrator under Ashram School guidelines Rule no. 2.5 (2) and 2.9 till the end of the academic year in order to prevent further damage to the education of tribal children.

“Community reposes faith in the Government”: Bal Bandhus, Sukma Block, Sukma District, Chhattisgarh

The security of teachers was cited as one of the reasons for closing down schools in the interiors of Sukma block and for shifting children to the schools in the exteriors. The samiti members
divulged that the guruji (teacher) had a lot of respect in the panchayat and the entire panchayat ensured her/his security. For instance, in the Koyabekur gram panchayat, the teacher had to travel a long distance from either Kota or Kerlapal and inevitably got delayed to reach school. On finding this out, a house was built for him by the community members within 15 days and now he permanently stays there, doesn’t leave even during holidays!

The Bal Mitra Samiti Adhyaksh of the Burdi GP shared about the water problem at the porta cabin school wherein children had to take their utensils to the nearby pond to wash. Also, no doctors were available in this panchayat and as a result children suffered. While there were seven PHCs near the gram panchayat, the doctors stayed there from only 10 am to 12 pm and left thereafter. Written complaints and petitions were given to the administration but no action had been taken. In one of the government hospitals, the doctor was found to be charging fees for the medicines on a false pretext. The bal bandhus informed the community about this malpractice, mobilized the panchayat and ensured that treatment and medicines were given free of cost.

The bal bandhus and the samiti members revealed an interesting fact – they asserted that the demand for replicating the Bal Bandhu program in other blocks in the district was slowly being raised by the community owing to the positive outcomes of the scheme. After consistent and repeated efforts, the parents, community, sarpanchs and the panchayat members had started responding and taking ownership of the provisions meant for their children in the block. The children were coming to schools and AWCs and sometimes due to the lack or absence of infrastructure dropping out and joining the workforce, raising serious questions about the response of the government. It was thus upon the State and the administration to timely and effectively respond and assure the community of action.

V. Policy Recommendations

A number of core areas of concern were found which require comprehensive strategies, strong, time-sensitive implementation plans and convergence of departments (such as Health, Education, Rural Development, Panchayati Raj, Tribal Welfare, among others) to ensure protection of rights of children and their families, along with successful implementation of schemes such as the Bal Bandhu Scheme. To this end, the State and District Administration should have taken support from the Bal Bandhus who were already working extensively at the grassroots level and acted as ‘eyes and ears’ of the government.

1. Role of local bodies

   - Every gram panchayat should have a list of all children in the 0-18 years. They must also have knowledge of all the educational interventions that children could avail of as well as other child centric institutions in the block, district and State.
   - The Shiksha Samitis (education councils/forums/committees), comprising the community members, should be involved in the functioning of the schools and AWCs.

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33In the Bal Bandhu program of the NCPCR in the areas of civil unrest, children are being tracked by the local community and gram panchayats and brought back from across States to their villages. They have shown that if trust and faith is reposed in the community they can take care of their children. After such children have come back to their families, getting support from the system for such children to enjoy their entitlement to education, health, nutrition has been a herculean task. (Annexure for details)
2. Comprehensive data on all children
   - A proper survey should be conducted to ascertain the number of children, with information regarding school-going children, out-of-school children, drop-outs, and child labourers as well as number of functional and non-functional AWCs, and children accessing AWCs.
   - Similar information should also be collected for other vulnerable groups of children, such as handicapped children, who require special provisions to enable them to attend AWC or school.
   - The local bodies should be involved in the collection of such data.
   - The District Administration should comprehensively use this data in its planning.

3. Teacher Training/Orientation and RBCs
   - A letter from the DEO (District Education Officer), explicitly stating the RTE Act as well as Rules, should be sent to all the schools and their Headmasters (HMs) and should be circulated amongst teachers. Training should also be organized for the HMs and teachers to orient them with the Act, in order to address the issues such as denial of admission to children and corporal punishment.
   - Physical verifications should be conducted to find out the reasons for bogus enrolment in schools and new strategies need to be devised to ensure teacher regularity as well as retention.
   - Since there is a large number of children who are out of school, either drop-outs or never been to school, an RBC centre should be set up per cluster where these children could be easily enrolled. Existing schools, with extra space and fewer students can also be converted into RBC centres by adding a floor or two to them.
   - Non-residential bridge courses should be started within the regular schools.

4. Strengthening of School Infrastructure
   - Students should be able to study all the subjects in school and their inability to do so should not be attributed to the lack of trained teachers. Trained and competent teachers for respective subjects should be appointed in schools suffering from a lack of teachers at the earliest possible instance.
   - The DEO should regularly inspect the schools and enquire if the students have received the textbook, notebooks, uniform, scholarship money and other entitlements due to them and should report this information to the District Magistrate/Collector.
   - Every school should be a child-friendly setting and should not lack basic infrastructure such as classrooms, tables, chairs, functional toilets (separate for girls and boys) and electricity. In overcrowded schools, a floor or more should be added to build classrooms and accommodate all students class-wise. Regular inspections and physical verifications should be made to ensure that children do not lose interest and drop out of school owing to any of the abovementioned reasons.
   - One kilometer norm should be strictly adhered to and children should not be compelled to travel lengthy distances for education.

5. Provision of Hostels
   - The training material being used in RBCs for special training of older students for age-appropriate class should be up to date to ensure complete bridging of gaps of the students.
6. Review of AWCs

- A systematic assessment of all AWCs should be done in both the blocks to ensure that these centres function fully, provide nutritious and good quality food as well as pre-school education to children and are not understaffed. CDPO as well as aanganwadi workers and helpers should be appointed wherever necessary.
- Defaulting AWC staff should be warned and strict treatment should be meted out to them in case of repeated complaints by the community.
- There should be a weekly Panchayat level review meeting with the AWW and the helper with regard to the functioning of the AWCs.
- Petitions regarding opening of new AWCs should be reviewed periodically as well as addressed. The non-functional AWCs should be reopened with immediate effect.

7. Review Mechanism

- Since the Bal Bandhus mapped out each and every child, household as well as gram panchayat, the District Administration should make use of their information in its planning. A review meeting should be held with the community members reassuring them of the progress of their petitions.
- A review meeting should be held at every level – Panchayat, Block and District – involving the Sarpanchs or Panchayat members and the concerned officials, whereby certain major issues can be presented from the community for the administration to take action.

8. Bal Bandhu

- The Bal Bandhu program should be extended and expanded to neighboring blocks to replicate the success of the scheme
- The State should help the bal bandhus complete their higher education and provide them with opportunities such as scholarships towards this end.

9. Others

- Trainings should be organized for Bal Mitra Sangathans involving teachers, aanganwadi workers and helpers, Panchayat members, ward members and other members from the community to orient and sensitize them on the various aspects of child rights.
- There is a major problem of agents in almost every Panchayat – children are picked up by certain agents and sent to cities such as Delhi, Mumbai etc to work as child labourers. Strict action should be taken against these agents.

VI. Conclusion

As evident from the Bal Bandhu program, the youths play a significant role in the strengthening and deepening of democracy in a country like India. They have created a cadre of young people who are willing to work for the development of the country through the processes of social mobilization. These youths mobilize the community, instill confidence to access institutions, point
out the gaps in access, and act as a link to bridge these gaps through interactions with the governments. With regard to ensuring children’s access to their fundamental right to education, these youths focus on creation of democratic spaces and a dialogue between the community and the government in a non-adversarial, non-confrontational, and a non-intimidating way. This further enables trust of the community in the system and faith in the workings of the government. The youths such as the bal bandhus have employed the child tracking systems in areas of conflict – one of the key objectives of the 12th five year Plan in India. They have called for and ensured multi-sectoral action – involvement and convergence of functionaries from every department from the local to State and National level. While children in areas of civil unrest face the risk of being recruited by bal sanghas / bal morchas, the bal bandhus have provided a compelling alternative in the form of access to schools and education. Such programs also help the governments in their perception management. There are no separate cadres of youths or youth volunteers which work exclusively for children and their access to rights and entitlements. Thus, creation of such a cadre by using the energies of the youths becomes important. Since the Bal Bandhus are youths from within the community where they work, they are able to win the trust and confidence of the parents, teachers, panchayat and ward members, and reach areas which otherwise remain inaccessible to the block and district administration, giving them certain credibility and advantage. The youths thus act as eyes and ears of the government and the administration and facilitate work in difficult, inaccessible areas, especially for ensuring access of children to their right to education.

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Recognizing Children’s Contribution to Care Work at the Household: The Potential Role of Social Protection in Maintaining Child’s Right and Wellbeing

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Abstract

For most societies, children involvement in care work (including unpaid care work) and to some extent in community work is considered normal and has become a common practice until now. The care work in form of household work carried out by children often seen as child devotion to their parents. Children accounts for 37% to total Indonesia population and as much as 8.2 million (9.81%) of the children are those involved in doing care work at household. Disproportional care work responsibility occurs between boy and girl. Among children involved in care work, 69.89% of them are girls while boys are only 30.11%. Furthermore, among the children involved in care work, more than 70 thousands of them are those working as domestic helper at home which most of them are girl. Based on age category, older children appeared doing care work more than the younger ones. Recent national socio economic data shows that children involved in care work activities are mostly from 14 - 17 years age groups. Children involvement in doing care work bring important contribution to family welfare. Having children doing domestic chores, minding younger siblings, helping parent cooking for family member have saved the household from expenditure in providing such service while at the same time made the other family member—the adult able to do economic work and making money. Article 32 of the UN Convention on the Right of the Child stipulated that there is no prohibition for children help out their parents at home as long as in ways that the work do not harmful to their physic (health), mental, social development, and interfere to their education. However, in practice, disproportional burden of care work responsibilities could jeopardized children’s right in attaining education—especially for girls. Doing housework and paid work have made children losing their leisure time, made them deprived from non-material well being. The drudgery in care work has made children did not have time to take a rest and felt exhausted. Some other domestic work also put children in unsafe condition. Using quantitative and qualitative approaches, this paper aims to describe the condition of children that are doing care work including (unpaid) caring activities, and see how it will affect their wellbeing and fulfillment of their rights. The quantitative data analysis is conducted by cross-tabulating data derived from the latest national socio-economic survey (SUSENAS) year 2011 and the qualitative data is deducted from findings from various SMERU’s study that are related to children issues.

Keywords: children wellbeing, child rights, (unpaid) care work, care diamond, child protection
Introduction

For most societies, children involvement in household care work (including unpaid care work) and to some extent in community work is considered normal and has become a common practice until now. The ILO seen household chores undertaken by children in their own homes as something positive and as an integral part of family life and of growing up, as long as it conducted in reasonable condition, and under the supervision of those close to them.\(^{34}\) For most families children involvement in household care work is regarded necessary in the development of a child; socially, physically and emotionally, as something that they need to become an adult. Furthermore, it also contributes to the wellbeing of the family, as shown by study of Rama, Sharma and Linda M. Richter (2007). In Indonesia, there are approximately 8.2 million children (9.81\% of the children population) that are involved in doing care work at household. Most of them are those who spent most of their time at school while doing household care work out of school hours. However, there are other group of children devoted most of their time for doing household care work at home and even devoted themselves as fulltime home maker. There are also another groups of children facing double and even multiple burdens from the obligation in doing combination of household care work, schooling, and working. Accordingly, when the work load become too excessive and interfere with children's right such as on education, or even put them in hazardous condition, therefore it might be tantamount to child labour.\(^{35}\) A paper investigated the effects of girls' work on their school attendance in Egypt by Ragui Assaad, Deborah Levison, and Nadia Zibani (2010) found that substantial burden of girls' domestic work leads to lower rates of school attendance.\(^{36}\) Regarding the concern on gender aspect of intra-household care work distribution, at household level the burden of care work often fall upon those who have less choice and less decision-making power (Orozco, 2009), which most of them are women and girls.\(^{37}\) In Indonesia, among children involved in household care work, 69.89\% of them are girls while boys are only 30.11\%.

Despite the benefit it brings, it is also necessary to really look into that practice as most of the time the work done by children is undermined by other people even by family member, and there is concern that children contribution might bring unintended impact on their wellbeing and will further deter the fulfillment of their rights. Concerns are more obvious especially for children from poor family and during economic crises, as their contribution might be higher than children from families at higher income level.

The existing social protection schemes such as PKH (conditional cash transfer), BOS (school operational assistance), and Jamkesmas (public health assurance) have put children as the beneficiaries and aimed to guarantee children rights to access health and education services. However, there are no scheme or programs yet to address intra household problems including disproportionate burden bear by children involve in unpaid domestic housework. Failure to address this will put children at risk in their development process.

Based on that, this paper aims to describe the condition of children that are doing household work including (unpaid) caring activities, and see how it will affect their wellbeing and fulfillment

\(^{34}\) International Labor Organization (ILO), as retrieved from: http://www.ilo.org/ipec/areas/ Childdomesticlabour/lang--en/index.htm

\(^{35}\) Ibid.


\(^{37}\) as cited from Unpaid Care Work in Indonesia, SMERU Research Institute (2012)—forthcoming publication.
of their rights. First, the paper will explore children contribution in the household work; what kind of work they are doing, especially related to unpaid care work, the time allocated for that activities and the likely impact of doing that work to their wellbeing. This paper will also highlight the potential role of social protection in maintaining child’s rights and wellbeing in such circumstances.

**Literature Review**

As mentioned earlier, children contribution to household care work could be problematic. In one hand, it certainly contributes to family wellbeing, but most of the time it failed to be recognized by other family member. Regarding the impact of that work to children, a study by Rama S and Linda M Richter (2007) showed that children’s time devoted to do the house work sometimes made them often deprived of the chance to play and make friends, and are vulnerable to verbal, physical and social abuse.

The issue becomes more problematic because it adds up to the existing debate about ‘unpaid care work’. This kind of work, previously known as ‘reproductive work’ though important, also has been neglected by development practitioners, even among feminists and gender activists, thus never reached into development agenda. As Eyben (2012) mentioned that this happened partly due to its invisibility, long nature of neglected due to social and political agendas behind it. Only recently that there are efforts to bring back the issues of unpaid care work into the development agenda (IDS, 2012); yet attention or focus on children’s involvement in that type of work is still limited.

In many societies, especially those keeping hold traditional norms, unpaid care work in form of household work carried out by children often seen as child devotion to their parents. Performing household work also perceived as a good way in training children to work and to becoming responsible person that will be useful for their future. Article 32 of the UN Convention on the Right of the Child stipulated that there is no prohibition for children help out their parents at home as long as in ways that the work do not harmful to their physic (health), mental, social development, and interfere to their education.

Relating to the concept of wellbeing, it includes aspects such as material and immaterial such as relational and subjective. Child material wellbeing could be determined from their education and health status. While child relational wellbeing could be determined from their relation with other family members. As for child subjective wellbeing, could be determined from their hopes, fear, and aspiration (Sumner, et all, 2012) In a more dynamic term, wellbeing is a combination of: what a person has, what a person can do with what they have, and how they think about they have and can do (McGregor, 2007). Since the concept of wellbeing are not limited to material aspects, doing the unpaid care work to some extent could also impact child’s non material wellbeing, including feeling discontent and emotional dissatisfaction in the long term.

Further on the wellbeing concept, Eyben and Fontana (2011) stated that wellbeing of some may be at the cost of wellbeing for others—often the powerless and vulnerable. In the context of children doing the housework, sometimes it makes children in powerless position, especially girls, as the work distribution is disproportional towards them. Girls tend to have more work, usually inside the house – compared to boys. Boys also generally have more autonomy than girls as mentioned by Boyden and Levinson in Rama S (2007). Elder girls often put in the second position—after mother, as the most responsible person in doing unpaid care work. It often found that children do multiple works, for example mind their younger sibling, perform other domestic chores, and even perform out home paid work while still enrolling in school. Those activities that
often taken as daily routine, are possible to lessen their leisure time, making them losing opportunity in social activities even reduce their performance at school. Some other house work requires physical effort, such as fetching water to distance place and cooking with firewood, even put them in hazardous condition that will jeopardize their material wellbeing in term of health condition.

Data and Methodology

To achieve the above objectives, this paper will present a combination of quantitative and qualitative data analysis. The quantitative data analysis is conducted by cross-tabulating data derived from relevant national statistical data set—the latest national socio-economic survey (SUSENAS) year 2011. The definition of child care workers were based on the data of household members’ activities during the past week, that may including home making activities or the combination of home making activities with working and schooling. Since the data on household members’ activities only covered household members aged ten and above, the data of children doing unpaid care work employed by this paper are those children aged 10 to 17 years, while children aged below 10 years old data employed in this paper were only those the domestic child worker. 38 We considered to include the data of domestic child worker regarding it as under paid work. The qualitative data is deducted from findings from various SMERU’s study that are related to children issues, among others are: exploratory study on impact of conditional cash transfer program with child labor component support in 2011; qualitative part of child poverty and disparity study in 2010; preliminary study on unpaid care work in 2012; and food price volatility study in 2012. Qualitative data and information were collected using qualitative techniques including participatory assessment, through in-depth interviews, focus group discussions with groups of adult and children from various welfare groups, and researchers’ observation. Information acquired from the case study sites were analyzed through a process of triangulation by consolidating and comparing all the findings to get a complete and consistent picture.

Findings

In Indonesia there are approximately 95.8 million people (around 39.86% of its total population) involved in care work activities at household. Children accounts for 37% to total Indonesia population and as much as 8.2 million (9.81%) of the children are those involved in doing care work at household. Disproportional household work responsibility occurs between boy and girl. Among children involved in household work, 69.89% of them are girls while boys are only 30.11%. Furthermore, among the children doing household work, more than 70 thousands of them are those working as domestic helper at home which most of them are girl. Based on age category, older children appeared doing household work more than the younger ones. As shown by following table, most of the children doing household work are girls from 17 years old age group. The figure also shown that only 0.02% of children aged 0-9 appeared as doing household work. However, the number could be underestimated since the data only covered those working as domestic child worker. Thus, the total number of children aged 0-9 involved in doing household work could be more than what appeared in the calculation.

38 in Susenas, domestic worker are considered as household member
Table 1. Children Doing Household Work by Age Group, 2011

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Note: as percentage to total number of children doing care work

Household Care Work and Children Schooling

Schooling has been major activity for many children in Indonesia and anywhere else in the world today. Proving a progress in achieving the second goal of Millenium Development Goals (MDG’s) in providing basic education for all, the Government of Indonesia continue its effort by promoting nine years compulsory education for all. As reported, the primary school net enrolment rate (NET) improved from 88.7% in 1992 to 95.23% in 2008/2009 while the gross enrolment rate improved to more than 100% respectively. For the junior secondary education, the NER improved from 42% in 1992 to 74.5% in 2008/2009, the GER improved from 55.6% in 1992 to 98.1% in 2008/2009. Children enrolled in regular school are required to attend class six days a week or otherwise for those enrolled in non regular. While most of the school children do not burden with household work or other working responsibility, there are more than 6 million Indonesia children burdened by doing some combination of schooling, working, and household activities. They have to attend school and at the same time they are also have to do domestic work and or working out of school hours. As shown by following figure, among children doing household work, 75.86% of them are those devote most of their time to school activity.

Despite its achievement in improving school enrollment rate, school drop-out and discontinuation remains a problem for Indonesia. In 2009, around 12.67% of children aged 13 - 15 years, around 32% of children aged 16 - 17 years, and around 1.05% of children aged 7 - 12 years are drop out or discontinued (DOD) their school. The DOD number seems in line with the figure showing that children involved in household work activities are more for those at older ages (14 - 17 years). There are approximately 16.72% of children doing household work are those devote most of their time for doing household work at home. Beside doing household work, they are also performing school and working. Yet there are another 12.82% of children who are full time home maker.

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40 Child Poverty and Disparities in Indonesia: Challenges for Inclusive Growth, SMERU Research Institute, UNICEF, and BAPPENAS (2010).
Disproportional burden of unpaid household care work responsibilities, in some cases has jeopardized children’s right in attaining education, especially for girls. It has been stigmatized in the society that girl—especially oldest girl in the family, as the one who most responsible to replacing mother’s responsibility in doing domestic work in case of un-present mother. As revealed from another qualitative research conducted by SMERU, there was a girl whose decided to discontinue her school since her mother leave for abroad to be migrant worker. She was entitled to replacing her mother to do all the household work, since her father did not do so much (SMERU, 2012). The existing social protection program such as PKH is design to increase children school participation. However in practice, the money received often used for other purpose out of school needs. As found in one of the study area, one teacher were complaining about PKH fund that used by parents for buying consumptive goods (mobile phone, motorcycle, etc) instead of children’s school needs. Even though the households are the beneficiaries of PKH program, in some cases children still have to do paid work i.e putting-out system work at home to help the family to get additional income. Doing housework and paid work has made children losing their leisure time. The following figure shown that most of the children involved in doing household work are those who completed elementary school level (around 30.37%) and secondary school level (around 41.50%).

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**Figure 1. Combination of Child Care Worker Activities, 2011**

<table>
<thead>
<tr>
<th>Children Doing Care Work</th>
<th>Boy</th>
<th>Girl</th>
<th>Boy + Girl</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fulltime care worker</td>
<td>2.10%</td>
<td>10.73%</td>
<td>12.82%</td>
</tr>
<tr>
<td>Most of the time devoted to doing care work</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>- doing care work while working</td>
<td>0.25%</td>
<td>1.02%</td>
<td>1.27%</td>
</tr>
<tr>
<td>- doing care work while schooling</td>
<td>0.73%</td>
<td>1.74%</td>
<td>2.48%</td>
</tr>
<tr>
<td>- doing care work while working and schooling</td>
<td>0.06%</td>
<td>0.09%</td>
<td>0.15%</td>
</tr>
<tr>
<td>Most of the time devoted to schooling activity</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>- schooling while doing care work</td>
<td>22.46%</td>
<td>48.45%</td>
<td>70.91%</td>
</tr>
<tr>
<td>- schooling while working and doing care work</td>
<td>1.93%</td>
<td>3.03%</td>
<td>4.96%</td>
</tr>
<tr>
<td>Most of the time devoted to working</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>- working while doing care work</td>
<td>2.31%</td>
<td>3.81%</td>
<td>6.11%</td>
</tr>
<tr>
<td>- working while schooling and doing care work</td>
<td>0.21%</td>
<td>0.24%</td>
<td>0.44%</td>
</tr>
<tr>
<td>Domestic child worker</td>
<td>0.08%</td>
<td>0.78%</td>
<td>0.86%</td>
</tr>
</tbody>
</table>

Source: author calculation, Susenas 2011.
### Figure 2. Highest Education Level Attained by Children Who Perform Household Work, 2011

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Boy</th>
<th>Girl</th>
<th>Boy + Girl</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary School Level</td>
<td>10.83%</td>
<td>19.54%</td>
<td>30.37%</td>
</tr>
<tr>
<td>Elementary school</td>
<td>10.39%</td>
<td>18.50%</td>
<td>28.89%</td>
</tr>
<tr>
<td>Islamic elementary school</td>
<td>0.41%</td>
<td>1.01%</td>
<td>1.42%</td>
</tr>
<tr>
<td>Elementary school equivalency program</td>
<td>0.02%</td>
<td>0.03%</td>
<td>0.05%</td>
</tr>
<tr>
<td>Secondary School Level</td>
<td>13.02%</td>
<td>28.47%</td>
<td>41.50%</td>
</tr>
<tr>
<td>Secondary school</td>
<td>11.16%</td>
<td>23.64%</td>
<td>34.80%</td>
</tr>
<tr>
<td>Islamic secondary school</td>
<td>1.80%</td>
<td>4.76%</td>
<td>6.56%</td>
</tr>
<tr>
<td>Secondary equivalency program</td>
<td>0.06%</td>
<td>0.07%</td>
<td>0.14%</td>
</tr>
<tr>
<td>High School Level</td>
<td>8.22%</td>
<td>19.52%</td>
<td>27.74%</td>
</tr>
<tr>
<td>High school</td>
<td>4.27%</td>
<td>11.61%</td>
<td>15.88%</td>
</tr>
<tr>
<td>Islamic high school</td>
<td>0.51%</td>
<td>1.93%</td>
<td>2.44%</td>
</tr>
<tr>
<td>Vocational school</td>
<td>3.43%</td>
<td>5.98%</td>
<td>9.42%</td>
</tr>
<tr>
<td>University level</td>
<td>0.12%</td>
<td>0.28%</td>
<td>0.40%</td>
</tr>
<tr>
<td>Total</td>
<td>32.18%</td>
<td>67.82%</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

Source: author calculation, Susenas 2011.

### Household Care Work and Children Non Material Wellbeing

For many families, children involvement in household work are formatively perceived as a form of devotion to parents. It often found that most of the household member doing care work are those status as children of the household head. However, for poor families, children involvement in doing care work bring important contribution to family welfare. Having children doing domestic chores, minding younger siblings, helping parent cooking for family member made poor family able to save their expenditure for providing such service while at the same time made the other family member—the adult able to leave home for making money.

A more challenging issue revealed since poor households have higher dependency ratio than wealthier households. From following figure, we can see that households at lower quintiles have more baby, under five children, as well as elderly than those of at higher quintiles. It is also shown by the figure that number of children aged 10 to 17 involved in doing unpaid household work were higher at lower quintile groups.

### Figure 3. Children Doing Unpaid Care Work by Quantile Group

Source: Author calculation using Susenas 2011.
A qualitative research conducted by SMERU in 2010 has found that drudgery house work has deprived child’s well being in non-material term due to inadequate leisure time (SMERU, 2010). Beside of doing a range of domestic housework, some children also work to collect grass for livestock feeding, and helping parent on farm. The drudgery in housework has made children did not have time to take midday nap and felt exhausted. Some other domestic work also put children in unsafe condition. One girl in one of the case study area got her hands blistered from grinding rice. Even though, they are afraid of being injured by many thorns in field, they still have been asked by their parents to collect grass from it. Regarding their hope, in general children in research sites answered that they would be very pleased if they don’t have to do those works.

Household Care Work and Children's Safety

In many part of Indonesia, where infrastructure are still lacking, household care work could be something that hard to undertaken. It often found in rural areas, children that have to fetch water from distance. The children not only have to carry heavy water bucket above their head, but also have to walk to distance place foresee the available water source.

Discussion: Policy Implication and Recommendations

Looking at the above findings, one potential measure to address the problem and to maintain children wellbeing during such circumstances is trough the creation of appropriate and child sensitive social protection (programs). It could be done through maintaining and improving the performance of the existing programs for example program that aims to ensure child access to health and education services, while also create protection programs and policies that are ‘child sensitive’ that will have more structural impact.

At more practical level, we can start to think and try to implement what Diane Elson’s term of **3Rs** to maintain child wellbeing:

- **Recognise** the extent and value of care and care giver (child): include measures of unpaid care in household, collect data on time spent gathering fuel and water, growing food for families, caring for families and communities.
- **Reduce** the drudgery of care: invest more in water and sanitation facilities, better cooking technology and fuel, improve housing quality, transport, health, services, care services.
- **Redistribute**: intra household responsibility allocation; awareness building activities to encourage men and boys to take a greater share; invest in high quality ECD, child- and elderly care; provide accessible medical care, etc.

Lastly, all key actors as mentioned by Razavi (2007) in diagram of ‘Care Diamond’ that consists of government, community, and the private sectors needs to be involved and taken active part in the above activities.
Selected References


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Eyben, Rosalind and Marzia Fontana, *Caring for Wellbeing*, Bellagio Commissioned Paper, November 2011


The UN Convention on the Right of the Child

Qualitative Research of Child Poverty and Disparity Study, SMERU and UNICEF (2010)
4

Contractual Children Savings Accounts in Low Resource Communities: Who Saves?

Leyla Karimli, Fred M. Ssewamala
Columbia University, US

ABSTRACT

This study examines variation in saving behavior of poor families enrolled in a children savings accounts program for orphaned and vulnerable school-going children in Uganda.

We employ multilevel analyses using longitudinal data from a cluster-randomized experimental design. Our analyses locate the following significant results: (1) financial institutions’ characteristics affect average monthly savings and deposit frequency; (2) reported high levels of family cohesion are associated with higher deposit frequency; (3) children in the care of female guardians report higher average monthly saving and deposit frequency.

The study has the following key implications: institutions and family relations matter in children savings mobilization.

Keywords: Contractual Children Savings Accounts; Child Development Accounts; Suubi-Maka; Economic empowerment intervention; Sub-Saharan Africa; Uganda.
1. INTRODUCTION

Poor communities are less attractive to mainstream financial institutions. As a result, people residing in these communities are less connected to formal financial institutions. Lack of access to formal financial institutions makes poor communities and the people who reside in them to be, in large part, financially excluded from key financial services including access to safe savings products. Yet, just like their non-poor counterparts, poor people, and those who reside in poor communities, too have financial emergencies and unforeseen needs that may necessitate them, over time, to tap into accumulated savings. In addition, on an on-going basis poor people need lump sum amounts of money to cover family-related needs including the human basic needs of food, health, shelter (housing), education, and any unforeseen emergencies. Savings do not merely help individuals meet their future consumption needs—they strengthen one’s ability and capacity to mitigate risks and break the cycle of intergenerational poverty.

Of recent, given the documented psychosocial and developmental impacts of saving and asset accumulation (McKernan, Ratcliffe, & Nam, 2010; Moore et al., 2001; Schreiner & Sherraden, 2007; Ssewamala, Han, & Neilands, 2009; Ssewamala, Neilands, Waldfogel, & Ismayilova, 2011; Ssewamala, Sperber, Zimmerman, & Karimli, 2010), there are several programs being implemented to connect poor people to financial institutions that would help them save and accumulate assets. Indeed, examples of these initiatives exist both in the developed countries (Sherraden, 2002; Sherraden et al., 2005; Sherraden, Schreiner, & Beverly, 2003) and in the developing countries (Chowa, Despard, & Osei-Akoto, 2012; L. Johnson, Lee, Osei-Akoto, Njenga, & Sharma, 2012; Kagotho & Ssewamala, 2012; Ssewamala, Karimli, Chang-Keun, & Ismayilova, 2010; Ssewamala, Wang, Karimli, & Nabunya, 2011).

Studies on these initiatives provide documented evidence that poor people save—if provided with institutional structures, including incentives in the form of matched savings (Grinstein-Weiss, Wagner, & Ssewamala, 2006; Han, Grinstein-Weiss, & Sherraden, 2009; Ssewamala & Sherraden, 2004), financial education and knowledge (Ssewamala, 2012), and easy access to a financial institution (Grinstein-Weiss et al., 2006; Ssewamala, 2003; Ssewamala & Sherraden, 2004). Moreover, although there are several studies that specifically examine the impact of Child Development Accounts in poor communities of Sub-Saharan Africa (Ssewamala & Ismayilova, 2009; Ssewamala, Ismayilova, et al., 2010; Ssewamala, Neilands, et al., 2011), there are no studies (by this writing) of contractual savings in Sub-Saharan Africa that examine variation in saving behavior of poor African children. Indeed, very little is known about why of poor children in Sub-Saharan Africa, when facilitated with similar institutional structures, some save in larger ammounts and deposit more frequently and others simply do not behave the same way. The question therefore is: can the existing theories of saving behavior—tested mainly in the context of western socieities—explain variation in saving behavior of poor children living in poor communities in Sub-Saharan Africa?

One of the initiatives that connect poor families to financial institutions are the child development accounts being implemented in Uganda under an experimental intervention study called “Suubi-Maka” (which means “Hope for Families” in Luganda). The Suubi-Maka initiative (described in detail below) is the focus of the current paper. Specifically, using data from the Suubi-Maka initiative, this paper addresses two questions: (1) If poor children and their families in a poor community are given the opportunity of being connected to a financial institution, who among them saves and who does not? (2) How do the children and their families that save (the savers) differ from those who do not save (the non-savers)?

The answers to these two questions are important because they would inform policy and programming, especially as governments and organizations in Sub-Saharan are increasing moving
towards financial inclusion for young people—the fastest growing population segment in the region. Further, findings may also contribute to an understanding of what affects savings of poor families in the context of Sub-Saharan Africa, and may inform development of poverty reduction policies specifically targeted to vulnerable children in poor resource settings.

2. BACKGROUND

2.1. Factors accounting for savings behavior: theory

There are several theories that explain individual saving behaviors. For example, neoclassical economic theories—including the life-cycle theory and the permanent income theory of savings—posit that resources allocated to individuals’ consumptions depend on their life resources and savings serve the purpose of maximizing individual’s consumption utility (Ando & Modigliani, 1963; Feldstein, 1976; Sherraden et al., 2003). Individuals save to smooth their consumption when facing income fluctuations. Savings increase when individual’s current income rises above the expected lifetime resources and decrease when individual’s current income falls below the expected lifetime resources (Modigliani, 1986). According to the lifecycle theory, variation in savings among households is an inverted U-shaped function of age: young and elderly individuals having fewer saving than middle-age individuals. On the other hand, the permanent income theory posits that savings increase when an individual has an increase in temporary income. Increase in permanent income, however, decreases the savings (Beverly & Sherraden, 1999).

Unlike neoclassical economic theories, behavioral-related theories on saving do not assume that individuals are rational decision makers. Instead, they posit that individuals have “myopic” sides, placing too much weight on current consumption relative to future consumption. This leads to irrational choices - despite individual’s initial desire to optimize utility. According to this perspective, an individual’s saving behavior is improved by imposing the self-constraint on spending (Maital & Maital, 1994).

Psychological and sociological theorists point to personality characteristics, motives, expectations, as well as family influence as main determinants of saving and asset accumulation (Beverly et al., 2008). Historical inequalities resulting in wealth stratification are also considered important determinants of asset accumulation (Spierman, 2000), suggesting that poor saving behaviors and low asset accumulation among poor populations may be attributed to institutional discriminations.

Within the sociological explanations of saving behavior is the argument of poor people’s restricted access to formal institutions of social assistance. Specifically, the argument is that poor rely heavily on support from the community and extended family. The heavy reliance on community, however, comes with a price: e.g. claims from extended family members, relatives and neighbors on cash available at home (Banerjee & Duflo, 2007). Indeed, in line with the sociological theories of saving, demands from extended family members for material assistance can undermine individual’s saving and asset accumulation efforts. Other arguments put across by sociological theorists point to demographic variables such as age, gender and household characteristics (e.g. number of people in the household) as key determinants for household saving behavior and asset accumulation (Browning & Lusardi, 1996). For example, presence of young children, particularly in single parent households, may have negative effect on household’s saving behavior (Fry, Mihajilo, Russell, & Brooks, 2008), while a family structure of two working adults with no children may have a positive effect on household’s saving behavior.

This paper focuses on savings among school-going orphaned children—average age of 13—taken
care by a living parent (children who have lost one parent) or by an adult caregiver within extended family (children who have lost both parents). Children’s saving-related beliefs, consumption patterns and expectations for saving can be heavily influenced by parents and caregivers (Gudmunson & Danes, 2011). Children learn financial management behavior through purposive instruction from their parents and caregivers (Jorgensen & Savia, 2010). Children also learn financial behaviors by observing and modeling those of their parents and caregivers (Shim, Barber, Card, Xiao, & Serido, 2010). Parents with higher socioeconomic status serve as role models for children. Indeed, findings from studies of Individual Development Accounts (IDAs) seem to support these propositions (Grinstein-Weiss et al., 2012; Schreiner, Clancy, & Sherraden, 2002). Specifically, participants who recall their parents saving while they were young have more financial assets, compared to participants with no recollection of their parents ever saving as they were growing up (Han et al., 2009; Williams Shanks, Kim, Loke, & Destin, 2010).

The child savings accounts examined in this paper present a special form of savings accounts and rest in the realm of institutional theory of savings which posits that variation in savings behavior is explained by differentiated access to institutional structures, such as (i) access (proximity of savings programs—including access to electronic and direct deposits), (ii) incentives (matching deposits, earnings on savings including interests earned), (iii) information (educational programs to increase financial literacy), (iv) facilitation (assistance from program staff, nudging saving behavior), (v) expectations (participants’ clear saving goals), (vi) restrictions (limiting the use of savings for specific designated/only authorized purposes), and (vii) security of investments (Beverly et al., 2008; Schreiner & Sherraden, 2007). The other element may be (viii) trust in the financial systems—which may be attributed to financial literacy, and an overall feeling of security.

2.2. Child Development Accounts

Individual Development Accounts (IDAs) are contractual subsidized bank accounts with a match on the deposits of account holders. The accounts have both an element of incentivizing and nudging the poor to save, and also addressing the challenge of the poor people’s restricted access to financial institutions. Programs that promote IDAs are grounded in two mutually reinforcing theories on saving behavior: asset theory (Sherraden, 1990, 1991); and institutional theory (Sherraden, 2005). Specifically, in line with the asset-theory on saving, IDAs premise that the ownership of financial assets—including monetary savings, homeownership, education and income generating activities—changes people’s capacities, behavior and attitudes. With ownership of assets, individuals are likely to have better ability to make choices to pursue the kind of life they value (Robeyns, 2005; Sen, 1999; Sherraden, 1991; Ssewamala, Sperber, et al., 2010). In line with the institutional theory of saving, and similar to 401K retirement plans, IDAs provide opportunities for subsidized asset building by matching participants’ savings. Just like the 401K matched saving plans, the matched amounts in the IDAs are restricted to the approved specific asset-building purposes, such as home purchase, investment in education, microenterprise, or purchase of a car to commute to work. Participants of IDA programs are also provided with financial education and financial counseling and support (Han et al., 2009; Mills et al., 2008; Schreiner & Sherraden, 2007).

This paper focuses on a special form of IDA—which is intended for children and young adolescents—called Child Development Accounts (CDAs). With CDAs a bank account is opened in a child’s name. This may be as early as at birth (Bennett, Quezada, Lawton, & Perun, 2008; Nam, Kim, Clancy, Zager, & Sherraden, 2012; Prabhakar, 2010; Zager, Kim, Nam, Clancy, & Sherraden, 2010) or when children are already enrolled in primary school (Ssewamala & Curley, 2006; Ssewamala et al., 2009; Ssewamala, Han, Neilands, Ismayilova, & Sperber, 2010; Ssewamala,
Neilands, et al., 2011). The argument behind CDAs is that if savings are good for old people, they are even more essential for the young ones. Starting asset accumulation at an early age—specifically having savings accounts—may have a long-term impact on children’s savings behaviour, and, consequently, their economic well-being, as adults (Peng, Bartholomae, Fox, & Cravener, 2007). Additionally, CDAs contribute to overall child development and to children’s psychosocial behavior (Ssewamala et al., 2009)

In developing countries, Child Development Accounts offering matching incentives are a new initiative. Such accounts are currently set up in South Africa (Fundisa accounts), Uganda (SEED, the Suubi/Bridges-related accounts in Centenary Bank, Diamond Trust Bank and Kakuuto Microfinance) and Sri Lanka (SingithiKirikatiyo accounts).

As detailed in the theory section above, saving participation and saving amounts—including contractual savings like IDAs and CDAs—can be attributed to a variety of factors. However, most of the studies on contractual savings, on which these theoretical frameworks have been tested (and the resulting outcomes) are within the context of developed countries (Han & Sherraden, 2009; McKernan et al., 2010; Mills et al., 2008; Schreiner & Sherraden, 2007; Sherraden, Johnson, Elliott III, Porterfield, & Rainford, 2007; Ssewamala & Sherraden, 2004; Zhan & Sherraden, 2011). If contractual savings are good for welfare states like the United States, they are even more essential for poor countries with no public welfare system—where having some money saved (however modest the savings may be) may make the difference between starvation and being able to feed one’s family. Indeed, although, studies exist on the impact of contractual savings, including Child Development Accounts in poor communities, specifically those in Sub-Saharan Africa (Ssewamala et al., 2009; Ssewamala & Ismayilova, 2009; Ssewamala, Ismayilova, et al., 2010; Ssewamala, Neilands, et al., 2011), we know very little about the drivers of the saving behavior of participants—especially children—in contractual savings being implemented in poor countries. In other words, what factors account for variation in saving behavior among poor children participating in these programs? Can we use the existing western focused theory to explain the observable variations? To address this gap, we use data from an NIH funded study on CDAs, called Suubi-Maka, implemented in Southwestern Uganda between 2008 and 2012. We specifically address the following question: What accounts for saving variations among poor participants in a contractual Child Development Accounts Program? Saving variation will be measured using three outcome variables: (1) whether, when invited and given an opportunity, participants opened a CDA; (2) For those participants who opened a CDA, what is their average monthly savings in CDA; and (3) For those who opened a CDA, what is their deposit frequency in CDA.

3. METHODS

3.1. Data

The paper uses data from a 4-year (2008-2012) NIH-funded experimental study called “Suubi-Maka” (meaning “Hope for Families” in the local Ugandan language). The Suubi-Maka study utilized cluster-randomized control trial. Ten rural public primary schools in Rakai district of Uganda were randomly assigned to treatment group (n=5 schools) and control group (n=5 groups). All the children included in the study had to meet the following inclusion criteria: (1) be an orphan—defined as a child who had lost one or both parents; (2) enrolled in a public primary school located within Rakai or Masaka district in Southern Uganda—two districts heavily affected by HIV/AIDS; (3) attending the last two years of primary school (an equivalent of grades 6th and 7th in the U.S. system); (4) live within a family setting. For a caregiver to be included in the study,
he/she had to be identified as the primary caregiver for the participating child. Identification for
the primary caregiver of a specific child was done by the child, and was verified by a letter from
the local council/village leaders. The study did not enroll any children living in institutions—for
example group homes or orphanages.

The Suubi-Maka study collected data from both children and their guardians (N=346 dyads) in
three waves over a period of 24 months. Wave 1 – baseline data – was collected prior to
random assignment.

Each child in the treatment group (n=179) had a Child Development Account opened in his/her
name. A deposit of up to 20,000 Uganda shillings (an equivalent of US$10 at the time) was subject
to being matched on a monthly basis at a rate of 2:1. This means that if a child or family deposited
an equivalent of $10 a month, they would receive $20 in their savings accounts, giving them a
total of $30 in the account in one month. The withdrawals from the matched accounts were
restricted to covering educational expenses and/or starting a family small business initiative—
hence the name “contractual savings”. In other words, the participants and the Suubi-Maka
Project entered into a contract specifying the following: (1) savings, up-to an equivalent of USD10
per month in a Suubi-Maka account for the child, would be matched at a rate of 2:1; and (2) the
matched amounts must be spent on one of the following goals: education financing, and/or family
small business development. To illustrate, the participants’ personal savings were kept in a
separate account from the actual matching amounts coming from the intervention. If a
participant wanted to pay for education, the participant was expected to use one-third (1/3) of
the required amount out of their Suubi-Maka personal savings accounts; and the Suubi-Maka
project would then pay directly to the school the remaining two-thirds of the required amount
out of the participant’s matching account. This process was intended to avoid misuse of the
matching funds. In addition to the match, each participant with a CDA also received financial
management/literacy training session. The CDA accounts were opened in three banks: Kakuuto
Microfinance, Centenary Bank and DFCU. A participant was free to open an account in a bank of
his/her choice. Each of the three financial institutions required a minimum opening amount to set
up a Child Development Account. The minimum opening amount varied across the three banks
and was fully covered by the Suubi-Maka project—as a part of financial incentive to participants.
The matching intervention period ran for a period of 20 months.

Participants in the control group (n=167) received usual care for orphaned children that
included the following: counseling, food, school uniforms, and scholastic materials.

Given the focus of this paper—which is about understanding the saving behavior of participants in
a contractual savings program, we use data only from the treatment group (n=179). The data
(savings data) on account opening, deposits, and withdrawals—come directly from the financial
institutions holding the children’s savings accounts; hence the data is pretty accurate. Data on
predictor variables was collected through a 90-minute individual interview with children and
guardians separately.

3.2. Measures

(a) Outcome variables

To ascertain whether a participant is a saver or non-saver, we use the following measures:

(1) Whether families opened up a bank account in the Suubi-Maka project or not. It is a
dichotomous (Yes/No) variable.

(2) Deposit frequency: calculated as a ratio of times of making deposits to the total number
of months the account was opened. We use ratio, because the total number of months during which the CDA was opened differs across the project participants.

(3) Average monthly savings per participants. This measure is obtained by subtracting total unmatched withdrawals from total deposits and dividing this amount by the number of months in which the participant made deposits.

**(b) Predictor variables**

Based on the multiple theoretical frames detailed above, we examine several factors to understand how savers differ from non-savers in Suubi-Maka project. More specifically, the following predictor variables are used in the analyses:

**Financial attitudes:** child’s propensity to save and guardian’s propensity to save. Child’s propensity to save is measured by asking the question “*If you had Uganda shillings 10,000, what would you do?*” This measure ranges from 1 “spend all of it” to 6 “buy a cow, goat, pig, chicken, rabbit or other animal that would eventually bring in money”. The higher the score, the higher is the propensity to save. Guardian’s propensity to save is measured by asking the guardian an identical question to the one asked above (to the children): *If you had Uganda shillings 10,000, what would you do?***

**Financial behaviors:** child’s previous experience with saving (i.e., experience with saving prior to the treatment), and guardian’s previous experience with saving. Child’s previous experience with saving is measured through a baseline dichotomous question with a “Yes” or “No” response: “*Do you currently have any money saved anywhere*”. Guardian’s previous experience with saving is measured through the following identical baseline question addressed to the guardians: “*Do you currently have any money saved anywhere*”. (Yes/No).

**Family cohesion reported by a child.** To measure family cohesion, we use average score of 26 items. Sample items on the family cohesion scale reported by the child include: “*Do your family members ask each other for help before asking non-family members for a help*”, “Are you available when others in the family want to talk to you”, “*If you have a problem, how often do your parents offer to help*”, “*Can you count on your current parent/guardian to help you out if you have some kind of problem?*”. Each item is measured on a 5-point scale from 1 “Never” to 5 “Always”. The average score ranges from 0 (low level of family cohesion) to 5 (high level of family cohesion). The measure has high level of internal consistency (Chronbach’s alpha = 0.8).

**Household assets:** is a composite score consisting of 16 dichotomous items. Each item indicates household’s ownership of a specific asset, e.g. house, land, means of transportation (car, motorcycle, and bicycle), garden, and livestock. The score ranges from 0 (household has no assets) to 16 (household has all 16 types of assets). Questions used to compute household assets come from the guardians’ instrument. The measure has high internal consistency (Cronbach’s alpha = 0.7).

**Financial institution where CDA was opened:** This measure has three response categories—representing the three financial institutions holding the CDAs: 1) Kakuuto Microfinance; 2) Centenary Bank and; 3) DFCU bank.

**Demographic characteristics:** child’s gender and age, guardian’s gender and age, number of people in the household, child’s orphanhood status, type of guardian, and guardian’s employment status. Child’s orphanhood status is a categorical variable indicating whether the child is double orphan (reporting both parents not alive), single paternal orphan (reporting father not alive), or single maternal orphan (reporting mother not alive). Type of guardian is a categorical variable with three response categories: “parents”, “grandparents”, and “other relatives”. Guardian’s employment status is a dichotomous variable indicating whether the guardian is employed or unemployed.
3.3. Analyses

This paper is about the saving behavior of participants enrolled in a Child Development Accounts program. For that reason, we focus exclusively on participants in the treatment arm of the Suubi-Maka study (n=5 schools; 179 participants).

Data on predictor variables—a panel data on children and their guardians (179) dyads—was collected in three waves, that is at baseline, at a 12-month follow-up, and at a 24-month follow-up. Except for three predictors—namely, child’s gender, guardian’s gender, and financial institution where CDA was opened—all other predictors are treated as changing over the course of three waves. Child’s gender and guardian’s gender are not changing over the course of three waves; and regression models include baseline (Wave 1) values for these predictors. Financial institution where CDA was opened also did not change over the course of study: each of the children in the treatment group was provided with one CDA account opened at one of the three participating institutions (Kakuuto Microfinance, Centenary Bank or DFCU bank); and these accounts could not be “switched” from one institution to another. Regression models include “Kakuuto Microfinance” as reference category.

Data on outcome variables reflects savings by the end of the intervention: (1) whether—by the end of the intervention—families opened up a bank account or not; (2) how frequently money was deposited on a bank account—by the end of the intervention—given the total number of months the account has been opened; and (3) what was average monthly saving on a bank account—by the end of the intervention—given the total number of months the account has been opened.

Data analyses are performed in Stata 12. To account for clustering of individuals within schools, we use survey commands in Stata 12 and report estimates of parameters along with confidence interval statistics. To answer the question guiding our study, we follow the following steps:

1) Before running regressions of the outcomes on the predictors, first, we apply empirical Bayes prediction procedures on predictors. We fit multilevel models to predictor measures changing over the course of three waves—to obtain empirical Bayes predictions of random intercepts and random slopes. With this procedure, random intercepts show estimates of starting points for each individual and random slopes represent estimated change (over the course of 3 years) for each individual. Given the small number of schools (n=5), the multilevel models we fit to obtain empirical Bayes predictions have two levels, i.e., individual and time.

2) After obtaining the empirical Bayes predictions on predictors, we fit regression models of three outcome measures onto estimates of random intercepts (model 1) and slopes (model 2) separately. It is important to note that for two predictors—namely (i) child’s previous experience with saving (do you have any money saved anywhere?—reported by a child); and (iii) guardian’s previous experience with saving (do you have any money saved anywhere?—reported by a guardian)—only the baseline values are included in regression models, because our interest is in experience with saving prior to the treatment. Furthermore, both measures are endogenous at Wave 2 and Wave 3, their values being affected by the treatment.

3) Third regression model is run on mean scores of predictors for each person over the three waves. Results are compared with previous two models.
4. RESULTS

4.1. Description of measures

Table 1 describes both predictor and outcome measures. Due to attrition, number of treatment group participants at Wave 3 reduced from 179 to 166 (an attrition rate of 7.3%). This is considered a good attrition rate over a 3-year study period.

At study initiation/baseline: on average, participants—with mean age of 13 for children and 44 for guardians—lived in households with 7 people. Girls represented 65% of the sample; 23% of children in the sample were double orphans (both parents not alive), 58% were single paternal orphans (father not alive), and 19%—single maternal orphans (mother not alive). Families reported an average 6 items on the household assets measure—signifying relatively poor families (the range on this measure is 0 to 16 items). Further, both children and guardians report above average scores on propensity to save. Specifically, children scored an average of 4.8 out of a possible score of 6; and guardians scored an average of 4 out of a possible score of 6. Further, children reported high scores on the family cohesion measure (average score = 3.8 out of 5).

At baseline, 25.5% of children reported their guardians saving money for them. The percentages were 71.5% and 55.3% at Waves 2 and 3, respectively.

At baseline, 20.1% of children participants reported having money saved somewhere. There was a 29-percentage point increase to 49% at Wave 2, and a 43-percentage point increase to 63.3% by Wave 3. Among guardians, at baseline, 39.7% of participants reported having money saved somewhere. At Wave 2, it was 56.9% and at Wave 3 – 67.9% of guardians reported having money saved somewhere.

[INSERT TABLE 1 HERE]

Out of 179 families enrolled in treatment group, 81.6% (n=146) had Child Development Accounts opened up as a result of participation in the study. Out of the 146 accounts opened, 8.2% (95% CI = 0.3, 72) were opened in Kakuuto Microfinance Institution; 35% (95% CI = 4.2, 87) were opened in Centenary Bank and 57% (95% CI = 8.8, 95) were opened in DFCU bank. Financial institutions were unevenly distributed across the schools, which may explain significant variation in 95% confidence interval estimates. Out of 146 accounts opened, 11 accounts were never activated and 17 accounts had no deposit made during the project implementation period—beyond the opening amount provided by the project. In 118 CDA, each participant saved an average of UGX 5,477 per month (an equivalent of USD 3.04. Average exchange rate was 1USD for 1,800 UGX at the time of the study). The bottom 10% saved an average of UGX 171 while the top 10% saved an average of UGX 19,090. Average deposit frequency equaled to 0.29, that is, participants deposited 29% of time when the account was opened.

4.2. Regression analyses

For each outcome measure (i.e., whether families opened up a bank account in the Suubi-Maka project or not; deposit frequency; and average monthly savings per participants) we fit three distinct regression models. Models 1 and 2 are regressions of outcome measures onto random intercepts and random slopes of predictors. Model 3 is a regression of outcome measures onto mean scores of predictors over the three waves.
(a) Whether Participants Opened CDA Account

Table 2 presents results of binomial regressions on whether participants opened CDA accounts or not. It reports odds ratios and 95% confidence interval statistics.

Model 1 (see Table 2) illustrates that the fraction of families opening a CDA is higher among children who reported higher baseline scores on propensity to save (odds ratio=1.8, 95% CI=1.3, 2.4). Furthermore, proportion of families that opened a CDA was greater among households where guardian reported having baseline experience with saving (odds ratio=2.2, 95% CI=1.1, 4.2).

Results also indicate (Model 3) that, on average over the course of project implementation period, fraction of participants opening a CDA was greater among single orphans compared to double orphans (odds ratio=0.99, 95% CI=0.99, 0.997).

[b] Average Monthly Saving Per Participant

In Table 3, we present results of linear regressions on average monthly saving per participants. We find significant results—confirmed by all three models—for having CDA opened in Centenary Bank: participants who opened up CDA in Centenary Bank had less average monthly savings, compared to participants who opened up CDA in Kakuuto Microfinance. Model 1 shows similar results for another financial institution, DFCU: participants who opened up CDA in DFCU had less average monthly savings, compared to participants who opened up CDA in Kakuuto Microfinance (B= -3,969, 95% CI= -6,510; -1,429).

Model 1 also illustrates that single orphans had higher average monthly saving compared to double orphans (B= 48, 95% CI= 12; 84). Model 2 demonstrates that children taken care by female guardians had higher average monthly saving compared to children taken care by male guardians (B= 3,309, 95% CI=300; 6,318).

(c) Deposit Frequency

Table 4 describes results of regression analyses on deposit frequency in CDA. All three models show significant effect of guardian’s propensity to save and guardian’s gender on deposit frequency.

At baseline (Model 1), higher guardian’s propensity to save is associated with lower deposit frequency (B= -0.22, 95% CI= -0.4; -0.05). Similarly, on average over the project implementation
period (Model 3), higher guardian’s propensity to save is associated with lower deposit frequency (B= -0.05, 95% CI= -0.08; -0.02). As explained above, this might be due to specifics of measuring the participants’ propensity to save. Meanwhile, as would be expected, increase in guardian’s propensity to save (Model 2) is associated with increased deposit frequency (B= 2.5, 95% CI= 0.5; 4.6).

On average over the project implementation period (Model 3), higher family cohesion reported by child is associated with higher deposit frequency (B= 0.16, 95% CI= 0.03; 0.3).

In addition, all three models demonstrate that children taken care by female guardians deposit more frequently than children taken care by male guardians.

Participants who had CDA opened in Centenary Bank (B= -0.08, 95% CI= -0.1; -0.02) and in DFCU (B= -0.15, 95% CI= -0.3; -0.04) deposited less frequently, compared to participants who had CDA opened in Kakuuto Microfinance (Model 1).

5. DISCUSSION

The results point to two main findings. First, in this study, we find that financial institution characteristics influence saving performance of children. In our analyses, participants saving in a community-based microfinance institution (Kakuuto Microfinance) saved more and deposited more frequently, compared to those saving in more urban-based financial institutions located further away from the community. We do not know whether these differences in saving performance are due to variation in operational procedures utilized by financial institutions (e.g., frequency of communicating with clients, physical proximity to clients, availability of staff in case if clients need support and advice, etc.). The strong association between financial institutions and saving behavior (in children’s accounts offered in these institutions) urges for further research to better understand what specific operational procedures and policies of financial institutions account for the variation in saving behavior of their clients.

Second, family does matter in regards to individual saving behavior. Higher family cohesion, as reported by child, is associated with higher frequency of depositing money into child’s savings account. Having even one biological parent (the case of single orphans)—as compared to having no biological parents survived (the case of double orphans)—increases the likelihood of a savings account being opened for a child as well as the amount of average monthly savings. In addition, guardian’s propensity to save is an important factor affecting the average monthly saving in children’s savings accounts as well as frequency of depositing money into these accounts. This finding is important in light of previously established strong association between caregiver’s financial behavior, specifically asset accumulation, and child’s wellbeing (Conley, 2001; Mayer, 1997; Williams Shanks et al., 2010). Additionally, the findings of this study augment earlier studies that point to the importance of matrilineal support (Karimli, Ssewamala, & Ismayilova, 2012; Oleke, Blystad, & Rekdal, 2005) in care and support of orphaned and vulnerable children. In this case, children under the care of female guardians saved more and deposited more frequently. Significant effect of specific caregiver characteristics (i.e. gender and propensity to save) provides further insight into the family-level decision making with regard to saving for children.

Having savings accounts help children better understand concepts related to savings and investment (E. Johnson & Sherraden, 2007), and this may have a long-term impact on children’s
savings behavior as adults (Peng et al., 2007), thus, break the circle of intergenerational poverty. Identifying factors that account for saving behavior—specifically among children and their families in poor communities in Sub-Saharan Africa—can help improving saving performance and, therefore, contribute to successful asset-building in the long-run. Furthermore, it may add to the knowledge on feasibility of social welfare policies focused on asset-building (in this case savings)—rather than meeting immediate consumption needs—for the poor.

6. LIMITATIONS

One of the limitations of this study is that the dataset does not contain information on household consumption and expenditure patterns, and, therefore, we cannot look closely into households’ financial management mechanisms. In the Suubi-Maka dataset, when children are saving, we do not know who is making the decision to save: children themselves or families? It is important to understand who, within the family, made decisions on savings and how these decisions were communicated among the family members; how the structure of power within the household, social constructions of gender behavior and orphanhood status affect family’s decision to save for a child, especially for an orphan child taken care by a family. Also, it would be informative to examine how saving in children accounts affected families’ consumption patterns, particularly given significant budget constrains experienced by poor families in our sample.

Secondly, Suubi-Maka study focuses specifically on school-going children who are taken care by a living parent (when the child is a single orphan) or by an adult caregiver within an extended family (when the child is a double orphan). The study does not cover orphans living in child-headed households or orphans living in streets. Therefore, in this paper, we refrain from drawing conclusions about saving behavior of all orphans. As illustrated by the study results, families have significant effect on individuals’ saving behaviors. It is also stated elsewhere (Gudmunson & Danes, 2011; Shim et al., 2010) that children’s saving behavior is influenced by their family members, specifically parents. Consequently, we refrain from concluding how orphans would save in the absence of family structure (in case of street orphans) or in the absence of adult caregiver (in case of child-headed households).

7. POLICY IMPLICATIONS

The study has the following key implications: financial institutions and family relations matter in children savings mobilization.

In line with institutional theory of saving and previous findings on importance of institutions in affecting savings outcomes (Curley, Ssewamala, & Sherraden, 2009; Han & Sherraden, 2009; Schreiner & Sherraden, 2007; Ssewamala & Sherraden, 2004), our findings show that financial institutions significantly affect savings in Child Development Accounts. Further research may be needed to understand what specific operational procedures within financial institutions affect saving behavior of their clients. This being said, however, our findings suggest that institutional structures of asset-building initiatives affect savings among poor children and their families in poor communities of Sub-Saharan Africa. Specific institutional features, therefore, shall be focus of policy initiatives encouraging asset building among poor communities in Sub-Saharan Africa.

In agreement with previous studies (Danes, 1994; Gudmunson & Danes, 2011; Kim, LaTaillade, & Kim, 2011), families play an important role in children saving mobilization. This finding suggests
that families—both biological and extended families—shall be seen as a vital component in building assets for poor children in Sub-Saharan Africa.

**BIBLIOGRAPHY**


### Table 1. Description of measures

<table>
<thead>
<tr>
<th>PREDICTOR MEASURES</th>
<th>Wave 1 (n=179)</th>
<th>Wave 2 (n=171)</th>
<th>Wave 3 (n=166)</th>
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<td>Mean [95% Confidence Interval]</td>
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<td></td>
<td></td>
</tr>
<tr>
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<td>44 [38; 51]</td>
<td>45 [37; 53]</td>
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<td>7 [6; 7]</td>
<td>6 [6; 7]</td>
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<td>6 [4.6; 7.8]</td>
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<td>3.9 [3.8; 3.9]</td>
<td>3.9 [3.8; 4.0]</td>
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<td>4.7 [3.9; 5.5]</td>
<td>5 [4.8; 5.5]</td>
</tr>
<tr>
<td>Guardian’s propensity to save (range: 1-6)</td>
<td>4 [3.9; 4.6]</td>
<td>3.7 [3; 4]</td>
<td>4 [3; 4]</td>
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<tr>
<td><strong>Female child</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female child</td>
<td>65.4 [49.1; 78.6]</td>
<td>65.5 [48.7; 79.2]</td>
<td>63.9 [46.6; 78.2]</td>
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<td>Child’s orphanhood status</td>
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<td>Double orphan</td>
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<td>24.3 [18.5; 31.2]</td>
<td>21.5 [14.1; 31.3]</td>
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<td>Single paternal orphan</td>
<td>57.9 [48.7; 66.5]</td>
<td>57.4 [50.6; 64.5]</td>
<td>59 [48.2; 68.8]</td>
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<td>Single maternal orphan</td>
<td>19 [13; 27]</td>
<td>18.3 [13.4; 24.7]</td>
<td>19.6 [16.4; 23.3]</td>
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<td>Type of guardian</td>
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<tr>
<td>Parents</td>
<td>40.2 [28; 53.8]</td>
<td>41.3 [31.4; 52]</td>
<td>43.2 [31.3; 55.9]</td>
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<td>Grandparents</td>
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<td>Other</td>
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<td>37.1 [28.9; 46.2]</td>
<td>36.4 [29; 44.5]</td>
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<td>Female guardian</td>
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<td>78.4 [61.4; 89.3]</td>
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<td>Guardian’s employment status</td>
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<td>Unemployed</td>
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<td>Employed</td>
<td>88.8 [77.2; 94.9]</td>
<td>93.4 [84.4; 97.4]</td>
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<td>Child’s experience with saving. Do you have</td>
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<td></td>
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<tr>
<td>money saved (reported by child)? (% YES)</td>
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<td>49 [34.5; 63.9]</td>
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<td>56.9 [44.3; 68.4]</td>
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<td>DFCU</td>
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<td><strong>OUTCOME MEASURES</strong></td>
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<tr>
<td>Percent and Mean [95% Confidence Interval]</td>
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<td>Opened CDA (% YES)</td>
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<td>0.29 [0.18; 0.4]</td>
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### Table 2: Whether Participants Opened CDA Accounts.

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<th>Random slope (Model 2)</th>
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</tr>
<tr>
<td>baseline value)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[0.2 -12.5]</td>
<td>[0.3 -11.6]</td>
<td>[0.2 -15.4]</td>
</tr>
<tr>
<td>Guardian's experience with saving. Do you</td>
<td>2.2*</td>
<td>2.2</td>
<td>2.6*</td>
</tr>
<tr>
<td>have money saved (reported by guardian)?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(%YES, baseline value)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[1.1 -4.2]</td>
<td>[0.8 -5.8]</td>
<td>[1.3 -4.9]</td>
</tr>
<tr>
<td>Constant</td>
<td>4.2</td>
<td>4.05*</td>
<td>0.15</td>
</tr>
<tr>
<td></td>
<td>[0.9 -19.7]</td>
<td>[1.2 -13.9]</td>
<td>[6.89e-05 -304.7]</td>
</tr>
<tr>
<td>Observations</td>
<td>176</td>
<td>176</td>
<td>176</td>
</tr>
</tbody>
</table>

*p<0.05, **p<0.01, ***p<0.001
Table 3: Average Monthly Saving per Participant.

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>Random intercept (Model 1)</th>
<th>Random slope (Model 2)</th>
<th>Mean predictor over three waves (Model 3)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Beta-coefficient [95% CI]</td>
<td>Beta-coefficient [95% CI]</td>
<td>Beta-coefficient [95% CI]</td>
</tr>
<tr>
<td>Family Cohesion reported by child</td>
<td>3,428 [3,870 - 3,054]</td>
<td>3,426 [120]</td>
<td></td>
</tr>
<tr>
<td>Child’s propensity to save</td>
<td>-1,710 [-8,567]</td>
<td>-1,679 [-8,567]</td>
<td>-1,497 [-7,605]</td>
</tr>
<tr>
<td>Guardian’s propensity to save</td>
<td>455 [4,938]</td>
<td>44,958 [855]</td>
<td></td>
</tr>
<tr>
<td>Guardian’s age</td>
<td>-95 [-248 - -57]</td>
<td>528 [-84]</td>
<td></td>
</tr>
<tr>
<td>Number of people in the household</td>
<td>209 [2,514]</td>
<td>197 [-17]</td>
<td></td>
</tr>
<tr>
<td>Child’s gender</td>
<td>2,229 [2,142]</td>
<td>2,454 [2,500]</td>
<td></td>
</tr>
<tr>
<td>Child’s orphanhood status</td>
<td>48 [12 - 84]</td>
<td>41 [-17]</td>
<td></td>
</tr>
<tr>
<td>Type of guardian</td>
<td>1 [601 - 201]</td>
<td>1 [-17]</td>
<td></td>
</tr>
<tr>
<td>Guardian’s gender</td>
<td>2,431 [3,309]</td>
<td>2,500 [2,500]</td>
<td></td>
</tr>
<tr>
<td>Guardian’s employment status</td>
<td>302 [408]</td>
<td>3,713 [3,713]</td>
<td></td>
</tr>
<tr>
<td>Child’s experience with saving, Do you have</td>
<td>0.907 [0.200]</td>
<td>0.487 [0.487]</td>
<td></td>
</tr>
<tr>
<td>money saved (reported by child)? (%, YES, baseline value)</td>
<td>[-5,737 - 3,924]</td>
<td>[-5,121 - 4,721]</td>
<td>[-4,659 - 3,685]</td>
</tr>
<tr>
<td>Guardian’s experience with saving, Do you have</td>
<td>2.131 [3.081]</td>
<td>2.569 [2.569]</td>
<td></td>
</tr>
<tr>
<td>money saved (reported by guardian)? (%, YES, baseline)</td>
<td>[-2,162 - 6,484]</td>
<td>[-2,723 - 6,885]</td>
<td>[-2,315 - 7,434]</td>
</tr>
<tr>
<td>Financial Institution where CDA was opened:</td>
<td>-4,197** [-3,284**]</td>
<td>-3,488* [-3,488*]</td>
<td></td>
</tr>
<tr>
<td>Centenary Bank</td>
<td>-6,227 [-2,068]</td>
<td>-4,879 [-1,689]</td>
<td>-5,609 [-2,367]</td>
</tr>
<tr>
<td>Financial Institution where CDA was opened:</td>
<td>-3,969* [-3,126]</td>
<td>-2,806 [-2,806]</td>
<td></td>
</tr>
<tr>
<td>DFCU</td>
<td>-6,510 [-1,429]</td>
<td>-7,512 [-1,260]</td>
<td>-3,896 [-284]</td>
</tr>
<tr>
<td>Constant</td>
<td>5,118** [3,222]</td>
<td>7,200 [7,200]</td>
<td></td>
</tr>
</tbody>
</table>

*p<0.05, **p<0.01, ***p<0.001
Table 4: Deposit Frequency.

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>Random intercept (Model 1)</th>
<th>Random slope (model 2)</th>
<th>Mean predictor over three waves (Model 3)</th>
<th>Beta-coefficient [95% Confidence Interval]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Household assets</td>
<td>-0.01</td>
<td>-0.4</td>
<td>-0.01</td>
<td>[-0.03 -0.01] [1.4 -0.6] [-0.01 -0.004]</td>
</tr>
<tr>
<td>Family Cohesion reported by child</td>
<td>0.18</td>
<td>-0.4</td>
<td>0.16*</td>
<td>[0.03 -0.3] [0.03 -0.3]</td>
</tr>
<tr>
<td>Child's propensity to save</td>
<td>0.05</td>
<td>-0.06</td>
<td>0.03</td>
<td>[-0.06 -0.2] [0.03 -0.3] [-0.03 -0.09]</td>
</tr>
<tr>
<td>Guardian's propensity to save</td>
<td>-0.22*</td>
<td>2.5*</td>
<td>-0.05*</td>
<td>[-0.08 -0.02]</td>
</tr>
<tr>
<td>Child's age</td>
<td>-0.04*</td>
<td>Omitted</td>
<td>-0.03</td>
<td></td>
</tr>
<tr>
<td>Guardian's age</td>
<td>-0.003</td>
<td>0.02</td>
<td>-0.002</td>
<td></td>
</tr>
<tr>
<td>Number of people in the household</td>
<td>0.01**</td>
<td>0.05</td>
<td>0.01</td>
<td>[0.03 -0.3] [0.03 -0.3] [0.06 -0.1]</td>
</tr>
<tr>
<td>Child's gender</td>
<td>0.03</td>
<td>0.02</td>
<td>0.03</td>
<td></td>
</tr>
<tr>
<td>Child's orphanhood status</td>
<td>0.001</td>
<td>0.0002</td>
<td>-0.001</td>
<td></td>
</tr>
<tr>
<td>Type of guardian</td>
<td>-0.01</td>
<td>0.17*</td>
<td>-0.01</td>
<td></td>
</tr>
<tr>
<td>Guardian's gender</td>
<td>0.13*</td>
<td>0.17*</td>
<td>0.15*</td>
<td></td>
</tr>
<tr>
<td>Guardian's employment status</td>
<td>0.02</td>
<td>0.03</td>
<td>0.23</td>
<td></td>
</tr>
<tr>
<td>Child's experience with saving. Do you have money</td>
<td>-0.05</td>
<td>-0.03</td>
<td>-0.04</td>
<td></td>
</tr>
<tr>
<td>saved (reported by child)? (%, YES, baseline value)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guardian's experience with saving. Do you have</td>
<td>0.06</td>
<td>0.08</td>
<td>0.1</td>
<td></td>
</tr>
<tr>
<td>money saved (reported by guardian)? (%, YES,</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>baseline value)</td>
<td>[0.1 -0.2]</td>
<td>[0.09 -0.3]</td>
<td>[0.1 -0.3]</td>
<td></td>
</tr>
<tr>
<td>Financial Institution where CDA was opened:</td>
<td>-0.08*</td>
<td>-0.04</td>
<td>-0.05</td>
<td></td>
</tr>
<tr>
<td>Centenary Bank</td>
<td>[-0.1 -0.2]</td>
<td>[-0.12 -0.03]</td>
<td>[-0.1 -0.01]</td>
<td></td>
</tr>
<tr>
<td>Financial Institution where CDA was opened:</td>
<td>-0.15*</td>
<td>-0.115</td>
<td>-0.12</td>
<td></td>
</tr>
<tr>
<td>DFCU</td>
<td>[-0.3 -0.04]</td>
<td>[-0.3 -0.05]</td>
<td>[-0.3 -0.01]</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>0.3**</td>
<td>0.2*</td>
<td>0.04</td>
<td></td>
</tr>
<tr>
<td>Observations</td>
<td>116</td>
<td>116</td>
<td>116</td>
<td></td>
</tr>
<tr>
<td>R-squared</td>
<td>0.279</td>
<td>0.187</td>
<td>0.296</td>
<td></td>
</tr>
</tbody>
</table>

*p ≤ 0.05, **p ≤ 0.01, ***p ≤ 0.001
Notulensi Theme 2:  
Child-Sensitive Social Protection and Poverty Reduction 

Rabu, 11 September 2013

Moderator: Santi Kusumaningrum (PUSKA PA UI)  
Rapporteur: Antoine (UNICEF)

Presenter 1:  
Name: Soetji Andari (Balai Besar Penelitian dan Pengembangan Pelayanan Kesejahteraan Sosial (B2P3KS), Kemsos, Yogyakarta)  
Title: Solidaritas sebagai Strategi Survival Anak Jalanan di Lempuyangan Yogyakarta

Highlights of Conclusions and Recommendations:

- Abolisi melalui reintegrasi keluarga, reintegrasi pendidikan, dan reintegrasi kerja
- Memberikan jaminan sosial untuk hidup, tumbuh, dan berkembang serta memiliki identitas diri sebagai pendukung
- Memfokuskan pada solusi yang berasal dari lapangan (jalanan), karena fokus anak jalanan berada di wilayah jalanan.

Presenter 2:  
Name: Gunjan Wadhwa (National Commission for Protection of Child Rights)  
Title: Ensuring Children’s Access to Right to Education in Areas of Civil Unrest: Role of Youth in World’s Largest Democracy

Highlights of Conclusions and Recommendations:

- Gunjan starts the presentation with some anecdotes about the condition of children in rural India
- When houses were burnt, Gunjan interviewed children who were the victim of the unrest, and most of them did not care about their houses that were burnt, but all the things that they brought were only books. It indicates that children paid more attention on education
- She showed some photos of the condition where NCPCR conducted the projects, one of the photos is a classroom where children doing activities. The classroom was an abandoned chicken farm
- The role of children and youth can be very significant in how to manage challenges and how to deal with the impact of child poverty. Children can be agent of change too.
Presenter 3:
Name: Rachma Indah Nurbani (SMERU Research Institute)
Title: Recognizing Children’s Contribution to Care Work at the Household: The Potential Role of Social Protection in Maintaining Child’s Right and Wellbeing

Highlights of Conclusions and Recommendations:
- The paper is a part of an ongoing study with IDS
- Rachma starts the presentation with the definition of care work
- The existing social protection will increase children participation, but the money received by the household will be spent on something that is not related to children’s education
- 3Rs to maintain child well being
- Recognize the extent of care work definition
- Reduce the care work by investing more in infrastructure such as cooking and water facilities as well as sanitation
- Redistribute (definition of domestic worker, particularly for girls)
- The paper highlights care work undertaking by children whether living with families or not.

Presenter 4:
Name: Leyla Karimli (Columbia University, US)
Title: Contractual Children Savings Accounts in Low Resource Communities: Who Saves?

Highlights of Conclusions and Recommendations:
- The presentation is done through video and Q&A session is done through teleconference
- Child savings account is indicated as active if children open their account (after being given such deposit) and starts saving their money regularly
- From age characteristics, children who were older save more compared to younger children
- Poor families do save when there is an offered institutional mechanisms as well as the family characteristics
- Further research: causal inferences, savings as a ratio of family income, different matching ratio, significant school effects

Discussant’s comments:
Name: Edy Soeharto, PhD
Title: Director of Child Welfare, Kemensos

Highlights of Conclusions and Recommendations:
- Discussant is also managing the PKSA program
- Keempat paper telah merepresentasikan masalah anak-anak
• Melanjutkan riset dan penanganan masalah anak untuk mengubah paradigma bahwa perlindungan anak basisnya adalah keluarga

• Highlight dari paper Gunjan, masih belum jelas lingkup penelitiannya
  Apa peran remajanya?

• Untuk paper yang berkaitan dengan anak jalanan, anak jalanan memang masalah yang sangat luar biasa di Indonesia sehingga dengan adanya solidaritas yang kuat seharusnya dapat dijadikan bahan bagi pemerintah untuk berkonsentrasi penuh pada program yang berhubungan dengan solidaritas anak jalanan tersebut

• Solidaritas sebagai survival strategy belum terlihat. How do children deal with their problem?

• Dari paper Rachma, Child in the care work as child exploitation belum melihat perbandingan antara anak-anak yang bekerja di rumah dengan anak-anak yang diluar

• Problem utama dari financial inclusion adalah bukan dari beneficiaries, tapi dari perbankan, karena mereka enggan berhadapan dengan orang miskin apalagi anak-anak

• Hingga kemarin PKH pemberi layanan melalui PT Pos dan BRI, namun BRI mundur pelan-pelan

• Bagi pihak bank, buat apa menyimpan uang dari ribuan orang yang isinya kosong dibanding dengan 1 atau 2 orang yang isinya milyaran?

Questions and Answers:

Q:  
1. Winarti (YKAI)  
To Edy Soeharto: Many best practices, according to your experience, how’s your achievement to replicate studies into policy?

2. Iis (Yasmina Foundation)  
To Soetji Andari: Shelter justru menambah jumlah anak jalanan dari tahun ke tahun. Apa kebijakan terkait dengan shelter tersebut?

To Leyla: Masalah tabungan anak-anak adalah pada perbankan sehingga yang lebih bergerak adalah microfinance institution yang lebih mudah dijangkau oleh orang-orang yang kurang awam dengan perbankan.

Response from moderator who were meeting with Sswemala last year: that they actually have different MOUs with different financial institution.

A:  
Soetji:  
Untuk penanganan anak jalanan dari shelter, mereka yang masih liar kemudian dilatih di rumah singgah untuk kembali menormalkan kehidupan mereka melalui pola makan, pola hidup lainnya. Kemudian mereka baru diberikan keterampilan dan pendidikan.

Penelitian ini mengungkapkan bahwa anak jalanan biasanya tergantung pada orang yang dekat dengan mereka, dan salah satu studi kasus ini adalah kasus waria yang dekat dengan anak jalanan.
Mereka menggunakan anak-anak tersebut untuk memperkuat eksistensi mereka sebagai waria dengan memberikan pandangan mengenai disorientasi seksual kelompok waria tersebut.

Q:
3. Lina (Unicef)
To Gunjan: The challenge in Indonesia is funding issue, what’s your solution regarding this in your country?

A:
Gunjan
Documenting the barriers of children is the methodology used by Gunjan’s paper. The objective is for the program, not for the research. The first part of these best practices should be the documentation of this program. The next part is getting collaboration. This is a pilot program, later the idea was taken over by the government. Community is very significant in the implementation of community-based program.

FINAL CONCLUSIONS & RECOMMENDATIONS:
1. Should focus on the basic rights of child, because if they concentrate more on the other issue out of their rights, particularly for the creation of family’s well-being, then it will impact their basic rights
2. More comprehensive data is needed to provide policy for policymakers.
THEME 3
Inclusive Social Protection

1. Social Protection Initiatives and Their Ability to Tackle Child Labour: Examining the Case of Internal Child Migrants in Indonesia
   Simrin Singh (ILO Thailand)

   Suharma (STKS, Indonesia)

   Rizqa Fithriani (BPS Lampung, Indonesia)

4. Migration and the Incidence of Child Labor: Evidence from Left-Behind Children in Indonesia
   Niken Kusumawardhani (SMERU Research Institute, Indonesia)
Social protection and its effectiveness in tackling child labour: the case of internal child migrants in Indonesia

Simrin Singh
Senior Child Labour Specialist, International Labour Organization

Sarah McLeish
Independent Consultant, International Labour Organization

1 Introduction

There is growing recognition amongst policymakers that social protection policies and programmes are uniquely placed to reduce child labour because they directly address its root causes: tackling simultaneously the poverty, exclusion and vulnerability that compel families to depend on the meagre incomes they can earn by sending their children to work. Social protection can also address the underlying social and economic causes that prevent children from attending school. Nevertheless, particular social protection schemes vary significantly in their ability to tackle child labour – depending on their specific features and the characteristics of the children they target (ILO, 2012).

There is an urgent need to better understand the types of vulnerabilities faced by different children, in order to distinguish the social protection systems that can adequately meet their needs and make these more effective. This would enable the design and implementation of social protection policies and programmes to become better informed on child labour and ensure their maximum impact in eliminating its core causes.

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1 The authors wish to acknowledge BPS Statistics Indonesia for providing the underlying data to make this research possible. We also wish to thank the following individuals for providing inputs and guidance to the development of this paper: Valerie Schmitt; Marko Stermsek; Sinta Satriana; Arum Ratnawati; Rachael Chadwick; Dyah Retno Sudarto; Albert Y. Bonashat; and Hans van de Glind.

2 Child labour is defined by the International Labour Organization’s (ILO) Convention on the minimum age for admission to employment, 1973 (No. 138), as including three types of work: work undertaken by children below the nationally defined minimum age for employment, which should not normally be less than 15; hazardous work undertaken by children below 18; and light work undertaken by children below 13. The minimum age for employment in Indonesia is 15.
The present paper focuses on internal child migrants\(^3\) in Indonesia as a specific category of vulnerable children for whom better policies could make a direct and significant change. Global estimates suggest that there are roughly four times as many internal migrants as international and that they tend to be from poorer, more vulnerable sections of society (UNDP, 2009). In Indonesia, many internal migrants are children under the age of 18, a significant number of which migrate in ways which make them particularly vulnerable to child labour, including the worst forms of child labour. As long as these dynamics remain poorly understood, they will remain opaque in the context of expanding Indonesia’s social protection system.

An estimated four million 5-17 year olds are engaged in child labour in Indonesia, damaging not only their immediate well-being but also their future potential, making tackling child labour an urgent policy priority (Understanding Children’s Work (UCW) Programme, 2012). In order for exploitative child labour to be eliminated there needs to be a better understanding of how to reach out to these children and for solid evidence of what works in specific circumstances (UNICEF, 2012).

The findings presented in this paper have been informed by a thorough literature review and semi-structured interviews with specialists and field staff working on social protection, migration and child labour in Indonesia. The statistical analysis described below was primarily based on the Indonesia Population and Housing Census 2010, with kind permission from IPUMS International.

The objectives of this paper are threefold: (i) to identify specific categories of internal child migrants who are particularly vulnerable to child labour; (ii) to establish the extent to which Indonesia’s current social protection system mitigates this vulnerability; and (iii) to offer concrete recommendations for how it could be made more effective.

The rest of the paper is divided up as follows: Section 2 presents a review of the literature linking social protection, internal migration and child labour; Section 3 presents a statistical overview of child labour and internal child migration in Indonesia; Section 4 examines Indonesia’s current social protection policies and programmes in terms of their effectiveness to reach and protect internal child migrants; Section 5 concludes; Section 6 sums up a number of recommendations for policies and future research.

2 Literature Review

This section provides an overview of existing theoretical and empirical evidence on the links between social protection, internal migration and child labour. It centres around two key questions: How does social protection mitigate child labour (2.1) and to what extent are internal child migrants vulnerable to child labour (2.2)?

2.1. How does social protection mitigate child labour?

The term ‘social protection’ encompasses a range of policy initiatives and services, all of which aim to address poverty, exclusion and vulnerability as a means of promoting human welfare;

\(^3\) Internal child migration is the movement of children below the age of 18, moving within the boundaries of a nation state within a given period. It can occur independently or with families and may be either permanent or temporary. For the purpose of this paper, we limit our focus to those children who migrate voluntarily, rather than being the victims of trafficking or a forceful move coming about through war, conflict or natural disaster. For the purposes of the statistical analysis conducted in this paper, internal migration is defined as movement across district boundaries for a period of at least 6 months.
facilitating social cohesion; and contributing to economic performance and fair growth. It can include such policy mechanisms as direct cash transfers to poor families; access to health care services and health insurance; food-based programmes; and the provision of training programs for the unemployed. Access to adequate social protection is recognised by the United Nations (UN) as a basic right and is one of the four strategic objectives of the ILO’s Decent Work agenda.

Although the root causes of child labour are highly complex and can vary significantly between contexts, by far the closest determinant is poverty. Poverty forces families to make difficult decisions about whether to keep their children in education and compels poor families to depend on the meagre incomes that can be earned by sending children to work. In turn, child labour perpetuates poverty by keeping children out of school, severely limiting their future prospects and their chances of obtaining decent work as adults. This assertion is well supported by robust evidence showing that child labour rates are higher in poorer countries; and that within countries incidences of child labour are more common in poorer households (ILO, 2012).

There is a growing body of evidence which demonstrates the crucial role that social protection can play in mitigating these vulnerabilities and a growing awareness amongst policymakers that any meaningful and substantive action to reduce child labour needs to prioritise reducing poverty through the provision of social protection services.

Social protection can help to prevent child labour through three direct mechanisms; first, improving the economic position of households, enabling them to keep children in school for longer and reducing the necessity to send children to work; second, increasing the resilience of households to economic shocks making them less likely to have to resort to taking children out of school and into work; and third, through creating positive incentives to keep children in school and out of work, for example by making social protection benefits conditional on the achievement of certain health and education objectives. In addition to their preventative functions, social protection initiatives can also provide support and protection to child labourers themselves by facilitating their rehabilitation or ensuring that they have basic standards of security and protection.

As a result, there has been growing recognition of the need to design and implement ‘child-sensitive’ social protection to ensure that these benefits are maximised and that social protection systems are responsive to the specific vulnerabilities faced by children, including in relation to child labour. In support of these objectives, there is a growing body of research and evidence which seeks to evaluate existing social protection mechanisms and to identify ways in which they could be made even more effective in the fight against child labour. The majority of existing research has focused on the role of cash transfers. Cash transfers can help to boost the incomes of poor families, smooth consumption and protect against economic shocks making it easier to send children to school and households less reliant on income earned from sending children to work. When combined with conditionalities, which link cash transfers to positive behaviours, further positive incentives can be generated. This can either happen directly – for example in Ghana where recipients of must abstain from the use of child labour (ODI 2013) – or indirectly, as is the case in Indonesia and elsewhere – where recipients must ensure that children are enrolled in school.

The ILO’s World Report on Child Labour 2012 draws on rigorous impact evaluations to elucidate specific mechanisms by which social protection mechanisms can support efforts against child labour, and to provide concrete recommendations for how child labour concerns can be more effectively mainstreamed into social protection systems. This report finds that the impact of specific social protection schemes on child labour varies significantly between programmes and depends on a range of factors. For example, cash transfers to poor families were found to be
particularly effective when combined with supply-side schooling initiatives and less effective where they are invested in productive activities such as land and microfinance.

A recent study by Understanding Children’s Work (UCW), an inter-agency research project between the ILO, World Bank and UNICEF, found that the impact of conditional cash transfers on child labour differs considerably between countries and programmes, and that they are typically higher when child labour rates are higher and the margin for improvement is greater (Understanding Children’s Work (UCW) Programme, 2012). Social assistance programmes that are focused of children have the greatest impact on child welfare and they tend to work better when a commitment to child welfare is high on the political agenda. Conversely, the impact of programmes that are not explicitly focused on children is more mixed and can result in either positive or negative spill-overs (UNICEF, 2012).

2.2. To what extent are internal child migrants vulnerable to child labour?

Research and evidence paints a complex picture of internal child migration. On the one hand, evidence suggests that it can reduce child labour by raising incomes, reducing poverty and improving educational outcomes. For example, a study in Indonesia found that, on average, children who migrate within the country record permanent, positive and large effects on measures of education and health and that compared to similar individuals who remain in rural areas and that children who migrate to urban areas within Indonesia increase their educational attainment by around four years (Suryadarma & Resosudarmo, 2011). However, evidence also suggests that these benefits are not equally distributed and that internal migration can also be associated with particular risk factors which make children especially vulnerable to joining the labour force prematurely or engaging in hazardous work. These vulnerabilities can relate to the characteristics of migrant children; the types of migration which is undertaken; or the situation of migrants on arrival at their destination.

2.2.1 Vulnerabilities relating to the characteristics of migrant children

Poverty

Poverty has a significant impact on the type of migration which is undertaken and on the situation of migrants at their place of arrival. Poor people are more likely to migrate internally, partly because international migration is less accessible because of the high costs that can be involved. Evidence also suggests that poor people are more likely to migrate in unsafe ways; including seasonally; that poor children are more likely to migrate for work; and that on arrival they are likely to end up living in similar poverty (DFID 2012).

A study from Pakistan showed that migrants with ‘low prior social endowments’ are particularly vulnerable when they migrate internally because they are likely to become involved in informal economic activities, including begging and petty crime (Gazdar, 2003).

Gender

Gender can expose migrants to specific risks and challenges because girls and boys tend to migrate in different circumstances and have access to different opportunities at their destination. Evidence from the Population Council (2013) has shown that, compared with migrant girls, migrant boys have larger social networks and migrate with more support from friends and family and that on their arrival they have access to greater number of opportunities. The limited range of occupations available to migrant girls who are above the minimum age of employment makes
them particularly vulnerable to conditions which amount to child labour. In addition girls who migrate are more likely than boys to fall victim to sexual exploitation and trafficking.

2.2.2 Vulnerabilities relating to the type of migration undertaken

Independent child migration

Independent child migration refers to children below 18 years of age who migrate without being accompanied by a parent or guardian. It is inextricably linked to child labour because the majority of children who migrate by themselves do so in order to work. The particular vulnerability faced by internal child migrants has been explicitly recognised by the UN Special Rapporteur on the Human Rights of Migrants; “children who are unaccompanied or separated from their parents are particularly vulnerable to human rights violations and abuses at all stages of the migration process” (United Nations Special Rapporteur on the Human Rights of Migrants, 2013). They face a range of risks, particularly because they lack adult supervision and protection; are isolated from traditional familial and community networks; may end up living and working on the street; and are routinely exposed to violence, coercion and exploitation.

A study into the education outcomes of migrants to Greater Jakarta found that educational outcomes were much worse for those that moved between the ages of 10 and 17 years, since they were likely to have migrated by themselves, dropped out of school in order to do so and had little or no opportunities to continue with their education afterwards (McDonald et al, 2011).

Seasonal migration

Seasonal migration refers to temporary movement from one area to another and is particularly associated with sectors where there is not a steady flow of work throughout the year. This type of migration is closely associated with poverty and is often a very important livelihood strategy for people from rural areas (Silvey and Elmhirst, 2003). It typically consists of people who work in agriculture during peak planting and harvesting seasons but spend the rest of their time elsewhere, such as working in urban informal settings.

Evidence from across Asia suggests a close link between seasonal migration and educational disadvantage. Research from India has shown that children accompanying seasonal and circular internal migrants do not attend school, as school systems generally do not allow children to be absent for prolonged periods (Srivastava, 2011). In Ho Chi Minh City, Viet Nam, about 40% of the children (aged 11–14) of short-term and seasonal migrants are out of school, compared with 15% of the children of permanent migrants, who have resided for over six months and can demonstrate permanent employment. Older youth are at even greater risk: 80% of short-term and seasonal migrants 15 to 18 years old were found to have dropped out of school, compared with 34% of permanent residents (World Bank, 2007).

In relation to the labour market and working conditions

Evidence suggests that the increased work opportunities which are available in urban areas may generate additional incentives for children to work, especially for recent migrant families still in transition and in situations where children are unable to access schools or lack access to basic services (ILO and UCW, 2010). In rural areas, migrant worker families are often paid by piece-work which can generate incentives to use children to increase outputs, particularly in situations where remuneration is too low to sufficiently support families, or where schools and basic services are difficult to access (Kou & van de Glind, 2013).
For children who do enter the labour market, evidence suggests that internal migrants face more disadvantages and increased vulnerabilities compared with non-migrants. According to research by the ILO, migrant child labourers receive less pay, work longer hours, attend school less often and face higher death rates at work in comparison to local child labourers (ILO, Migration and Child Labour - Essentials, 2011).

A study by McDonald et al (2011) based on data from the 2010 Greater Jakarta Transition to Adulthood Survey found that only a small minority of men and women who migrate to Jakarta as youth are ever able to move into formal sector employment, and that the majority remain self-employed or in casual work, typically working very long hours for very low wages. Mosse et al (2002), in a study on Bhil in western India, found that employers tended to prefer migrant workers because they would accept worse conditions than local labourers; and that migrant workers typically worked in hazardous environments with no protection against injury, no sick pay; no contribution to medical expenses and subject to low wages and unpaid overtime. A study into migrant adolescent girls found that limited human capital constrains migrant girls’ work opportunities and that migrant girls tend to enter the labour market at younger ages and with less education compared with local urban girls, meaning that migrant girls who leave home to pursue employment often face limited job options and exploitative working conditions (Population Council, 2013).

In relation to living and housing conditions

Internal migrants are over-represented in urban informal settings; face problems in accessing services; and face basic challenges in accessing adequate sanitation (Sabates-Wheeler & Waite, 2003). Research from Sri Lanka has shown internal migrants who live in slum areas also face problems accessing schools for their children (Fernando, 2005). In situations where migrants tend to move to one particular area, it can place pressure on services and the labour market; creating tension with the local community, and also cause capacity problems for accessing services.

In Indonesia this is particularly pronounced in cities such as Jakarta where overcrowding makes it difficult to access services and high quality education because the city does not have the infrastructure to deal with the high numbers of internal migrants who move there (World Bank, 2003). A qualitative study by the SMERU Institute and UNICEF (2013) into the situation of children in North Jakarta, highlighted some of the issues associated with living in urban informal settings. Focusing on the example of Tanah Merah which is an informal settlement on disputed land where the majority of inhabitants are internal migrants, they showed that the environmental conditions were very poor including dense, crowded and unhealthy housing conditions; a lack of adequate sanitation facilities; and a lack of clean water supplies.

3. National context: internal child migration and child labour in Indonesia

This section combines statistical and anecdotal evidence to create a picture of internal child migration and child labour in Indonesia. The first part (3.1) establishes – as far as available data allows – the nature and extent of internal child migration in Indonesia and the characteristics of internal child migrants. The second part (3.2) provides an overview of the child labour situation in Indonesia with a particular focus on three sectors in which there are a significant number of internal child migrants: child domestic work, the urban informal economy and agriculture. In doing so, this section will build an understanding of the situations in which migrant children can be found in Indonesia and some of the risks to which they are exposed.
3.1. Internal child migration

Indonesia is the largest country in Southeast Asia by a significant way. According to the 2010 population census, it had a total population of 238 million people spread across 34 provinces and 501 separate regencies and municipalities. The 2009 socioeconomic survey indicated that around a third of Indonesians were below the age of 18, whilst approximately 12% of Indonesians lived below the national poverty line in 2012. Between and even within provinces there are huge disparities in terms of income, wealth and poverty – particularly between rural and urban areas. The population distribution between Indonesia’s various islands is also extremely uneven, with the island of Java carrying over 50% of the country’s population, despite being only 10% of its total landmass. The share of Indonesia’s urban population is projected to rise to almost one half by 2015 and to exceed two thirds by 2050. An estimated 65% of urban growth will be due to internal migration and only 35% to natural increase ((UN Statistics Division, 2009).

Indonesia’s government has historically placed few restrictions on internal migration, which has long resulted in large migration flows to urban areas, particularly on Java and parts of Bali (Hugo, 2003). One key exception to this rule has been Jakarta, which has intermittently – particularly during the 1970s – operated a ‘closed city’ policy that enabled non-registered internal migrants to be evicted from the city.

3.1.1. Data sources and limitations

The primary data and all of the graphs presented in this section are derived from a representative subset of the ‘Indonesia Population and Housing Census 2010’, harmonised and published by IPUMS International. The sample holds a tenth of the complete census data, stratified geographically by household. The data are self-weighting and the results below representative of the entire Indonesian population in 2010.

Internal migration is captured through a question asking respondents where they had lived five years ago – whereby a change of province or regency / municipality would indicate internal migration within the five years between 2005 and 2010. The question, unfortunately, is insufficient for capturing short-term or seasonal migration that may occur and be undone during the five-year period. Moreover, household heads are counted as living in a particular place so long as they return there once in every six-month period, which again leads to an omission of circular or seasonal migrants. This is an unfortunate lapse since field studies demonstrate the widespread and rising incidence of circular migration in Indonesia over the past 20 years (Hugo, 2003), which the data contained here are unable to capture. Furthermore, those internal migrants who migrated internally after 2005 but subsequently either moved abroad or died before the 2010 census was taken could also not be captured in the present data. As such, the aggregate results presented below are very likely to underestimate the true extent of internal migration between 2005 and 2010 although they do provide the most accurate picture, based on the current data.

3.1.2. A profile of internal child migrants

According to the 2010 Census, some 4.31 million Indonesian’s above the age of five changed their regency or municipality within the same province between 2005 and 2010, whilst a further 5.13 million changed their province altogether. These 9.44 million internal migrants between 2005 and 2010 represent some 4.0% of the total population captured in the Census. Within this overall

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4 World Bank, World Development Indicators 2012

5 The comparative figure for international migration during this period; according to the Census; was only 158,000 individuals, representing some 0.07% of the total population.
Figure, there were roughly 1.86 million children in Indonesia, aged between five and 17 in 2010, who had changed their province or regency / municipality at some point in the five years prior to 2010.

Although this figure is accurate for those children aged 5-17 in 2010, a more robust estimate should also include those internal child migrants who were born after 2005 as well as those who migrated and then turned 18 at some point after 2005. In order to correct for this, the missing values were estimated by taking a five-year average for all the possible ages the children might have been at the time of their migration and assuming these were evenly distributed in each of the five years between 2005 and 2010. Thus, for example, an internal child migrant who was 12 at the time of the Census, might have migrated at any age between eight and 12. To estimate the total number of those who were 12 at the time of migration, the estimate took one fifth from each of the five-year averages containing migratory 12-year-olds (i.e. 8-12, 9-13, 10-14, 11-15 and 12-16). The estimates for the different age groups 1-17 (no estimate was possible for those aged below one at the time of migration) were then summed to obtain the aggregate number, which was then divided by five to estimate the annual flows per age-group.

The estimated total number of internal child migrants (aged 0-17) that migrate within Indonesia between 2005 and 2010 is thus 2.63 million, based on the method outlined above.

This figure represents an average annual flow of around 527,000 internal child migrants in Indonesia during each of the five years between 2005 and 2010, using the outlined method.

Disaggregating these estimates by gender and age reveals that both the male and female flows trough around the age of ten and increase steadily thereafter. Both the flows are fairly gender-balanced within the different age-groups up to the age of 13, beyond which the girls increasingly outnumber the boys (see Figure 1, below).

Figure 1. Estimated annual internal migration flows between 2005 and 2010, by age and gender (ages 5-18)

Disaggregating the estimates further by type of internal migration – whether it was between a regency or municipality within the same province (inter-municipal) or between two provinces entirely (inter-provincial) – shows fairly even flows for each age group (Figure 2).
Looking now at the figures for internal child migrants by their actual age in 2010, it is possible to disaggregate them by their relationship to the household head in 2010, in order to gain some insight into the reason behind their move. The graph below thus shows the shares of internal child migrants’ within each age group by their relationship to the head of their household at the time of the census (Figure 3). As one might expect, the vast majority of internal child migrants below the age of 12 are the child, stepchild, grandchild or child-in-law of their household head. What is surprising, however, it that this figure drops away sharply around the age of twelve, with many being replaced by ‘others’ (including relatives and non-relatives of the household head) and domestic servants. Live-in domestic servants peak around the age of 17, suggesting the bulk of internal child migrant domestic workers migrate between the age of 13 and 17. As for those internal child migrants who were themselves the head of their household in 2010 (or married / partnered to the head), they exceed 1% at the age of 14; account for 20% of internal child migrants by 18; and exceed 50% of them by 23.
Looking now at school attendance for different types of children – inter-municipal internal migrants, inter-provincial internal migrants and non-migrants – the graph below shows their school attendance rates, by their age in 2010. Whilst all three groups attended school at rates above 90% between the age of seven and 12, the attendance rate for inter-provincial internal migrants fell away sharply after that. What is surprising is that the inter-municipal child migrants seem to perform just as well as the non-migrants, whilst those who migrated between provinces did progressively worse from the age of 13. If not attending school can be taken as a proxy for child labour, this finding suggests that the most vulnerable children are those who migrate long distances, as opposed to those who move or stay within the same province.

**Figure 4. School attendance rates by age and type of migrant (ages 7-17)**

Comparing all 5-17 year-olds in these three migration categories, we see the shares of those who never attended school are fairly even at 10% in all three groups and for boys as much as girls (). Looking at the likelihood that they once attended school but no longer do, the figures are higher for internal child migrants than non-migrants and higher still for inter-provincial internal child migrants. As the graph also shows, the differences are even more pronounced for girls than they are for boys, indicating that they are at more risk of dropping out of school after and internal migration.

**Figure 5. Shares of children by historical school attendance, gender and type of migrant (all 5-17-year-olds)**
3.2. Child labour in Indonesia

According to the latest estimates, from 2009, there are approximately 4 million child labourers in Indonesia, including 1.4 million children aged 12 and below; 650,000 children aged 13-14 in non-light work; and 2 million 15-17 year olds in hazardous work (Understanding Children's Work (UCW) Programme, 2012). The available data does not differentiate according to migration status, making it difficult to obtain a reliable estimate of how many of these children are internal migrants.

This overall figure masks substantial differences in children’s employment rates between different regions (in Jakarta only 1% of children aged 10-14 were in employment in 2009, compared to 9% in Eastern Indonesia), as well as between rural and urban areas (only 3% of children from urban areas were in employment, compared with 8% in rural areas). An overall majority of working children are concentrated in the agricultural sector, which is also the sector which exposes children to the highest degree of hazards. Almost all of these children – 96% – work unpaid within their family unit.

Children in employment are less likely to attend school than those who are not in employment, and those that do attend school lag behind their non-working peers in terms of attendance and grade progression. By compromising education outcomes, children’s employment has significant and long-term negative effects, preventing children from acquiring the skills and qualifications needed for obtaining decent work when they reach the minimum age for employment.

In terms of gender distribution, girls are found to be slightly less likely to be in employment and slightly more likely to attend school than boys, although they spend more time carrying out household chores and are likely to be over-represented in sectors of work which are underestimated in household surveys, such as child domestic work.

Child labourers who work in migrant sensitive areas such as child domestic work, the urban informal sector and agriculture typically have limited access to formal social security provisions. This can make those above the minimum working age – aged 15-17 – particularly vulnerable to conditions which amount to child labour.

3.2.1. Policy and programme responses to child labour

Tackling child labour has been identified as a priority issue by the Indonesian government. Indonesia ratified ILO Convention No. 138 on Minimum Age for Employment in 1999 and ILO Convention No. 182 on the Worst Forms of Child Labour in 2000. The minimum age for work at 15, the minimum age for hazardous work at 18 and children are specifically prohibited from working in the worst forms of child labour. However the Act excludes children who are self-employed or lack clear wage relationships, therefore excluding the majority of children in the three sectors which this chapter focuses on; child domestic work, urban informal economy and agriculture; making children in these sectors particularly vulnerable to exploitation.

Indonesia has ratified the UN Convention on the Rights of the Child (UNCRC) 1989, which affirms that all children – regardless of their circumstance – should have the right to social security, including social insurance in according to national law (article 26). This represents a clear commitment that all children should be given a fair chance and an opportunity to reach their full

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6 Figures drawn from the 2009 Indonesia Child Labour Survey and 2009 Indonesia National Labour Force Survey)
potential and there are several complementary areas between social protection policies and programmes and combatting child labour.

The Government has however incorporated child labour issues into national development agendas, including the National Mid-Term Development Plan (2010-2014) which addresses the worst forms of child labour in domestic work, transportation, construction and mining and provides specific targets and budgetary allocations for action.

A National Action Plan on the Elimination of the Worst Forms of Child Labour was finalised in 2002 and provides a broad framework for national actions in this area, aiming for absolute elimination by 2020 of all worst forms of child labour. The second phase was completed in 2012 and focused on promoting a positive policy and enabling environment for eliminating child labour, through building the knowledge base, improving legislative responses and raising awareness. It also involved direct and targeted interventions in four sectors; child domestic labour, children in plantations, trafficking for sexual exploitation and street children at risk of trafficking; through formal and non-formal education provisions and skills training.

In support of the national policy, action committees on child labour have been established in 22 of the 34 provinces in Indonesia to formulate local policies and programs that are appropriate to local conditions. A National Action Committee (NAC) for the Elimination of the Worst Forms of Child Labour coordinates and monitors policy and program efforts to eliminate the worst forms of child labour at the national level. Education is compulsory for nine years between the ages of seven and fifteen. Articles 48 and 53 of the Child Protection Act further specify that the government must provide a minimum of nine years basic education for all children and free education for all children.

3.2.3. Child domestic work

Child domestic work refers to paid or unpaid domestic work by children in households other than their own. It typically involves carrying out domestic chores such as cooking and cleaning, looking after other young children and caring for elderly people. Worldwide, the majority of child domestic workers are migrants – mostly internal – who typically have to move long distances away from their family to their employer’s home (ILO, 2013).

It is one of the most hazardous and least visible forms of child labour, characterised by extremely difficult conditions including low pay and long working hours where physical, verbal and even sexual abuse is common place. In many cases, children are additionally vulnerable as a result of their migration because they are isolated from their family and communities and more likely to be engaged as ‘live-in’ workers. This creates a situation of dependency vis-à-vis the employer’s family and means that child domestic workers have little recourse to help and support. One ILO study found that child domestic workers in Indonesia perform the same amount of work as adult workers and that the long working hours and lack of time for rest, recreation and socialising impacts on children’s mental, physical, social and intellectual development (ILO, Flowers on the Rock: Phenomenon of Child Domestic Workers in Indonesia, 2004). A 2009 investigation by Human Rights Watch found girls as young as 11 working as domestic workers in Indonesia; often lured from rural areas with false promises of high wages and without full details of the tasks and working conditions that would be expected of them (Human Rights Watch, 2009).

As in most other places in the world, domestic workers in Indonesia are not covered by national law and legislation to the same extent as other workers. This makes young domestic workers above the minimum age for employment particularly vulnerable to conditions which amount to child labour. For example, the Manpower Act of 2003 provides basic labour rights to formal sector
worker - including a minimum wage, overtime pay, an eight-hour workday, weekly day of rest, vacation, and social security – but excludes informal workers, including domestic workers.

Figure 6 below shows the shares of children aged 5-17 whose relationship to their household head is that of a ‘domestic worker’ at the time of the 2010 Census’. The bars clearly show that internal child migrants – both boys and girls – are more likely to be domestic workers than non-migrants. This likelihood was even greater for inter-provincial internal migrants than for inter-municipal ones. In fact; as the tallest bar in the figure below shows; some 11% of all inter-provincial girl-child migrant; who migrated between 2005 and 2010 and were aged 5-17 in 2010; were employed as domestic workers. The absolute figures include as many as 81,000 girls in 2010 who migrated internally after 2005 to work as domestic employees, compared with only 65,000 of those who did not migrate at all. This finding implies that the demand for internal child migrant domestic workers is higher than non-migrant ones, both in absolute and relevant terms.

3.2.4 Street children in the urban informal economy

The urban informal economy is closely associated with rural-urban migration and with the phenomenon of ‘street children’. At a national level, UNICEF has estimated that the number of street children in Indonesia has increased rapidly over the last few decades; from around 50,000 in the late 1990s to 230,000 in 2008, and that they are particularly concentrated in large urban areas such as Jakarta. While it is not known how many of these children are internal migrants it is clear that the gap in opportunities between rural and urban areas, leading to migration, as a key cause of the growth of street children. Situational analysis conducted by UNICEF (2011) found that children involved in this sector are involved in a number of occupations including street vending, scavenging, begging and shoe polishing. Furthermore, children living on the streets generally have no adult protection and are therefore more vulnerable to further violations such as trafficking and sexual exploitation. Lack of access to services and education opportunities, and often bear the burden for being primary breadwinners for their families (UNICEF, 2011).

3.2.5 Fishing and Agriculture

The agriculture sector accounts for by far the largest share of children’s employment in Indonesia (Understanding Children’s Work (UCW) Programme, 2012). Although the exact number is unclear, anecdotal evidence suggests that this includes a number of internal migrants (Hugo, 2003). This type of work involves exposure to many hazards including extreme temperatures, pesticides, and

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7 The relevant question asked in the Census concerned all those “who live and eat in the respondent’s household and receive a wage/salary either in cash or in kind.” As further guidance, the question specified: “Only one relationship category can be selected even though, in fact, there is actually more than one relationship that exists between the household member and the head of household. For example, a family member who works as a maid (given wage/salary) or the child of a housemaid who also lives in the household of the respondent and treated like a maid is also considered a housemaid of the household…”
dangerous machinery. It typically requires working long hours and carrying out heavy, strenuous work, making agriculture one of the most hazardous sectors for children to work in.

In Indonesia, plantation work is a particularly common form of agriculture for children to be involved in, producing tobacco, rubber and palm oil. Plantations – particularly for rubber production - are typically located a long distance from the nearest settlements and have few facilities or services on offer. This can make it difficult to access schools and medical facilities. This is exacerbated by the fact that the distribution of health facilities between rural and urban areas is imbalanced: the majority of government hospitals are located in district capitals, limiting their access to rural residents, who instead have to rely on health centres as the basic source of primary care (Yao Lu, 2008).

An ILO study into child labour in tobacco plantations in Indonesia found that although most came from villages surrounding the plantation, others had moved from other districts or provinces to work. In common with the situation in much of the agricultural sector, none of the children in the study had a direct contractual relationship with the employer, but rather worked in order to help their parents meet quotas (ILO, 2010). There are also particularly high numbers of boys recruited from villages to work on off-shore fishing platforms (Jermal). These boys face particular difficulties and vulnerabilities because they are isolated, have no possibility to attend school and have to cope with extremely challenging living and working conditions.

4. Indonesia’s social protection system

This section conducts a detailed assessment of Indonesia’s social protection system in terms of its effectiveness in tackling child labour and in reaching vulnerable internal child migrants. This exercise is closely informed by the ILO’s recent assessment of the social protection situation in Indonesia which was conducted from April 2011 to November 2012 in close collaboration with Bappenas (Ministry of National Development Planning) (ILO, 2012).

4.1. Overview of social protection policies and programmes in Indonesia

Provisions for formal social protection in Indonesia expanded rapidly following the 1997-1998 East Asian financial crisis, during which the country experienced profound economic hardship coupled with severe political and social upheaval. As a result of the crisis inflation went from less than 8% in 1996 to 61% in 1998; economic growth from 8% in 1996 to -14% in 1997; GDP per capita almost halved from USD 1,155 in 1996 to USD 665 by end of 1998; and by the government’s estimates poverty rates jumped from 11% to 40% (UNDP, 2009).

The government’s response to the protracted crisis aimed explicitly at helping the poor and vulnerable to cope with economic hardship through a package of social protection interventions, including cash transfers and food subsidies. Although these initiatives were introduced in an ad hoc fashion and aimed at reacting to circumstances rather than addressing underlying risks and vulnerability, they provided the basis for social protection to become a more permanent part of the policy landscape.

Today, the right to social protection is explicitly enshrined in law: a 2002 amendment to the constitution recognised the right to social security for all; and the National Social Security Law (40/2004) further mandates the extension of social security coverage to the whole population in the areas of health, work injury, old age and the death of the breadwinner, following a ‘staircase approach’ by which the poor are provided with basic and non-contributory benefits; nominal
contributions for informal workers; and statutory social security schemes for formal sector workers. However, an estimated 13% of the poorest quintile of Indonesians and 44% of households in which at least one child under 15 is working do not receive any form of social protection, which at present focuses primarily on formal sector employees.

Access to education, particularly for girls, has been explicitly prioritised in social protection policies and programmes, through direct assistance to schools, scholarships and cash transfers which are conditional on school enrolment. A qualitative study on North Jakarta funded by the SMERU Institute found that the absence of birth certificates amongst children who had migrated between provinces made it difficult for children to be enrolled in school. For state schools having a birth certificate is a pre-requisite for admission meaning that often the only available choice was to enroll in a private school (SMERU Institute and UNICEF, 2013).

**Effects of decentralisation**

Drastic political decentralisation took place in 2001 and provincial and even district level officials took on significant responsibility for the development and implementation of social protection, often resulting in significant differences between areas in the services that are offered. Eligibility for such schemes depends on holding official residence in a particular district or province, as designated on National and Household ID cards.

The process of changing the place of residence on ID cards is cumbersome, and often prohibitively expensive for many of the most vulnerable internal migrants. For children it is even more difficult because they are not entitled to an individual national ID card until they are aged 17, meaning that some young workers who are above the minimum age for employment are precluded from accessing social protection schemes. For people that only migrate seasonally, the process of continually changing official registration is even more problematic. This results in a situation where even ‘de facto’ residents are unable to access social protection schemes, particularly in Jakarta which operates a ‘closed city’ policy and has particularly stringent registration requirements; requiring proof of employment and housing and to deposit with the city government the equivalent of the return fare to their point of origin (UNDP, 2009). A study by SMERU and UNICEF into the situation of children in North Jakarta looked at the case study example of Tanah Merah which is a slum located on disputed land. The majority of residents are internal migrants and face acute difficulties in accessing social protection services because the existence of the slum is not recognised by the local administration office, making it extremely difficult to obtain the necessary identification and residence documents (SMERU Institute and UNICEF, 2013).

Some of the programmes which are in operation at a local level are directly relevant for tackling child labour, including in Yogyakarta, where there is a “retrieval program” for drop out children, which allows students who have dropped out to return to school for free. Or indirectly, such as the health insurance card which has been rolled out in Jakarta using funding from the Jamkesda scheme. A persistent problem with local schemes such as this is that they only target children who are official residents of the city; proven through showing Identification Cards (Kartu Tanda Penduduk) or Household Information Cards (Kartu Keluarga); meaning that many vulnerable internal migrants are not eligible (Human Rights Watch, 2009).

**Main national and provincial social protection schemes**

The table on the following pages provides a preliminary assessment of Indonesia’s main social protection schemes in terms of their relevance in tackling child labour and their effectiveness in reaching internal child migrants.
**Table 1: Overview of the most relevant schemes**

<table>
<thead>
<tr>
<th>Scheme and details</th>
<th>Relevance for tackling child labour</th>
<th>Access for internal child migrants</th>
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| School assistance programme (*BOS: Bantuan Operasional Sekolah*)  
Provides block grants to schools with the aim of guaranteeing free basic education from grades one to nine.  
In 2012 it covered 44.7 million students in 200,000 schools with elementary schools receiving Rp 580,000 (USD 65) per student and junior secondary schools receiving Rp 710,000 (USD 79). | Helps to increase education quality; and improve access by ensuring that the costs of running schools do not need to be passed onto students. | Provides funding directly to schools rather than to individuals so issues of internal migration are not directly relevant. However, since it only reaches those who are enrolled in school, it does not always include internal migrants, who face a variety of internal and external barriers to enrolling in school. |
| Scholarships for poor students (*BSM: Bantuan Siswa Miskin*)  
Supports poor students from primary to university level; reaching 6.3 million in 2012; by directly dispersing money to students via the postal service. | Supports children from poor households to continue their education. However evidence suggests that the subsidies are not enough to cover the costs of schooling and so the effects on enrolment rates have been minimal (World Bank, 2012). No direct studies on the effectiveness of the scheme on reducing child labour. | Targeting is carried out on an ad hoc basis, typically by head-teachers or local education offices, with no systematic procedures in place to reach the most vulnerable. There is no formal system in place to ensure portability in cases where children move schools. |
| Mandatory public health insurance (*Jamkesmas: Jaminan Kesehatan Masyarakat*)  
Covers approximately 32% of the population and provides the poor and near-poor with free health care services in community health centres, basic wards in government hospitals and some designated private hospitals. | Strengthens the resilience of families and reduces poverty by reducing out-of-pocket health expenses. No direct studies on the effectiveness of the scheme on reducing child labour. | Benefits are fully portable between locations, meaning that internal migrants do not lose their entitlements when they move. From 2008 the programme began to allow people who did not hold identity cards – including abandoned children, and the homeless – to be covered by the programme. However this is dependent on obtaining a letter of recommendation letter from a local social affairs agency which may be problematic for children, particularly those which have migrated independently. |
| Provisional public health insurance scheme (*Jamkesda: Jaminan Kesehatan Daerah*)  
Covers 13.5% of the population and primarily targets poor people who are identified as poor but are not provided for by Jamkesmas, either because of data errors, or because they recently became poor. According to the Ministry of Health it covers 13.5% of the population. | In practice there is a messy distinction between the local and national schemes and many poor people are eligible for both, since the two schemes use completely separate databases and have no mechanisms to crosscheck. | Funds are allocated through local governments at the provincial and district levels, resulting in significant discrepancies between provinces and districts in the level in the type of protection that is offered and in the contribution requirements. Because they are linked to particular areas, these benefits are not portable and people are not eligible to receive treatment outside of the province or district in which they are registered. |
| Conditional Cash Transfer Programme (*PKH: Program Keluarga Harapan*)  
Children are the primary beneficiaries and targets of this programme, which in 2012 covered 33 provinces and 1.5 million very | Contains a small child labour sub-programme (PPA-PKH: Pengurangan Pekerja Anak untuk Mendukung Program Keluarga Harapan) which gives tailored support and assistance – including motivational and academic training - to the children of | Recipients of the PKH programme are required to have KTP (identification cards) and KK (family cards) which identify them as residents of the area they are receiving benefits. This means that many poor households who are migrants to an area are not |
poor households and is expected to reach 3 million households across every district and province by 2014. Depending on the household structure, cash transfers of around IDR 600,000 – 2,200,000 are given on condition of meeting relevant programme conditions, including that; children are enrolled in school and have at least 85% attendance; and pregnant and lactating mothers and infants regularly visit health facilities for check-ups.

families covered by the PKH programme who have dropped out of school to work, to return to school. In 2012 the programme reached 10,750 children across 84 districts in 71 provinces.

No direct studies on the effectiveness of the scheme on reducing child labour. Indirect studies have shown that PKH did not have an effect on enrolment rates, dropout rates, or transition rates due to poor timing, relatively small benefits, and lack of outreach to school-leavers (World Bank, 2012).

eligible to receive the benefits and that benefits are not portable between locations. Databases are maintained and updated on an irregular basis.

<table>
<thead>
<tr>
<th>Children’s Social Welfare Programme (PKSA: Program Kesejahteraan Sosial Anak)</th>
<th>Children who migrate internally are eligible to receive benefits under the terms of this scheme. However, there is no formal targeting or monitoring system in place; recipients are identified by NGOs or social organisations; and the programme only covers a fraction of those in need.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provides conditional cash transfers to children who are in need of special attention and support, including; abandoned infants/infants with special needs (five years or younger), abandoned children (6-18 years old), street children (6-18 years old), children with criminal charges (6-16 years old) and children with disabilities (0-18 years old). The conditions for receiving the money vary between groups but typically require a commitment to stay in school, stop working on the street, or to stop participating in criminal activity.</td>
<td>Conditionalities may include children have to leave child labour, and it reaches out to the most vulnerable children. No direct studies on the effectiveness of the scheme on reducing child labour. Benefits only reach children in the second half of the school year, but school related expenditures are biggest at the beginning of the school year (World Bank, 2012).</td>
</tr>
</tbody>
</table>

**5. Conclusion**

Although consensus is growing that social protection is crucial to reducing child labour, its effectiveness depends on the context and, in particular, on the characteristics of the children being targeted. This paper has focused on the example of internal child migrants in Indonesia and demonstrated the specific vulnerabilities that they face and highlighted the areas where current social protection provisions are failing to meet their needs. In so doing, this paper underlines the need for the issue of internal child migration to be better integrated into social protection policies and programmes in Indonesia; through improving the responsiveness of existing schemes and developing tailor-made interventions which are specifically suited to the unique needs of internal migrants, underpinned by a robust body of research and evidence.

Millions of children and young people migrate internally within Indonesia every year, very often in pursuit of greater opportunities, and improve their economic position and increase their future potential as a result. For others – particularly those from poor families – internal migration is associated with a heightened vulnerability to exploitative child labour, particularly when migration is undertaken independently or seasonally. In Indonesia, particularly significant numbers of internal child migrants can be found working in agriculture, in the urban informal economy and in domestic work. Very little policy attention has been given to how to most effectively address the unique risks and vulnerabilities that these children face.
While there are no official statistics on the number of internal migrants who are involved in child labour, data from the Indonesia Population and Housing Census 2010 gives some indication as to the extent of the problem and the characteristics of the children involved. For example, this data shows that the majority of children who migrate internally do so after the age of 12; and that they are significantly less likely to attend school than non-migrants. This data also reveals an important gender dimension of the migration process and that a significant number of girls who migrate do so for the purpose of domestic work.

In Indonesia there are several social protection programmes which have direct relevance for child labour elimination efforts: direct cash transfers which boost incomes, conditionalities which create positive incentives for school attendance; health insurance schemes which boost household resilience; grants which improve school quality and scholarships which support children to attend school. However there is very little direct evidence on the efficacy of these particular schemes in tackling child labour and no mechanisms in place to track the outcomes for beneficiaries, making it difficult to make robust conclusions of what works and under what circumstances.

Internal child migrants face numerous direct and indirect barriers in accessing and benefitting from these schemes. Most significant among these are stringent registration requirements which make it difficult for certain types of migrant to access social protection schemes in their new location. This is further compounded by the lack of portability of social protection benefits and the lack of an effective appeals mechanism.

These conclusions are particularly timely in the context of the on-going expansion and extension of Indonesia’s social protection system, which offers ample opportunity for the needs of internal child migrants to be taken into consideration and for social protection to play a full and active role in eliminating exploitative child labour in Indonesia. This is particularly true given that internal migrants make up such a significant proportion of the population, achieving social protection for all is unlikely to be possible without taking steps to reach out to them.

6. Recommendations

This section sets forth a range of policy recommendations designed to overcome the multitude of direct and indirect barriers facing migrant children in accessing social protection that is adequate and appropriate for their needs. Together, these recommendations highlight the need for the continued expansion and development of a comprehensive and sustainably financed social protection system in which the goal of child labour elimination is embedded into the design, implementation, monitoring and evaluation processes.

6.1. Strengthen the research and evidence base

There are still significant knowledge gaps that need to be filled in order for the linkages between child labour, internal migration and social protection to be fully understood. In order to facilitate more effective and better targeted policies the following should be pursued:

- Develop robust beneficiary databases which track outcomes; including in relation to child labour; over time. This will facilitate more effective targeting and monitoring and also allow for robust evaluations to take place.
- Collect better and richer information on internal child migration in Indonesia; including through developing techniques to accurately measure the extent of seasonal and
independent migration; to monitor migration flows and allow for disaggregation by relevant variables such as age, gender and poverty; focused qualitative research with internal migrant children to better understand their specific needs in relation to social protection programmes. Particular emphasis should be given to developing techniques to collect information on migrants in hard to reach sectors such as child domestic work.

- Conduct research into the broader relationship between migration, social protection and child labour, including into the situation of children who are ‘left behind’ when their parents migrate, the impacts on children who live in areas which are affected by particularly high rates of inward or outward migration, and on less tangible outcomes such as how internal migration affects family decision making structures.
- Identify examples of promising practices and lessons learned from district or provincial level schemes, with potential for successful schemes to be scaled up or rolled out nationally.

6.2. Improve responsiveness of existing social protection programmes

There are several ways in which the existing social protection schemes could become more accessible and responsive to the unique needs of internal child migrants:

- Regularise the status of de facto residents by simplifying the procedures for officially registering in new districts and provinces, and through the development of specific procedures for seasonal migrants, which will enable access to provincial and district level social protection schemes in their place of permanent resident and place of migration.
- Ensure that migrant children are able to take advantage of the services and increased opportunities that are on offer at their place of destination, including through: awareness raising and pre-departure training, development of a single window service, which will make it easier for migrants to be informed of their entitlements; mapping of the specific social protection interventions which are available in specific districts and provinces which is regularly updated and readily accessible by service users.
- *In relation to provincial level schemes such as BSM, PKH and Jamkesmas*: develop mechanisms to enable full portability and smooth transfers between provinces and districts.
- *In relation to PKSA*: Include specific reference to vulnerable internal child migrants – including those who migrate independently and seasonally – as children who should be targeted.

6.3. Develop customised social protection interventions for internal child migrants

The development of specific social protection programmes for internal child migrants with an overall focus on children who are particularly vulnerable but are not provided for by existing social protection schemes.

- *For 15-17 year old who are above the minimum age for employment*: support to migrate safely and find decent work opportunities, through skills training, job linking and pre-departure training. Particular focus should be given to migrant sensitive sectors such as agriculture and domestic work.
- *For children who are 15 and below and under the minimum age for employment*: develop programmes to support migrant children to attend schools, with a particular focus on children who have particular difficulties in accessing traditional schooling opportunities. This could include setting up worksite schools for children in agriculture; and flexible, non-formal schooling for child domestic workers. Sensitisation of child labour monitoring process to
issues relating to internal child migration and referral to appropriate schemes, particularly in sectors where large numbers of migrant children work.

- For independent child migrants: reduce isolation and vulnerability on arrival by providing safe places for young migrants to stay; mentoring schemes; and drop-in centres. This should give particular attention to girls, given evidence that they have fewer support networks.

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Perubahan Perilaku Anak Jalanan dalam Melakukan Aktivitas Mendapatkan Penghasilan dan Implikasinya Bagi Kebijakan Sistem Perlindungan Sosial Anak Jalanan di Kota Bandung

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ABSTRAK


Hasil penelitian menunjukkan terdapat 6 perubahan perilaku yang dilakukan anak jalanan dalam aktivitasnya mendapatkan penghasilan, yaitu: (1) ketika anak jalanan belum bisa berjalan dan berusia kurang dari 3 tahun; (2) ketika anak jalanan sudah dapat berjalan (usia 3 – 5 tahun); (3) ketika anak jalanan berusia 6 – 8 tahun; (4) ketika anak jalanan berusia 9 – 12 tahun; (5) ketika anak jalanan berusia 13 – 15 tahun; dan (6) ketika anak jalanan berusia 16 – 18 tahun. Faktor penyebab paling dominan terjadinya perubahan perilaku pada anak jalanan dalam melakukan aktivitas mendapatkan penghasilan adalah berkurangnya penghasilan anak jalanan. Hasil penelitian menggambarkan bahwa anak jalanan yang berusia dibawah usia 3 tahun mempunyai kecenderungan lebih besar untuk berada di jalanan sampai dengan usia 18 tahun. Terdapat hubungan yang signifikan antara aktivitas pengguna jalan dalam memberikan uang kepada anak jalanan dengan banyaknya jumlah anak jalanan. Dalam hal ini, sedikit banyaknya masyarakat pengguna jalan memberi uang kepada anak jalanan akan diikuti oleh sedikit atau banyaknya jumlah anak jalanan. Beberapa rekomendasi kebijakan dalam penanganan anak jalanan di Kota Bandung...
Bandung meliputi; (1) perlu adanya perlindungan sosial anak jalanan melalui program penguatan keluarga yang khusus ditujukan bagi orang tua/keluarga yang mempunyai anak jalanan berusia di bawah lima tahun; (2) program penanganan anak jalanan di Kota Bandung perlu didasarkan pada tiga sasaran anak jalanan sesuai dengan klasifikasi usia anak jalanan yaitu; anak jalanan di bawah 5 tahun, anak jalanan berusia 6 sampai 12 tahun, dan anak jalanan berusia 13 sampai 18 tahun; (3) perlu adanya program perlindungan sosial yang khusus ditujukan bagi anak jalanan yang berusia dibawah lima tahun melalui Program Perlindungan Sosial bagi Anak Jalanan yang Berusia Di bawah Lima Tahun (PPS Anjal Ulama); dan (4) perlu adanya program sosialisasi aturan denda/hukuman bagi pengguna jalan yang memberi uang kepada anak jalanan di wilayah Kota Bandung.

Kata kunci : Perubahan Perilaku, Anak Jalanan, dan Sistem Perlindungan Sosial
Latar Belakang Penelitian

Anak mempunyai posisi yang sangat penting, baik sebagai penerus keturunan suatu keluarga maupun sebagai penerus cita-cita bangsa. Agar mampu memikul tanggung jawab tersebut, anak perlu mendapat perhatian khusus dan kesempatan yang seluas-luasnya untuk terpenuhi kebutuhannya sehingga tumbuh dan berkembang dengan wajar secara jasmani, rohani dan sosial. Untuk itu, anak berhak memperoleh perawatan, asuhan, dan perlindungan berdasarkan kasih sayang dari keluarga dan dalam asuhan khusus. Namun demikian, masih banyak perlakuan salah yang dilakukan orang dewasa terutama orang tua dan keluarganya terhadap anak sehingga mereka tidak dapat tumbuh dan berkembang dengan wajar secara jasmani, rohani, dan sosial. Salah satu bentuk perlakuan salah terhadap anak tersebut memunculkan masalah sosial yang disebut anak jalanan.


Fenomena masalah sosial anak jalanan muncul karena orang tua secara disadari atau tanpa disadari telah mengabaikan kebutuhan atau hak anak. Selain itu, juga disebabkan oleh kurang pengetahuan orang tua tentang perkembangan anak, orang tua bermasalah atau konflik keluarga, penolakan anak oleh orang tua dan adanya nilai yang diyakini orang tua tentang status dan peran anak sebagai aset yang dapat dijadikan sebagai sumber mata pencaharian.

Fenomena anak jalanan memperlihatkan bukan lagi hanya masalah perut lapar, keterlantaran atau tidak terpenuhinya kesejahteraan, tetapi anak jalanan telah menjadi korban eksploitasi, kekerasan dan penyelahgunaan oleh orang dewasa, termasuk orang tuanya sendiri. Keadaan ini perlu adanya upaya lain dalam mencegah timbulnya permasalahan yang dihadapi anak sehingga kesejahteraan anak semakin meningkat. Kesejahteraan anak mengacu kepada kondisi yang memungkinkan terpenuhinya kebutuhan anak. Pemenuhan kebutuhan akan berpengaruh pada tingkat pertumbuhan dan perkembangan anak, sehingga pada gilirannya akan berpengaruh pula pada kemampuan pelaksanaan peranan sosial anak.

Perlunya perlindungan sebagai tambahan atas pendekatan kesejahteraan terhadap anak didasarkan atas pandangan bahwa anak-anak pun mempunyai hak asasi sebagai bagian dari hak asasi manusia. Pemenuhan kebutuhan anak oleh orang tua dan keluarga harus ditempatkan bukan semata-mata karena anak mempunyai kebutuhan, tetapi karena mereka mempunyai hak untuk dipenuhi kebutuhannya. Hak memunculkan kewajiban, kewajiban memunculkan tuntutan. Anak yang mempunyai hak, orang tua, masyarakat, dan negara yang bertanggung jawab untuk memenuhinya.

Hasil pemetaan dan survey anak jalanan di Kota Bandung yang dilaksanakan kerjasama antara Kementerian Sosial RI dengan Asian Development Bank (ADB) pada tahun 1999 menunjukkan bahwa 49,9% alasan anak jalanan berada di jalanan untuk membantu orang tua untuk mendapatkan penghasilan, 14,8% untuk menutupi kekurangan biaya sekolah, 11,4% karena putus sekolah, dan sisanya karena tidak ada keterampilan lain, terpisah dari orang tua, dipaksa orang tua, tidak tahan atas perilaku orang tua, mencari teman, mencari pengalaman dan ingin hidup bebas. Resiko yang dialami mereka selama di jalanan antara lain; dipukul, dikeroyok, diperas, dipaksa, ditolong, terserempet kendaraan, tertabrak kendaraan, dan jatuh dari kendaraan serta ditangkap petugas keamanan dan ketertiban. Beberapa dari mereka juga terlibat penyalahgunaan obat atau zat adiktif, kebiasaan merokok, dan minum-minuman keras.

Di jalanan, anak jalanan melakukan berbagai aktivitas untuk mendapatkan penghasilan/uang. Beberapa aktivitas yang dilakukan anak jalanan meliputi; mengemis, mengamen, menjadi pedagang asongan, menyemir sepatu, membersihkan kendaraan, dan memulung barang rongsokan. Di jalanan, anak jalanan melakukan berbagai perubahan perilaku dalam aktivitasnya untuk mendapatkan belas kasih, dan jasa dari pengguna jalan sehingga penghasilan mereka meningkat sebagai upaya membantu orang tuanya.

Hak-hak anak yang dituangkan dalam Konvensi Hak Anak (KHA) Perserikatan Bangsa-Bangsa (PBB) tahun 1989 merupakan hukum atau instrumen internasional tentang hak anak yang mengikat secara yuridis maupun politis negara-negara yang meratifikasinya. Pemerintah Indonesia telah meratifikasi KHA melalui Keputusan Presiden Nomor 36 Tahun 1990 dan mengadopsinya secara lebih kuat dalam Undang-Undang Nomor 23 Tahun 2002 tentang Perlindungan Anak. KHA mewajibkan setiap orang dan negara untuk menghormati (to respect), menjamin (to ensure), dan memenuhi (to fulfill) hak-hak anak. KHA mengatur bahwa tanggung jawab pertama tanggung jawab pemenuhan hak anak ada pada keluarga. Jika keluarga tidak dapat memenuhi hak anak tersebut, maka masyarakat yang akan menggantikannya. Jika masyarakat pun tidak mampu, maka negara berkewajiban memenuhi hak anak tersebut.

Menghadapi tantangan dan tuntutan tersebut, serta semakin meningkatnya kompleksitas masalah anak jalanan di Kota Bandung, Pemerintah Daerah Kota Bandung menetapkan Peraturan Daerah (Perda) Anak Jalanan. Kebijakan tersebut ditujukan sebagai landasan dalam pelaksanaan kegiatan penanganan dan perlindungan anak jalanan di Kota Bandung. Adapun tujuannya adalah menjamin terpenuhinya hak-hak anak agar dapat hidup, tumbuh, berkembang dan berpartisipasi...
secara optimal sesuai dengan harkat dan martabat kemanusiaan, demi terwujudnya anak di Kota Bandung yang berkualitas, berakhlaq mulia dan sejahtera.

Setiap kebijakan akan selalu mengandung resiko kegagalan (policy failure). Van Horn & Van Metter (1975) menyebutkan ada dua kategori kegagalan dari suatu kebijakan, yaitu non implementation (tidak terimplementasi) dan unsuccessful implementation (implementasi yang tidak berhasil). Kebijakan yang tidak terimplementasi (non implementation) mengandung arti bahwa kebijakan itu tidak dapat dilaksanakan sesuai dengan rencana, tidak ada kerjasama yang baik di antara para pelaksana, bekerja tidak efisien, bekerja tidak sungguh-sungguh, tidak menguasai permasalahan atau permasalahan di luar jangkauan kewenangan. Implementasi yang tidak berhasil (unsuccessful implementation), dapat disebabkan oleh berbagai faktor, seperti; pelaksanaan yang tidak baik (bad execution), kebijakan yang tidak baik (bad policy), atau kebijakan tersebut tidak bernasib baik (bad luck) karena faktor lingkungan kebijakan benar-benar tidak menguntungkan bagi implementasinya sehingga siapapun tidak dapat atau tidak perlu dipersalahakan.

Berbagai kondisi, masalah, dan resiko yang dihadapi anak jalan di dalam melakukan aktivitas mendapatkan penghasilan di Kota Bandung mendorong peneliti untuk melakukan penelitian tentang perubahan perilaku anak jalan di dalam melakukan aktivitas mendapatkan penghasilan dan implikasinya bagi kebijakan sistem perlindungan sosial anak jalan. Adapun lokasi penelitian dilaksanakan di Kota Bandung. Alasan dipilihnya lokasi penelitian tersebut adalah karena Kota Bandung pernah dijadikan pilot project kota bebas anak jalan. Namun pada sisi lain, jumlah anak jalan di Kota Bandung masih banyak dan bahkan cenderung meningkat.

Masalah utama dalam penelitian ini adalah bagaimana perubahan perilaku yang terjadi pada anak jalan dalam melakukan aktivitas mendapatkan penghasilan, dan bagaimana implikasinya terhadap kebijakan sistem perlindungan sosial bagi anak jalan? Untuk mendeskripsikan masalah utama dalam penelitian ini, dijabarkan kedalam sub-sub masalah penelitian sebagai berikut; (1) faktor apa saja yang menyebabkan anak jalan melakukan aktivitas mendapatkan penghasilan di jalanan? (2) Bagaimana anak jalan di Kota Bandung melakukan perubahan perilaku dalam aktivitasnya mendapatkan penghasilan? (3) Faktor apa saja yang mendorong anak jalan melakukan perubahan perilaku dalam aktivitasnya mendapatkan penghasilan? (4) Bagaimana implementasi kebijakan Peraturan Daerah tentang Anak Jalan di Kota Bandung? dan (5) bagaimana implikasi dari perubahan perilaku anak jalan bagi kebijakan sistem perlindungan sosial bagi anak jalan dalam upaya penanganan anak jalan di Kota Bandung?

Berdasarkan masalah utama dalam penelitian ini adalah mendapatkan gambaran yang komprehensif tentang perubahan perilaku yang terjadi pada anak jalan dalam melakukan aktivitas mendapatkan penghasilan. Selain itu, untuk mendapatkan gambaran tentang implikasi dari perubahan perilaku anak jalan dalam mendapatkan penghasilan terhadap kebijakan sistem perlindungan sosial bagi anak jalan. Secara khusus, penelitian ini ditujukan untuk memperoleh gambaran tentang; (1) faktor-faktor yang menyebabkan anak jalan melakukan aktivitas mendapatkan penghasilan di jalan; (2) perubahan perilaku yang dilakukan anak jalan dalam aktivitasnya mendapatkan penghasilan; (3) faktor yang mendorong anak jalan melakukan perubahan perilaku dalam aktivitasnya mendapatkan penghasilan; (4) implementasi kebijakan Peraturan Daerah tentang Anak Jalan di Kota Bandung; dan (5) implikasi dari perubahan perilaku anak jalan bagi kebijakan sistem perlindungan sosial bagi anak jalan dalam upaya penanganan anak jalan di Kota Bandung.

Secara praktis, hasil penelitian ini diharapkan dapat memberikan sumbangan pemikiran dalam merumuskan program penanganan dan kebijakan sistem perlindungan sosial anak jalan bagi pihak-pihak terkait dalam penanganan masalah anak jalan dengan memanfaatkan perubahan
perilaku yang terjadi pada anak jalanan dalam aktivitasnya mendapatkan penghasilan di jalanan. Secara teoritis, manfaat dari penelitian ini sebagai upaya untuk memperkuat penjelasan ilmiah tentang anak jalanan, khususnya tentang perubahan perilaku yang dilakukan anak jalanan dalam aktivitasnya mendapatkan penghasilan dan implementasi kebijakan sistem perlindungan sosial bagi anak jalanan.

**Tinjauan Literatur**

Definisi dan karakteristik anak jalanan di Indonesia masih dipahami sangat beragam, mulai dari anak yang hanya sekedar menghabiskan sebagian waktunya di jalanan hingga anak yang menjadikan jalanan sebagai tempat tinggal dan sumber kehidupannya sehari-hari. Begitu pula tentang pengertian anak, di Indonesia masih berbeda-beda. Undang-Undang Nomor 4 Tahun 1979 tentang Kesejahteraan Anak mendefinisikan anak adalah seseorang yang belum mencapai umur 21 tahun dan belum kawin. Pada sisi lain, Undang-Undang Nomor 23 Tahun 2002 tentang Perlindungan Anak mendefinisikan anak adalah seseorang yang belum berusia 18 tahun, termasuk anak yang masih dalam kandungan.

Definisi anak jalanan sebagai landasan untuk mengantarkan penelitian ini diambil dari pengertian anak jalanan yang dikeluarkan UNDP dalam Sudrajat (2005) yang mengartikan bahwa anak jalanan adalah anak-anak yang menghabiskan sebagian besar waktunya untuk berkelakaran dan mencari nafkah di jalanan dan tempat-tempat umum lainnya. Pada sisi lain, anak adalah seseorang yang masih lemah karena masih memiliki keterbatasan-keterbatasan baik fisik, mental maupun sosial, sehingga masih memerlukan bantuan, bimbingan dan perlindungan dari orang lain yang lebih tua atau dewasa.


Teori fungsi dalam perubahan perilaku mengemukakan bahwa perubahan perilaku individu tergantung kepada kebutuhan. Hal ini berarti bahwa stimulus yang dapat mengakibatkan perubahan perilaku seseorang adalah apabila stimulus tersebut dapat dimengerti dalam konteks kebutuhan orang tersebut. Latar belakang terjadinya perubahan perilaku seseorang disebabkan oleh kebutuhan individu yang bersangkutan (Telford & Sawrey, 1986)


Teori fungsi ini berkeyakinan bahwa perilaku mempunyai fungsi untuk menghadapi dunia luar individu, dan senantiasa menyesuaikan diri dengan lingkungannya menurut kebutuhannya. Oleh sebab itu di dalam kehidupan manusia perilaku itu tampak terus-menerus dan berubah secara relatif.


Teori SOR juga mengemukakan bahwa perilaku dapat berubah hanya apabila stimulus (rangsangan) yang diberikan benar-benar melebihi dari stimulus semula. Stimulus yang dapat melebihi stimulus semula ini berarti stimulus yang diberikan harus dapat meyakinkan organisme. Dalam meyakinkan organisme ini faktor reinforcement memegang peranan penting. Proses perubahan perilaku berdasarkan teori SOR ini dapat digambarkan sebagai berikut:

Gambar 1: Teori SOR dalam Perubahan Perilaku


Teori lain yang mendasar penelitian ini adalah teori belajar sosial (social learning theory) atau kemudia dikenal dengan teori kognitif sosial (social cognitive theory) (Telford & Sawrey, 1986). Teori ini mengemukakan bahwa perubahan perilaku seseorang dipengaruhi oleh faktor lingkungan, pribadi/personal, dan ciri dari perilaku itu sendiri. Setiap perubahan perilaku seseorang dapat dipengaruhi oleh salah satu atau lebih faktor tersebut. Prinsip utama dari teori kognitif sosial adalah konsep self-efficacy. Seseorang harus percaya pada kemampuannya untuk
melakukan perubahan perilaku yaitu orang tersebut harus memiliki self-efficacy dan harus melihat insentif yang dihasilkan dari perubahan perilakunya yaitu, ekspektasi positif seseorang dari melakukan perubahan perilaku harus lebih besar daripada ekspektasi negatif. Selain itu, seseorang yang melakukan perubahan perilaku harus mempunyai nilai outcome atau manfaat/efek yang lebih baik dari adanya perubahan perilaku tersebut bagi dirinya.

Selain ketiga teori perubahan perilaku di atas, masih banyak teori perubahan perilaku yang dikemukakan berbagai pakar perubahan perilaku. Namun demikian, tiga teori perubahan perilaku (teori fungsi, SOR, dan teori pembelajaran sosial) yang diuraikan di atas telah cukup memadai untuk mengantarkan penelitian ini. Hal penting yang menjadi perhatian peneliti adalah berbagai perubahan perilaku yang dilakukan oleh anak jalanan merupakan salah satu upaya anak jalanan dalam mendapatkan penghasilan/uan.

Hal penting lainnya yang menjadi perhatian peneliti tentang keberadaan anak jalanan adalah sebagaimana diungkapkan Sudrajat (2005) bahwa masalah anak termasuk anak jalanan memperlhatikan bukan lagi hanya masalah perut lapar, keterlantaran atau tidak terpenuhiya kesejahteraan, tetapi anak telah menjadi korban eksploitasi, kekerasan dan penyalahtgunaan oleh orang dewasa, termasuk orang tuanya sendiri. Untuk mengatasi permasalahan anak yang dihadapi anak tersebut, diperlukan suatu sistem perlindungan sosial bagi anak. Undang-Undang Nomor 23 Tahun 2002 tentang Perlindungan Anak telah mengamanatkan bahwa perlindungan anak bertujuan untuk menjamin terpenuhihnya hak-hak anak agar dapat hidup, tumbuh, berkembang, dan berpartisipasi secara optimal sesuai dengan harkat dan martabat kemanusiaan, serta mendapat perlindungan dari kekerasan dan diskriminasi, demi terwujudnya anak Indonesia yang berkualitas, berakhlak mulia, dan sejahtera.

Sudrajat (2005) mengungkapkan bahwa anak memiliki kebutuhan dalam dimensi fisik, emosional dan sosial serta intelektual. Kebutuhan mendasar pada usia anak tidak hanya sekedar terjamin kesehatan dan keselamattannya dengan tempat tinggal, makanan, pakaian, mainan dan kebersihan yang memadai, tetapi mencapai kondisi yang merasa diinginkan dan diterima oleh dirinya dan orang lain, memiliki rasa aman dan dapat berkembang, mampu memahami atau menjelajahi pengetahuan tentang dirinya dan dunia yang lebih luas, dan yang sangat prinsip bahwa kebutuhan tersebut dapat terwujud apabila mereka memperoleh kesempatan yang memadai yang diberikan oleh orang-orang dewasa terutama dalam lingkungan keluarganya atau pengganti keluarganya disamping lingkungan sosial lain pada umumnya.

Masalah sosial yang tumbuh dan berkembang dalam masyarakat suatu negara kalau diangkat ke atas pentas politik akan merupakan masalah yang mendesak untuk dipecahkan oleh pemerintah. Masalah sosial tersebut kadangkala pelik dan fundamental, sehingga memerlukan proses pemecahan yang komprehensif melalui suatu kebijakan.

Dalam implementasi suatu kebijakan tidak terlepas dari faktor-faktor yang mempengaruhinya sehingga suatu kebijakan sampai kepada sasarannya, bahkan dalam proses implementasinya menurut Dunsire dalam Wahab (1997) adalah “terbuka kemungkinan akan terjadinya perbedaan (implementation gap) antara apa yang diharapkan (direncanakan) dengan apa yang senyatanya dicapai (hasil pelaksanaan kebijakan)”. Edwards III (1980) secara lebih rinci dan jelas menerangkan bahwa ada empat variabel atau faktor yang mempengaruhi keberhasilan atau kegagalan implementasi suatu kebijakan. Keempat faktor tersebut adalah; (1) komunikasi (communication); (2) sumberdaya (resources); (3) perilaku pelaksana (disposition or attitude); dan (4) struktur birokral (bureaucratic structure). Keempat faktor ini saling berinteraksi dan saling mempengaruhi satu sama lain.


**Metode Penelitian**

Penelitian ini dilakukan melalui pendekatan deskriptif kualitatif dengan studi kasus yang berusaha menggambarkan perubahan perilaku anak jalanan dalam melakukan aktivitas mendapatkan penghasilan dan implikasinya bagi kebijakan sistem perlindungan sosial anak jalanan. Pendekatan kualitatif dengan studi kasus digunakan untuk memuaskan dan mengembangkan pemahaman yang mendalam tentang permasalahan penelitian yang didasarkan pada pemahaman yang berkembang di antara orang-orang yang menjadi subyek penelitian. Melalui pendekatan ini, diharapkan dapat menggambarkan kompleksitas permasalahan penelitian, untuk menghindari keterbatasan pembentukan pemahaman yang diikat oleh suatu teori tertentu dan yang hanya berdasar pada penafsiran peneliti.

Penelitian dilakukan selama 5 tahun yang dilaksanakan mulai dari tahun 2007 sampai dengan tahun tahun 2012 terhadap 7 orang anak jalanan di Kota Bandung. Ketika penelitian dilakukan, informan penelitian terdiri dari; 1 anak jalanan berusia 2,3 tahun; 1 anak jalanan berusia 4,4 tahun; 1 anak jalanan berusia 6,2 tahun; 1 anak jalanan berusia 8,1 tahun; 1 anak jalanan berusia 10,2 tahun; 1 anak jalanan berusia 12,3 tahun; dan 1 anak jalanan berusia 14,1 tahun yang dipilih secara bertujuan (*purposive sampling*). Selain ketujuh informan penelitian di atas, perilaku orang tua, dan anggota keluarga informan lainnya dalam memberi perlakuan terhadap anak jalanan dijadikan juga sebagai sumber data dalam mengkaji permasalahan penelitian.

Pengumpulan data dilakukan melalui penggunaan teknik partisipasi observasi yang dilakukan secara intensif melakukan pengamatan dan pencatatan secara langsung ditengah-tengah subyek penelitian. Peneliti melakukan pencatatan terhadap hasil pengamatan tentang perubahan perilaku yang dilakukan anak jalanan dalam aktivitasnya mendapatkan penghasilan dengan alat pencatatan manual dan dengan bantuan alat yang dapat mereka serta memotret kejadian-kejadian yang berkaitan dengan permasalahan penelitian. Pengumpulan data juga dilakukan melalui wawancara mendalam (*indepth interview*) yang digunakan untuk menggali lebih mendalam dan menyeluruh tentang permasalahan penelitian. Melalui kedua teknik pengumpulan data tersebut, peneliti berusaha melibatkan informan secara aktif dalam menggali informasi yang dapat memberi gambaran secara komprehensif tentang permasalahan penelitian.

Dalam mengolah dan menganalisis data, merujuk kepada analisis data kualitatif menurut Miles & Huberman dalam Sitors (2003). Berdasarkan pada pendapatan Miles & Huberman, maka dalam analisis data penelitian ini dilakukan tiga jalur analisis yaitu; reduksi data, penyajian data dan penarikan kesimpulan. Melalui reduksi data, dilakukan proses pemilihan, pemusatan perhatian pada penyederhanaan, pengabsorakan, dan transformasi data kasar yang muncul dari catatan-catatan tertulis di lapangan. Proses ini dilakukan secara terus menerus selama penelitian berlangsung sebelum data benar-benar terkumpul dan menggambarkan permasalahan penelitian.

Kegiatan analisis data selanjutnya adalah melakukan penyajian data. Data yang sudah diperoleh kemudian disusun menjadi sekumpulan informasi sehingga memberi kemungkinan adanya penarikan kesimpulan dan pengambilan tindakan. Penyajian data tersebut dilakukan dalam bentuk teks naratif, matrik, dan bagan yang bersumber dari catatan lapangan. Setelah dilakukan penyajian data, dilakukan penarikan kesimpulan yang didasarkan kepada hasil penyajian data yang telah dilakukan. Kesimpulan tersebut juga masih diverifikasi selama penelitian berlangsung dengan cara memikir ulang selama penulisan, tinjauan ulang pada catatan-catatan lapangan, serta melalui peninjauan kembali dan tukar pikiran dengan teman sejawat ataupun pakar untuk pengembangannya.
Temuan dan Analisis

Hasil penelitian menunjukkan bahwa pada tingkat mikro, kehadiran anak jalanan di Kota Bandung sangat erat kaitannya dengan “situasi anak dan keluarganya”. Situasi anak dan keluarga yang berpengaruh terhadap munculnya fenomena anak jalanan meliputi; pertama, perlakuan salah dan ketidak-mampuan orang tua/keluarga dalam menyediakan kebutuhan dasar bagi anak akibat dari kondisi kemiskinan. Kedua, anak yang lari dari orang tua atau keluarganya karena perceraian orang tua, konflik dalam keluarga, penolakan anak oleh orang tua, dan kondisi terpisah dari orang tua atau kehilangan orang tua. Kesenjangan komunikasi antara orang tua dan anak, disebabkan orang tua sudah tidak mampu lagi memahami kondisi serta harapan anak-anak sehingga menyebabkan anak mencari kebebasan di jalanan.


Hasil penelitian tersebut menunjukkan bahwa orang tua mempunyai kontribusi dalam menentukan keberadaan anak di jalanan. Sebagian besar dari orang tua yang anaknya berada di jalanan tidak peka terhadap kebutuhan atau hak-hak anak mereka, tidak peka dan tidak peduli terhadap resiko kehidupan jalanan bagi anak, dan tidak berusaha keras melindungi anak dari kehidupan jalanan. Dalam menghadapi ketidakpastian penghasilan untuk memenuhi kebutuhan keluarga, orang tua membiarkan, menyuruh bahkan memaksanya anak melakukan aktivitas di jalanan.
untuk mengambil manfaat ekonomi yang seharusnya menjadi tanggung jawab mereka tanpa harus dibagi kepada anak yang belum dewasa.

Hasil penelitian menunjukkan bahwa kondisi di atas didukung oleh relasi orang tua anak jalan yang relatif terisolasi, memiliki hubungan yang sangat terbatas, lebih banyak bergaul dengan komunitas orang tua lain yang mempunyai pengalaman membiarkan, menyuruh atau bahkan memaksa anak-anak mereka untuk turun ke jalanan. Dalam relasi tersebut, mereka memelajari aktivitas anak di jalanan, mempelajari manfaat yang dapat mereka raih, mempelajari pola pengguna jalan dalam memberikan uang, dan mempelajari perubahan perilaku dalam aktivitas untuk mendapatkan belas kasihan pengguna jalan. Hasil proses pembelajaran sosial tersebut diterapkan kepada anak-anaknya untuk mendapatkan penghasilan.

Pada sisi lain, hasil penelitian menunjukkan bahwa situasi anak yang lari dari orang tua atau keluarganya karena perceraiannya orang tua, konflik dalam keluarga, penolakan anak oleh orang tua, dan kondisi terpisah dari orang tua atau kehilangan orang tua, juga menjadi faktor penyebab munculnya fenomena masalah sosial anak jalanan. Kesenjangan komunikasi antara orang tua dan anak, disebabkan orang tua tidak mempunyai pengertian atau sudah tidak mampu lagi memahami kondisi serta harapan anak-anak sehingga menyebabkan anak mencari kebebasan di jalanan. Hasil penelitian menunjukkan bahwa anak yang lari/keluarga dari keluarga/orang tua yang mengambil proses pembelajaran sosial di jalanan tersebut dianggap hilang dan mendapatkan penghasilan. Mereka melakukan komunikasi dan proses pembelajaran sosial cara mendapatkan penghasilan di jalanan dari teman atau dari orang-orang yang telah lama berada di jalanan.

Hasil penelitian mendapat bahwa orang tua tidak menyadari dan tidak tahu bahwa sesungguhnya pilihan melibatkan anak dalam pemenuhan ekonomi keluarga merupakan pelanggaran hak anak dan sangat membedakan bagi perkembangan anak-anak mereka. Bagi sebagian keluarga miskin, jalanan dianggap memiliki daya tarik yang memikat karena menawarkan solusi untuk keluar dari kesulitan dengan kegiatan ekonomi alternatif yang dianggap mudah, tidak mempersyaratkan keterampilan dan modal, serta tidak diikat ketat oleh aturan. Kehidupan jalanan bagi sebagian anak yang lari dari keluarga/orang tua juga menarik karena menawarkan kesenangan, dikelilingi orang-orang yang menyetujui “kebebasan” dari norma yang berlaku umum yang dianggap membatasi kehidupan mereka. Hal tersebut didorong oleh semakin banyak model/contoh orang atau keluarga yang dianggap bisa meraih harapan seperti yang mereka inginkan di jalanan.

Situasi keluarga yang mempengaruhi keberadaan anak jalanan seperti diuraikan di atas, pada hakekatnya menunjukkan ketidakmampuan keluarga dalam menjalankan fungsinya. Orang tua pada keluarga tersebut sesungguhnya bukan hanya telah gagal menjalankan peran untuk fungsi ekonomi keluarga tetapi juga tidak cukup memadai menjalankan sosialisasi peran, gagal menyediakan dukungan dan lingkungan yang aman untuk pertumbuhan dan perkembangan serta kesejahteraan anak, gagal melindungi anak dari situasi jalanan yang penuh resiko atau dengan kata lain gagal memberikan perawatan dan pengasuhan yang memadai bagi pertumbuhan dan perkembangan anak secara optimal.

Faktor penyebab lain muculnya fenomena anak jalanan pada tingkat mezo, berhubungan dengan kekurangan sumber informal di lingkungan keluarga besar dan masyarakat yang dapat memberikan dukungan atau kekuatan pada keluarga anak yang bermasalah. Melemahnya kemampuan keluarga besar untuk membantu keluarga-keluarga inti yang bermasalah, akibat pergeseran nilai dan kondisi ekonomi mempunyai pengaruh signifikan terhadap keberadaan anak jalan. Adanya pergeseran nilai dari “saling tolong menolong” dalam keluarga besar menjadi “individualistik” menjadikan keluarga inti lain dalam keluarga besar tidak mau dan tidak peduli terhadap keluarga inti lainnya. Kondisi tersebut didorong oleh kondisi ekonomi yang dihadapi
keluarga inti lainnya yang tidak cukup untuk membantu keluarga inti yang mempunyai masalah ekonomi. Hal tersebut didukung pula oleh adanya nilai “individualistik” masyarakat perkotaan yang tidak mau tahu atau tidak peduli terhadap sesama di lingkungannya.

Pada tingkat makro, keberadaan anak jalanan berkaitan dengan kesenjangan struktur ekonomi. Tidak dipungkiri adanya keluarga miskin dan sangat miskin telah mendorong mereka untuk mencari nafkah di jalanan. Pada sisi lain, keluarga kelas menengah dan kaya telah memanfaatkan keluarga miskin dan sangat miskin sebagai pihak/sasaran dalam memberi uang dengan alasan perintah agama untuk bersedekah agar mendapatkan pahala. Kondisi tersebut mendorong terjadinya peningkatan jumlah gelandangan dan pengemis di jalanan serta munculnya fenomena anak jalanan.

Hasil penelitian menunjukkan bahwa terdapat 6 perubahan perilaku anak jalanan dalam mendapatkan penghasilan (uang) di jalanan. Pertama, ketika anak jalanan belum bisa berjalan dan berusia kurang dari 3 tahun, anak jalanan disimpan di jalanan atau dibawa/digendong oleh ibunya atau kakaknya untuk mendapatkan uang dengan cara meminta belas kasihan pengguna jalan. Dalam hal ini, kakak maupun ibunya berupaya menunjukkan situasi dan kondisi anak yang belum bisa berjalan tersebut untuk meminta belas kasihan pengguna jalan. Kedua, ketika anak jalanan sudah dapat berjalan (usia 3 – 5 tahun), anak jalanan diibarkan untuk melakukan aktivitas meminta-minta uang sendiri kepada pengguna jalan. Pada tahap ini seringkali anak jalanan tidak menggunakan peralatan dalam melakukan aktivitasnya. Anak jalanan hanya mengandalkan situasi dan kondisi sebagai anak yang berada di jalanan untuk mendapatkan perhatian dan meminta belas kasihan pengguna jalan.


Keempat, ketika anak jalanan berusia 9 – 12 tahun, anak jalanan melakukan aktivitas meminta imbalan jasa dengan cara mengamen, membersihkan kaca mobil, dan atau menjual produk dalam melakukan aktivitasnya mendapatkan uang/penghasilan di jalanan. Dalam hal ini, anak jalanan meminta kerelaan pengguna jalan untuk memberi imbalan jasa dari upaya mengamen dan membersihkan debu di kaca mobil. Selain itu, pada usia ini, anak jalanan juga sudah mulai menawarkan barang untuk di jual seperti koran maupun produk vitamin. Pada masa ini, anak jalanan sudah mulai meminta imbalan jasa walaupun lebih menekankan kepada belas kasihan pengguna jalan dibanding dengan kualitas mengamen/bernyanyi maupun jenis produk yang di jualnya.

Kelima, ketika anak jalanan berusia 13 – 15 tahun. Pada tahap ini, anak jalanan sudah mulai melakukan kegiatan profesional dalam melakukan aktivitas mengamen dan atau menjual berbagai produk sebagai pedagang asongan. Dalam hal ini, jika anak jalanan tersebut memilih mengamen sebagai aktivitas untuk mendapatkan uang maka mereka akan mengamen/bernyanyi dengan maksimal sesuai dengan kemampuan dan keterampilannya dalam memainkan alat musik dan bernyanyi. Pada sisi lain, jika mereka memilih untuk berjualan maka mereka akan menjual berbagai produk yang laku di jual di jalan.

Keenam, ketika anak jalanan berusia 16 – 18 tahun. Pada tahap ini, anak jalanan merasa penghasilannya di jalanan semakin berkurang, pada sisi lain kebutuhannya semakin meningkat.
Persaingan dalam melakukan aktivitas mengamen dan menjadi pedagang asongan semakin ramai, sehingga pada tahap ini mereka melakukan perubahan aktivitas dalam mencari penghasilan/uang. Pada usia ini, anak jalanan sudah mulai keluar dari jalanan dan melakukan aktivitas lain dalam mencari pekerjaan seperti; menjadi pedagang kaki lima, buruh bangunan, dan aktivitas pekerjaan pada sektor informal lainnya. Pada tahap ini, anak sudah tidak betah lagi berada di jalanan dan mencoba mencari alternatif lain di luar jalanan untuk mendapatkan penghasilan/uang.

Hasil penelitian menunjukkan bahwa faktor penyebab yang paling dominan terjadinya perubahan perilaku pada anak jalanan dalam melakukan aktivitas mendapatkan penghasilan/uang adalah berkurangnya tingkat penghasilan anak jalanan. Dalam mempertahankan tingkat penghasilanannya, anak jalanan melakukan berbagai difersifikasi perubahan perilaku untuk mendapatkan perhatian dan belas kasihan pengguna jalan.

Perubahan perilaku yang dilakukan anak jalanan dalam aktivitasnya mendapatkan penghasilan memiliki fungsi instrumental. Dalam hal ini, perubahan perilaku yang dilakukan anak jalanan berfungsi sebagai alat untuk memenuhi kebutuhannya dalam meningkatkan penghasilan yang sudah mulai berkurang. Ketika kondisi yang dihadapi anak jalanan dalam melakukan aktivitasnya untuk mendapatkan penghasilan sudah mulai berkurang maka anak jalanan akan mencari alternatif perilaku yang dapat menjadikan perhatian pengguna jalan agar penghasilannya tetap stabil. Dalam pelaksanaannya, alternatif perubahan perilaku yang dilakukan anak jalanan dalam mendapatkan penghasilan dapat bersifat positif maupun negatif. Bersifat positif jika perubahan perilaku yang dilakukan anak jalanan sebagai akibat dari menurunnya tingkat penghasilannya menjadikan mereka keluar dari jalanan dan mencari alternatif aktivitas lain di luar jalanan. Bersifat negatif jika alternatif perubahan perilaku anak jalanan dalam mendapatkan perhatian pengguna jalan dengan cara menyiksa dan menyakiti tubuh diri sendiri atau melakukan kegiatan kriminal seperti mencuri, dan menjadi tukang copet.

Hasil penelitian juga menunjukkan bahwa perubahan perilaku yang dilakukan anak jalanan dalam mendapatkan penghasilan disebabkan adanya stimulus/rangsangan yaitu menurunnya tingkat penghasilan anak jalanan. Kualitas rangsangan menurunnya tingkat penghasilan tersebut begitu kuat dirasakan anak jalanan sehingga mereka harus mencari alternatif perilaku untuk menarik perhatian dan belas kasihan pengguna jalan sehingga pengguna jalan tetap memperhatikan dan memberi uang kepada anak jalanan. Melalui proses belajar, anak jalanan melakukan aktivitas prakteknya agar pengguna jalan tetap memberi perhatian, merasa kasihan, dan memberikan uang kepada anak jalanan.

Proses perubahan perilaku tersebut menggambarkan proses belajar pada anak jalanan yang terdiri dari; pertama, adanya stimulus (rangsangan) yaitu menurunnya penghasilan dan menurunnya perhatian serta belas kasihan dari pengguna jalan. Kedua, stimulus tersebut ditangkap oleh anak jalanan sehingga mereka harus melakukan alternatif perubahan perilaku agar perhatian, dan belas kasihan pengguna jalan tetap stabil. Ketiga, setelah itu organisme (anak jalanan) mengolah stimulus tersebut sehingga terjadi kesediaan untuk bertindak atau bersikap demi stimulus yang telah diterimanya (bersikap). Keempat, dengan proses belajar, dukungan situasi, fasilitas, dan dorongan dari lingkungan maka stimulus tersebut mempunyai efek tindakan (perubahan perilaku) dari anak jalanan dalam mendapatkan penghasilan.

Hasil penelitian menunjukkan bahwa perilaku anak jalanan dapat berubah dalam mendapatkan penghasilan karena stimulus (rangsangan) menurunnya tingkat penghasilan dan menurunnya perhatian, serta belas kasihan pengguna jalan benar-benar berpengaruh pada pemenuhan kebutuhannya. Oleh karena itu melalui proses pembelajaran sosial, anak jalanan melakukan difersifikasi perubahan perilaku dalam aktivitasnya untuk mendapatkan penghasilan supaya tetap stabil. Ketika tidak ada lagi alternatif perubahan perilaku yang benar-benar efektif menurut anak
jalan untuk merespon stimulus yang ada, maka anak jalan akan berhenti dan ke luar dari jalan untuk mendapatkan alternatif aktivitas lain di luar jalanan. Hal penting yang menjadi perhatian peneliti adalah berbagai perubahan perilaku yang dilakukan oleh anak jalanan merupakan salah satu upaya anak jalanan dalam mempertahankan penghasilannya. Ketika secara obyektif penghasilannya tetap semakin berkurang walaupun perubahan perilaku untuk mendapatkan penghasilan di jalanan telah dilaksanakan, maka mereka akan melakukan perubahan perilaku dalam aktivitas mendapatkan penghasilan di luar jalanan atau ke luar dari jalanan.

Hasil penelitian menggambarkan bahwa anak jalanan yang berusia dibawah usia 3 tahun yang dibawa orang tua/ibu dan atau kakaknya di jalanan mempunyai kecenderungan lebih besar untuk berada di jalanan sampai dengan usia 18 tahun. Selama pengguna jalan menaruh perhatian dan belas kasihan sehingga pengguna jalan memberikan uang atau memberi imbalan jasa kepada anak jalanan, maka selama itu pula anak jalanan melakukan aktivitas mendapatkan penghasilan di jalanan. Ketika pada situasi tertentu dimana penghasilan yang diterima anak jalanan menurun, maka mereka akan melakukan perubahan perilaku sehingga berhenti, dan belas kasihan pengguna jalan tetap stabil sehingga penghasilan mereka tetap stabil pula. Pada sisi lain, ketika penghasilan mereka tetap berkurang walaupun perubahan perilaku dalam aktivitasnya mendapatkan penghasilan telah dilakukan, maka mereka akan berhenti dan ke luar dari jalanan untuk melakukan aktivitas mendapatkan penghasilan di luar jalanan. Hasil penelitian menunjukkan bahwa sebagian besar kondisi tersebut terjadi pada saat anak jalanan berusia 18 tahun.

Salah satu faktor yang menyebabkan stabilnya tingkat penghasilan yang diterima anak jalanan adalah adanya pandangan dari pengguna jalan bahwa anak adalah seseorang yang harus dibantu, dilindungi, dan dipenuhi kebutuhannya oleh orang dewasa. Pengguna jalan berpandangan bahwa seorang anak tidak sepantasnanya berada di jalanan sehingga harus diperhatikan dan dibantu serta diberi belas kasihan. Oleh karena itu, dengan alasan ingin membantu, dan melindungi seseorang anak, serta alasan perintah agama untuk bersedekah, maka pengguna jalan memberikan perhatian dan belas kasihannya dengan cara memberi uang kepada anak jalanan. Pada sisi lain, menurunnya tingkat penghasilan anak jalanan pada usia antara 15 – 18 tahun adalah adanya pandangan dari pengguna jalan bahwa anak jalanan yang berusia 15 – 18 tahun dianggap sudah dewasa dan tidak pantas melakukan aktivitas untuk mendapatkan belas kasihan dari pengguna jalan. Pengguna jalan berpandangan bahwa anak usia 15 – 18 tahun sudah harus dapat mandiri dalam pemenuhan kebutuhannya dengan bekerja sebagaimana mestinya sehingga tidak perlu lagi diberi belas kasihan dengan cara memberi uang di jalanan.

Berdasarkan hal tersebut, hasil penelitian menunjukkan bahwa terdapat hubungan yang signifikan antara aktivitas pengguna jalan dalam memberikan uang kepada anak jalanan dengan banyaknya jumlah anak jalanan. Dalam hal ini, sedikit banyaknya masyarakat pengguna jalan memberikan uang atau memberi imbalan jasa kepada anak jalanan akan diikuti oleh sedikit atau banyaknya jumlah anak jalanan. Hasil penelitian menunjukkan bahwa kehadiran jumlah anak di jalanan ada hubungannya dengan perilaku masyarakat pengguna jalan dalam memberikan uang kepada anak jalanan. Dalam hal ini, kuantitas dan kualitas perilaku pengguna jalan dalam memberikan uang kepada anak jalanan diikuti oleh sedikit banyaknya jumlah anak jalanan. Kuantitas perilaku pengguna jalan dalam meberikan uang kepada anak jalanan berkaitan dengan seringnya pengguna jalan memberikan uang kepada anak jalanan. Pada sisi lain, kualitas perilaku pengguna jalan dalam memberikan uang berkaitan dengan besar kecilnya uang yang diberikan kepada anak jalanan.

Dalam upaya penanganan kompleksitas masalah anak jalanan di Kota Bandung, Pemerintah Daerah Kota Bandung telah menetapkan Peraturan Daerah (Perda) Anak Jalanan. Kebijakan
tersebut ditujukan sebagai landasan dalam pelaksanaan kegiatan penanganan dan perlindungan anak jalanan di Kota Bandung. Hasil penelitian menunjukkan, hingga saat ini jumlah anak jalanan di Kota Bandung masih banyak bahkan cenderung bertambah. Hasil penelitian menunjukkan bahwa keberhasilan implementasi kebijakan Perda tentang Anak Jalanan di Kota Bandung dipengaruhi oleh faktor komunikasi kebijakan, sumber daya kebijakan, perilaku pelaksana, dan struktur birokrasi.

Hasil penelitian menunjukkan bahwa kebijakan Perda tentang Anak Jalanan di Kota Bandung tidak terimplementasi dengan baik sesuai dengan rencana, karena tidak dikomunikasikan/disosialisasikan kepada masyarakat, belum adanya sumber daya yang memadai untuk mengimplementasikannya, tidak ada kerjasama yang baik di antara para pelaksana, bekerja tidak efisien, dan tidak sungguh-sungguh. Hal ini ditunjukan walaupun dalam Perda Anak Jalanan tersebut sudah dicantumkan sanksi bagi masyarakat pengguna jalan yang memberikan uang kepada anak jalanan, namun dalam pelaksanannya tidak dapat diimplementasikan dengan baik. Hal tersebut juga ditunjukan dengan masih banyaknya anak jalanan di Kota Bandung. Pada sisi lain, hasil penelitian menunjukkan bahwa keberadaan anak jalanan mempunyai hubungan yang signifikan dengan perilaku pengguna jalan dalam memberikan uang kepada anak jalanan.

Salah satu faktor yang menghambat implementasi sanksi dalam Perda Anak Jalanan tersebut adalah adanya pro dan kontra tentang upaya masyarakat untuk melakukan kebaikan membantu anak jalanan dengan cara memberi uang di jalanan. Satu pihak menyatakan bahwa adanya sanksi tersebut merupakan upaya Pemerintah Daerah Kota Bandung untuk menghalang-halangi masyarakat untuk berbuat kebaikan. Pada pihak lain, perilaku pengguna jalan dalam memberikan uang kepada anak jalanan akan menjadi sebab munculnya kompleksitas permasalahan anak jalanan di Kota Bandung.

Di luar pro dan kontra tentang sanksi dalam Perda Anak Jalanan di Kota Bandung, hasil penelitian menunjukkan bahwa kuantitas dan kualitas komunikasi kebijakan dalam mengimplementasikan kebijakan tentang anak jalanan dapat mengurangi jumlah anak jalanan. Kuantitas dan kualitas komunikasi kebijakan tentang anak jalanan di Kota Bandung tersebut dilakukan melalui sosialisasi mengenai upaya perlindungan sosial bagi anak jalanan dengan tidak memberi uang di jalanan dan sosialisasi aturan denda/hukuman bagi pengguna jalan jika memberikan uang kepada anak jalanan. Dalam hal ini, jika melalui sosialisasi kebijakan tentang anak jalanan tersebut dapat mengurangi jumlah pengguna jalan yang memberi uang kepada anak jalanan maka hal tersebut akan diikuti oleh berkurangnya jumlah anak jalanan di Kota Bandung. Hal ini didasarkan pada hasil penelitian bahwa sedikit banyaknya masyarakat pengguna jalanan memberikan uang kepada anak jalanan akan diikuti sedikit banyaknya jumlah anak jalanan di Kota Bandung. Oleh karena itu, program sosialisasi yang dilakukan melalui pemasangan spanduk dan atau papan reklame di setiap perempatan jalan di Kota Bandung yang bersisi tentang larangan memberi uang kepada anak jalanan serta informasi denda/hukuman bagi pengguna jalan yang melanggar kebijakan tersebut merupakan salah satu cara efektif yang harus dilakukan Pemerintah Kota Bandung dalam mengurangi jumlah anak jalanan di Kota Bandung.

**Implikasi/Rekomendasi Kebijakan**

Penanganan anak jalanan di Kota Bandung tidak bisa hanya mengandalkan pada pembinaan terhadap anaknya, tetapi harus dilakukan pada berbagai pihak yang mempengaruhi dan mempertahankan masalah sosial anak jalanan tersebut. Salah satu pihak yang mempunyai kontribusi terhadap keberadaan anak di jalanan adalah orang tua atau keluarga anak tersebut. Orang tua/keluarga memiliki andil besar terhadap munculnya dan bertahannya anak jalanan selama ini. Keluarga pulalah yang merupakan unit sosial pertama yang memiliki tanggung jawab...
utama melaksanakan fungsi perawatan dan pengasuhan anak sehingga anak dapat tumbuh dan berkembang secara optimal yang secara khusus menjadi tanggung jawab orang tua. Pemerintah dan masyarakat bertanggung jawab memberikan dukungan untuk menjamin dan meningkatkan pelaksanaan tanggung jawab orang tua/keluarga dalam membesarkan dan mengembangkan anak. Oleh karena itu, kebijakan perlindungan sosial anak melalui penguatan keluarga harus menjadi bagian penanganan yang tidak bisa diabaikan. Penguatan keluarga sangat penting karena hasil penelitian menunjukkan bahwa sebagian besar anak jalanan masih tinggal dan berhubungan relatif sering dengan keluarga mereka.

Prioritas kebijakan perlindungan sosial anak melalui penguatan keluarga anak jalanan yang harus dilakukan hendaknya ditujukan bagi keluarga/orang tua yang mempunyai anak jalanan yang berusia dibawah lima tahun (balita). Kondisi tersebut didasarkan pada hasil hasil penelitian yang menunjukkan bahwa anak yang berusia dibawah tiga tahun yang berada di jalanan mempunyai kecenderungan lebih besar untuk berada di jalanan sampai usia 18 tahun.

Dalam implementasinya, kebijakan perlindungan sosial anak melalui penguatan keluarga dalam penanganan masalah anak jalanan hendaknya secara khusus diarahkan pada penguatan kesadaran dan kemampuan orang tua untuk melaksanakan perannya dalam mewujudkan fungsi keluarga. Hal ini didasarkan pada hasil penelitian bahwa orang tua tidak menyadari dan tidak tahu bahwa sesungguhnya pilihan melibatkan anak dalam pemenuhan ekonomi keluarga merupakan pelanggaran hak anak dan sangat membayakan bagi perkembangan anak-anak mereka. Target penguatan keluarga tersebut berhubungan dengan fungsi perawatan dan pengasuhan anak secara luas dan penguatan ekonomi keluarga, yang secara rinci dapat meliputi; (1) pengembangan pengetahuan dan kesadaran orang tua tentang tahap-tahap perkembangan anak, hak anak dan kebutuhan anak; (2) pengembangan kesadaran untuk tidak merumuskan harapan yang tidak realistik terhadap anak; (3) pengembangan kesadaran tentang peran orang tua dan kemampuan untuk melakukan refleksi terhadap peran mereka; (4) pengembangan kemampuan untuk merawat dan mengasuh anak, menjamin untuk tidak menelantarkan dan melaksanakan perlakuan salah terhadap anak; (5) pengembangan kemampuan orang tua dalam memecahkan masalah; (6) pengembangan kemampuan untuk mengendalikan stres dan kemarahan; (7) pengembangan komunikasi dan relasi dalam keluarga; (8) pengembangan kemampuan anggota keluarga untuk memberikan dukungan (dengan penyediaan informasi, dukungan emosional, pertolongan konkrit, dan umpan balik) yang positif bagi penyelesaian masalah yang dialami anggota keluarga; (9) pengembangan kemampuan orang tua dalam peran ekonomi melalui upaya memperkuat usaha ekonomi dan manajemen keuangan keluarga; dan (10) pengembangan keterampilan untuk membangun dan memperluas jaringan sosial yang dapat memperkuat akases pada dukungan masyarakat, dan pengembangan keterampilan sosial lain yang kondusif untuk mencegah anak turun ke jalan atau menarik anaj dari kehidupan jalanan.

Strategi penguatan keluarga yang mempunyai anak jalanan di bawah lima tahun dapat dilakukan melalui; (1) pemberian bantuan untuk mengatasi kebutuhan yang paling mendasar atau kebutuhan yang harus segera di atasi oleh keluarga yang menjadi sasaran; (2) strategi penguatan ekonomi melalui latihan keterampilan atau bantuan stimulan dan atau pendampingan pengembangan usaha dan manajemen keuangan keluarga; (3) konseling dan konsultasi keluarga; (4) pendidikan keluarga, antara lain dengan modeling role plays, diskusi atau dialog interaktif, pelatihan, dan penyuluhan; (5) advokasi agar keluarga mendapatkan pelayanan yang dibutuhkan; dan (6) pengembangan dan pendampingan.

Selain kepada orang tua/keluarga yang mempunyai anak jalanan dibawah usia lima tahun (balita), program perlindungan dan penanganan anak jalanan juga perlu dilakukan kepada anaknya. Jika program perlindungan dan penanganan anak dilakukan pada anaknya, maka program penanganan anak jalanan di Kota Bandung perlu didasarkan pada tiga asasaran anak jalanan sesuai...
dengan klasifikasi usia anak jalanan yaitu; anak jalanan dibawah 5 tahun, anak jalanan berusia 6 sampai 12 tahun, dan anak jalanan berusia 13 sampai 18 tahun. Klasifikasi tiga sasaran program perlindungan sosial dalam penanganan anak jalanan tersebut didasarkan pada kebutuhan perawatan dan pertumbuhan anak.

Anak jalanan yang berusia di bahwa lima tahun harus dilindungi untuk tidak diikutsertakan atau dibawa orang tuanya dalam melakukan aktivitas mencari penghasilan di jalanan. Perlindungan sosial dan penanganan anak jalanan perlu dilakukan bagi anak jalanan yang berusia dibawah 5 tahun sehingga mereka tidak lagi berada di jalanan. Program tersebut adalah Program Perlindungan Sosial bagi Anak Jalanan yang Berusia Di bawah Lima Tahun (PPS Anjal Ulama).

Dalam implementasinya, PPS Anjal Ulama memeperbanyak bantuan sosial kebutuhan dasar bagi perawatan dan pertumbuhan anak. Selain itu, PPS Anjal Ulama memberikan perlindungan sosial bagi anak jalanan di bawah usia lima tahun dari perlakuan salah yang dilakukan orang dewasa termasuk orang tuanya Jika keluarga atau orang tua yang bersangkutan tidak mungkin lagi menjalankan fungsinya dan tetap melibatkan anak-anak yang berusia di bawah lima tahun untuk mencari pendapatan di jalanan, maka pemerintah dan masyarakat bertanggung jawab untuk mencarikannya atau institusi pengganti untuk melaksanakan fungsi perlindungan tersebut. Hal tersebut telah diamanatkan dalam Undang-Undang Nomor 23 Tahun 2002 tentang Perlindungan Anak bahwa perlindungan anak bertujuan untuk menjamin terpenuhinya hak-hak anak agar dapat hidup, tumbuh, berkembang, dan berpartisipasi secara optimal sesuai dengan harkat dan martabat kemanusiaan, serta mendapat perlindungan dari kekerasan dan diskriminasi, demi terwujudnya anak Indonesia yang berkualitas, berakhklak mulia, dan sejahtera. Dalam undang-undang tersebut telah disebutkan bahwa pemerintah dan masyarakat mempunyai kewajiban untuk memberikan perlindungan sosial bagi anak yang diperlakukan salah oleh orang tua/keluarganya.


**Daftar Pustaka**


Undang-Undang Nomor 4 Tahun 1979 tentang Kesejahteraan Anak.

Undang-Undang Nomor 23 Tahun 2002 tentang Perlindungan Anak.


*) Penulis adalah Staf pada Sekolah Tinggi Kesejahteraan Sosial (STKS) Bandung. Penulis adalah lulusan S-3 Social Work Universiti Sains Malaysia (USM) dengan spesialisasi bidang kajian/keahlian “social policy and social services”. Saat ini, penulis tinggal di Komplek Permata Cimahi 2 Blok N Nomor 29 Desa Tanimulya Kecamatan Ngamprah Kabupaten Bandung Barat, dengan alamat email: harmas_stks@yahoo.co.id. Berbagai kajian dan penelitian yang telah dilakukan penulis terkait dengan topik kemiskinan, modal sosial dan pengembangan modal sosial dalam penanganan kemiskinan, masalah anak dan implikasinya terhadap kebijakan penanganan masalah yang dihadapi anak, sistem pelayanan sosial berbasis masyarakat dan lain sebagainya.
Abstaract


Key words: kemiskinan, tenaga kerja anak, nilai ekonomi anak, pendidikan, lampung, SUSENAS
I. PENDAHULUAN

Anak-anak sebagai individu yang tidak bebas merupakan korban terparah dari kemiskinan. Anak-anak yang terjebak dalam kemiskinan memiliki kesempatan yang terbatas untuk mengubah nasibnya. Mereka terjebak dalam rutinitas yang merenggut hak mereka untuk bermain, hak mengembangkan diri secara wajar, serta hak akan pendidikan.


Provinsi Lampung memiliki tenaga kerja anak terbesar kedua di Sumatera setelah Provinsi Sumatera Utara. Pada Juli 2012 terdapat 63,49 persen anak-anak yang berasal dari keluarga dengan status ekonomi 30 persen terbawah menjadi pekerja anak (Basis data terpadu TNP2K).

Gambar 1. Jumlah penduduk usia 5 s.d. 15 tahun pada keluarga dengan status kesejahteraan 30 persen terendah se Indonesia yang bekerja menurut provinsi di Pulau Sumatera, Juli 2012

![Gambar 1. Jumlah penduduk usia 5 s.d. 15 tahun pada keluarga dengan status kesejahteraan 30 persen terendah se Indonesia yang bekerja menurut provinsi di Pulau Sumatera, Juli 2012](image)

Sumber: Basis data terpadu TNP2K

Tingginya angka pekerja anak pada keluarga dengan status ekonomi terendah menjadi perhatian sendiri bagi pemerintah. Berbagai kebijakan perlu dirumuskan untuk menangani permasalahan pekerja anak dan kemiskinan. Untuk itulah perlu adanya studi mendalam antara pekerja anak dan kemiskinan.

Dalam ikhtisar kebijakan singkat “Pekerja Anak dan Pendidikan di Masyarakat Papua” (ILO, 2011) dipaparkan bahwa tingginya nilai ekonomi anak dalam keluarga miskin menjadikan nya hambatan bagi anak-anak di Papua untuk mengenyam pendidikan. Dan hal tersebut mendorong orang tua untuk mempekerjakan anak mereka dari pada menyekolahkannya.

Adapun tujuan dari penulisan makalah ini adalah untuk mengukur sejauh mana pengaruh nilai ekonomi anak terhadap maraknya tenaga kerja anak. Selain itu dalam tulisan ini juga ditujukan untuk melihat apakah gender turut andil dalam tenaga kerja anak.

II. TINJAUAN PUSTAKA

Pasal 2 dari Konvensi ILO tentang Bentuk-Bentuk Pekerjaan Terburuk untuk Anak, 1999 mendefinisikan seorang ‘anak’ sebagai seseorang di bawah usia 18 tahun. Pekerjaan anak adalah istilah yang digunakan untuk mengacu pada anak yang melakukan pekerjaan yang merusak kesejahteraan dan menghalangi pendidikan, perkembangan, dan masa depan anak tersebut. Pekerjaan anak adalah anak yang melakukan pekerjaan, yang sifat pekerjaan dan/atau cara pekerjaan itu dilakukan, merusak, menyalahgunakan dan mengeksploitasikan anak tersebut dan mengganggu pendidikannya.1

Pekerjaan anak dan kemiskinan merupakan dua hal yang tak terpisahkan. Mereka saling terkait satu dan lainnya membentuk sebuah siklus yang berulang. Dalam Panduan 1: Pengenalan terhadap Permasalahan Pekerja Anak yang diterbitkan oleh ILO dituliskan bahwa hubungan antara kemiskinan dan pekerja anak sebagai berikut:

“Karena pekerja anak biasanya datang dari keluarga miskin, fakta bahwa mereka tidak bersekolah menunjukkan bahwa kemiskinan dalam keluarga tersebut sudah berlangsung dari satu generasi ke generasi berikutnya. Dampaknya, pekerja anak merupakan bagian dari suatu siklus kemiskinan yang kejam.”2

Gambar 2. Siklus Kemiskinan dan Pekerja Anak

Sumber: Panduan 1: Pengenalan terhadap Permasalahan Pekerja Anak, ILO.


2 Ibid
Kemiskinan, usaha orang Meskipun diintegrasikan strategi kemiskinan berhubungan faktor Rocky

3

3


Untuk menghilangkan hambatan finansial bagi keluarga miskin dalam memasuki dunia pendidikan di cetuskanlah sebuah kebijakan subsidi biaya pendidikan. Program Bantuan Operasional Sekolah (BOS) merupakan salah satu program yang bertujuan untuk membebaskan biaya pendidikan pada tingkat pendidikan Sekolah Dasar (SD) serta Sekolah Menengah Pertama (SMP). Kebijakan subsidi pendidikan lainnya yang diberikan pemerintah adalah beasiswa siswamiskin. Dengan adanya kebijakan tersebut diharapkan keluarga miskin yangada di Indonesia dapat menyekolahkan anaknya hingga jenjang pendidikan yang tinggi.

Meskipun kebijakan penekanan biaya pendidikan telah dilakukan, tingkat partisipasi pekerja anak pada keluarga dengan tingkat kesejahteraan 30 persen terendah di Indonesia masih cukup tinggi. Setidaknya di tahun 2012 terdapat 60,53 persen anak usia lima hingga 15 tahun pada keluarga dengan tingkat kesejahteraan 30 persen terendah di Indonesia berstatus bekerja.4

Permasalahan pekerja anak telah menjadi masalah global selama 15 tahun terakhir, namun demikian ketersedian data akan pekerja anak masih terbatas di Indonesia. Dalam penelitian ini

3 ibid

4Data diolah dari basis data terpadu TNP2K. http://bdtnp2k.go.id/index.php?option=com_wrapper&view=wrapper&Itemid=88

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digunakan data Survei Sosial Ekonomi Nasional (SUSENAS) tahun 2011 modul KOR. Dalam SUSENAS KOR dapat kita peroleh informasi mengenai ketenagakerjaan dan kondisiekoimi yang tercermin dari pengeluaran perkapita. Namun untuk data pekerja anak SISENAS KOR hanya dapat menyediakan data pekerja anak usia 10 s.d 17 tahun. Lebih jauh lagi untuk data tenaga kerja anak SUSENAS KOR hanya menyediakan data pekerja anak pada sektor-sektor ekonomi legal. Data pekerja anak jalan, pekerja seks, serta pembantu rumah tangga tidak dapat kita peroleh.

III. METODE ANALIS

Untuk melihat kaitan antara pekerja anak dan kemiskinan di Provinsi Lampung digunakan dua pendekatan, yakni pendekatan makro dan mikro. Model regresi sederhana antara pekerja anak, jumlah penduduk miskin dan pengeluaran perkapita yang disesuaikan dibangun untuk melihat bagaimana hubungan antara kemiskinan dan pekerja anak secara makro. Sementara itu untuk melihat peranan kemiskinan secara mikro terhadap penciptaan pekerja anak dilihat dengan membentuk regresi logistik antara status pekerja anak terhadap tingkat kesejahteraan keluarga mereka.

Model dasar dengan pendekatan makro yang digunakan dalam makalah ini adalah:

\[ y_t = \beta_0 + \beta_1 x_{21} + \beta_2 x_{22} + \varepsilon_t \]  

Dimana:

- \( y_t \) merupakan jumlah pekerja anak usia lima tahun hingga 15 tahun,
- \( x_{21} \) jumlah penduduk miskin per kabupaten/kota di Provinsi Lampung.
- dan \( x_{22} \) adalah pengeluaran perkapita yang disesuaikan.

Data jumlah pekerja anak usia lima tahun hingga 15 tahun pada Provinsi Lampung yang digunakan dalam model ini bersumber dari Basis Data Terpadu untuk Program Perlindungan Sosial Tim Nasional Percepatan Penanggulangan Kemiskinan (TNP2K). Sementara itu data jumlah penduduk miskin per kabupaten/kota dan data pengeluaran perkapita yang disesuaikan diperoleh dari Badan Pusat Statistik BPS Provinsi Lampung.

Karena perbedaan skala pengukuran yang digunakan pada tiap variabel model (1) di atas ditransformasi dengan logaritma natural. Dengan mentransformasi model (1) diatas diperoleh sebuah persamaan baru:

\[ \ln y_t = \alpha_0 + \alpha_1 \ln x_{12} + \alpha_2 \ln x_{22} + \varepsilon_t \]  

Nilai \( \varepsilon_t \) menggambarkan elastisitas kemiskinan terhadap pekerja anak di Provinsi Lampung. \( \varepsilon_t \) memberikan gambaran akan elastisitas tingkat kesejahteraan masyarakat terhadap penciptaan tenaga kerja anak.

Untuk melihat kaitan kemiskinan terhadap pekerja anak dibangun model regresi logistik dengan menggunakan data hasil Survei Sosial Ekonomi Indonesia (SUSENAS) KOR tahun 2011. Pada dasarnya model logistik digunakan untuk melihat peluang (probabilitas) terjadinya suatu keadaan dengan memperhitungkan faktor-faktor yang mempengaruhinya, dan membandingkan resiko munculnya suatu keadaan sebagai akibat dari suatu faktor setelah memperhitungkan faktor-faktor lainnya dalam model. Karenanya model tersebut cukup memadai digunakan dalam penelitian ini terutama untuk melihat probabilitas terbentuknya pekerja anak berdasarkan kondisi kemiskinan rumah tangga dan gender pekerja anak.
Secara sederhana hubungan antara pekerja anak, kemiskinan, dan gender pekerja anak dapat dituliskan sebagai berikut:

\[ z_i = \beta_0 + \beta_1 x_{1i} + \beta_2 x_{2i} + \epsilon_i \]  

(3)

Dimana:
- \( z_i \) adalah status pekerja anak, \( z_i \) bernilai 1 jika anak responden SUSENAS 2011 merupakan pekerja anak, dan bernilai 0 jika sebaliknya.
- \( x_{1i} \) adalah tingkat kesejahteraan anak responden SUSENAS 2011, \( x_{1i} \) bernilai 1 jika anak responden SUSENAS 2011 berada di bawah garis kemiskinan, dan bernilai 0 jika sebaliknya.
- \( x_{2i} \) merupakan jenis kelamin anak responden SUSENAS 2011, \( x_{2i} \) berkode 1 jika laki-laki dan 0 jika perempuan.

Karena baik variabel bebas maupun variabel terikat dalam regresi berupa data kategorik, sehingga persamaan (3) diatas di transformasikan ke dalam model regresi logistik menjadi:

\[ \ln \left( \frac{p}{1-p} \right) = \beta_0 + \beta_1 x_{1i} + \beta_2 x_{2i} + \epsilon_i \]  

(4)

Kaitan antara kemiskinan dan pekerja anak dari sisi mikro tidak dilihat dari parameter model (4) diatas, namun dari nilai *odd ratio* yang diperoleh dari persamaan tersebut. *Odd ratio* itu sendiri merupakan perbandingan risiko antara dua kelompok individu dalam karakter yang berbeda.

*Odd* didefinisikan sebagai \( p/(1-p) \); dimana \( p \) merupakan probabilitas terjadinya peristiwa \( y=1 \) (dalam penelitian ini dapat dikatakan sebagai peluang menjadi pekerja anak), dan \( 1-p \) menyatakan probabilitas terjadinya peristiwa \( y=2 \) (dalam penelitian ini dapat dikatakan sebagai peluang tidak menjadi pekerja anak). Dengan demikian, *odd ratio* yang dilambangkan \( \psi \) dituliskan sebagai berikut:

\[ \psi = \frac{p(x_A)/(1-p(x_A))}{p(x_B)/(1-p(x_B))} \]

Jika variabel bebas merupakan variabel kategorik dengan dua kategori, misalkan 0 dan 1, dengan kategori 0 sebagai kategori referensi, maka interpretnasi koefisien pada variabel ini adalah nilai *odd* untuk kategori 1 terhadap nilai *odd* untuk kategori 0, yang dituliskan:

\[ \psi = \frac{\exp(\beta_1)}{1 + \exp(\beta_1)} = \exp(\beta_1) \]  

(5)

Hal tersebut berarti resiko terjadinya peristiwa \( y=1 \) pada kategori \( x_1 = 1 \) adalah sebesar \( \exp(\beta_1) \) kali resiko terjadinya peristiwa \( y=1 \) pada kategori \( x_1 = 0 \).

Dengan demikian nilai *odd ratio* dari model (4) akan mengukur perbandingan peluang anak yang berada di bawah garis kemiskinan menjadi pekerja anak dibandingkan anak yang berada
diatasgaris kemiskinan. Serta juga akan mengukur pengaruh gender terhadap peluang seorang anak untuk menjadi pekerja anak.

IV. ANALIS DAN PEMBAHASAN

Dari studi kasus sampel tenaga kerja anak pada SUSENAS 2011 di Provinsi Lampung setidaknya terdapat 62,32 persen dari tenaga kerja anak tersebut yang tidak lagi menempuh pendidikan di sekolah. Sebagian besar pekerja anak tersebut, 59,05 persennya, membantu menopang perekonomian keluarga sebagai tenaga kerja keluarga atau tenaga kerja yang tak dibayar. Dan umumnya pekerja anak tersebut bekerja pada lapangan usaha pertanian, yakni sebesar 58,08 persen.

Kaitan antara kemiskinan dan pekerja anak dapat dilihat secara makro melalui hasil regresi model (2). Model (2) tersebut secara signifikan, dengan tingkat signifikasi 95 persen, menggambarkan hubungan antara tingkat kesejahteraan masyarakat (yang diukur melalui pengeluaran perkapita yang disesuaikan) dan kemiskinan berpengaruh terhadap penciptaan pekerja anak. Nilai dari estimasi parameter pada model (2) masing-masing menggambarkan stabilitas jumlah pekerja anak yang terbentuk sebagai akibat dari perubahan pada besaran pengeluaran perkapita dan jumlah penduduk miskin.

<table>
<thead>
<tr>
<th>Variabel Independent</th>
<th>Estimasi Parameter</th>
<th>Signifikasni Parameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Logaritma natural Pengeluaran perkapita Provinsi Lampung</td>
<td>-9,262</td>
<td>0,027</td>
</tr>
<tr>
<td>Logaritma natural Jumlah Penduduk Miskin</td>
<td>1,029</td>
<td>0,000</td>
</tr>
</tbody>
</table>

Sumber: SUSENAS 2011, data diolah

Tingkat kesejahteraan masyarakat yang terukur dari pengeluaran perkapita yang disesuaikan memiliki hubungan yang negatif terhadap penciptaan pekerja anak. Peningkatan kesejahteraan masyarakat sebesar satu persen dapat menekan jumlah tenaga kerja anak di Provinsi Lampung sebesar 9,26 persen.

Kemiskinan memiliki hubungan yang positif dan signifikan terhadap penciptaan pekerja anak. Penurunan jumlah penduduk miskin di Provinsi Lampung sebesar satu persen akan diiringi dengan penurunan jumlah pekerja anak sebesar 1,029 persen.

Kedua hal tersebut memberikan gambaran bahwa penciptaan pekerja anak elastis terhadap tingkat kesejahteraan masyarakat dan kemiskinan. Kebijakan yang diarahkan pada peningkatan daya beli masyarakat dan penurunan tingkat kemiskinan akan mampu menurunkan penciptaan pekerja anak di Provinsi Lampung.

Jika mengkaji kaitan antara kemiskinan dan penciptaan pekerja anak secara makro memberikan gambaran hubungan yang positif dan signifikan, pengkajian hubungan tersebut secara mikro memberikan hasil yang berbeda. Kondisi kemiskinan rumah tangga pekerja anak nyatanya bukanlah faktor yang mendorong anak tersebut untuk terjun ke dunia kerja.
Dari permodelan regresi logistik diperoleh hasil bahwa peluang anak usia sepuluh hingga 17 tahun untuk menjadi pekerja anak pada keluarga miskin adalah sebesar 0,802 kali lebih tinggi dari pada mereka yang berasal dari keluarga tidak miskin. Hal ini menunjukkan bahwa kondisi kemiskinan rumah tangga bukanlah faktor yang mendorong seorang anak untuk menjadi pekerja anak. Pernyataan ini didukung oleh sebuah fakta yang cukup mengejutkan, bahwa 78 persen pekerja anak responden SUSENAS 2011 di Provinsi Lampung berasal dari rumah tangga yang tidak miskin. Mereka memiliki pengeluaran perkapita melebihi garis kemiskinan provinsi.

Studi Bank Dunia juga memberikan bukti yang disebut ‘paradoks kesejahteraan’ yang berkaitan dengan pekerja anak. Ini adalah situasi di mana keluarga yang memiliki lahan lebih berkemungkinan untuk menyuruh anak-anak mereka bekerja dibandingkan dengan keluarga yang tidak memiliki lahan. Situasi seperti ini dapat terjadi khususnya pada masa-masa puncaksiklus pertanian (yaitu penanaman dan panen) ketika pekerja sewaan sulit dan/atau mahal bagi keluarga tersebut. Ini disebut paradoks kesejahteraan karena kita mungkin mengharapkan bahwa keluarga yang lebih kaya (yang memiliki lahan) akan memiliki lebih sedikit pekerja anak karena mereka

**Tabel 2. Odd Ratio status kemiskinan rumah tangga dan jenis kelamin anak terhadap penciptaan pekerja anak anak**

<table>
<thead>
<tr>
<th>Variabel</th>
<th>Odd Ratio</th>
<th>Signifikansi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Status miskin rumah tangga</td>
<td>0,802</td>
<td>0,038</td>
</tr>
<tr>
<td>Jenis kelamin anak</td>
<td>3,263</td>
<td>0,000</td>
</tr>
</tbody>
</table>

Sumber: SUSENAS 2011, data diolah

**Gambar 3. Distribusi pekerja anak usia 10 s.d 17 tahun responden SUSENAS 2011 berdasarkan status kemiskinan rumah tangganya di Provinsi Lampung**


Studi Bank Dunia juga memberikan bukti yang disebut ‘paradoks kesejahteraan’ yang berkaitan dengan pekerja anak. Ini adalah situasi di mana keluarga yang memiliki lahan lebih berkemungkinan untuk menyuruh anak-anak mereka bekerja dibandingkan dengan keluarga yang tidak memiliki lahan. Situasi seperti ini dapat terjadi khususnya pada masa-masa puncaksiklus pertanian (yaitu penanaman dan panen) ketika pekerja sewaan sulit dan/atau mahal bagi keluarga tersebut. Ini disebut paradoks kesejahteraan karena kita mungkin mengharapkan bahwa keluarga yang lebih kaya (yang memiliki lahan) akan memiliki lebih sedikit pekerja anak karena mereka
lebih tidak perlu mempekerjakan anak mereka. Namun, studi mendapatkan bukti bahwa hal yang sebaliknya justru bisa terjadi.  

5 Gambar 4. Distribusi pekerja anak usia 10 s.d 17 tahun responden SUSENAS 2011 berdasarkan jenis lapangan usaha di Provinsi Lampung

Sumber: SUSENAS 2011, data diolah

5 Gambar 5. Distribusi pekerja anak usia 10 s.d 17 tahun responden SUSENAS 2011 berdasarkan subsektor lapangan usaha pertanian di Provinsi Lampung

Sumber: SUSENAS 2011, data diolah

5 Ibid, 19

Lebih tingginya peluang seorang anak laki-laki untuk menjadi pekerja anak dibandingkan dengan anak perempuan antara lain juga disebabkan tingginya permintaan tenaga kerja laki-laki pada tiap lapangan usaha. Terlihat pada gambar (6) diatas bagaimana distribusi pekerja anak menurut jenis
kelamin untuk tiap lapangan usaha. Secara keseluruhan sebanyak 77,5 persen pekerja anak di Provinsi Lampung berjenis kelamin laki-laki.

Gambar 8. Distribusi pekerja anak usia 10 s.d 17 tahun responden SUSENAS 2011 berdasarkan status partisipasi sekolah dan umur di Provinsi Lampung

![Graph showing distribution of child labor based on school participation and age in Provinsi Lampung]

Sumber: SUSENAS 2011, data diolah

Hal menarik lainnya yang terlihat dari kondisi pekerja anak Provinsi Lampung ialah sebagian besar para pekerja anak tersebut kehilangan kesempatan untuk menikmati bangku pendidikan. Terdapat 61,94 persen dari pekerja anak tersebut belum pernah sekolah dan tidak bersekolah lagi. Dari ilustrasi pada gambar (8) diatas tampak bahwa semakin tinggi usia pekerja anak semakin tinggi pula jumlah pekerja anak yang meninggalkan bangku sekolah.

Gambar 9. Distribusi pekerja anak usia 10 s.d 17 tahun responden SUSENAS 2011 yang tidak bersekolah dan belum pernah sekolah berdasarkan alasan berhenti/tidak pernah sekolah di Provinsi Lampung

![Pie chart showing reasons for child labor dropouts in Provinsi Lampung]

Sumber: SUSENAS 2011, data diolah

Ketika para pekerja anak yang berhenti sekolah/belum pernah sekolah tersebut dirinci berdasarkan alasan nya, hasil yang terduga ditemui. Meskipun untuk menempuh pendidikan formal dibangku sekolah kini tidak lagi perlu membayar biaya pangkal pendidikan, namun 61 persen dari pekerja anak tersebut beralasan bahwa keluarga mereka tidak mampu membiayai
mereka untuk melanjutkan pendidikan. Sebuah ironi yang ditemui ketika mereka pekerja anak tersebut sejatinya sebagian besar berasal dari keluarga yang tidak miskin.


Masih tingginya nilai ekonomi anak pada masyarakat kita dapat menjadi penghalang bagi kegiatan penurunan jumlah tenaga kerja anak. Pemberian subsidi pendidikan untuk menenangi biaya pendidikan tidak akan efektif dalam menekan jumlah pekerja anak selama paradigma lebih baik anak bekerja dari pada sekolah masih tertanam dalam benak masyarakat kita. Untuk itu diperlukan suatu kebijakan berupa pemberian pemahaman kepada masyarakat kita akan trade off antara mengirimkan anak mereka kesekolah dan mempekerjakan anak mereka. Tidak hanya itu pemberdayaan ekonomi keluarga miskin juga harus dilakukan agar mampu menenani nilai ekonomi anak pada keluarga tersebut.

V. KESIMPULAN DAN SARAN


Ditambah lagi adanya paradigma nilai ekonomi anak alam masyarakat kita menjadikan nya suatu hambatan dalam upaya pemberantasan pekerja anak. Anggapan akan lebih baik anak bekerja dari pada mengirim mereka ke bangku pendidikan menjadikan pemberian insentif finansial bagi pendidikan tidak akan memberikan dampak yang berarti terhadap upaya pengiriman kembali pekerja anak ke bangku sekolah.

Karena nya upaya penekanan jumlah penduduk miskin saja tidak akan memberikan dampak yang berarti terhadap penurunan jumlah tenaga kerja anak. Diperlukan adanya suatu kebijakan yang lebih mengarah pada peningkatan daya beli masyarakat. Diperlukan suatu kebijakan berupa pemberian pemahaman kepada masyarakat kita akan trade off antara mengirimkan anak mereka kesekolah dan mempekerjakan anak mereka.
DAFTAR PUSTAKA

http://bdtp2k.go.id/index.php?option=com_wrapper&view=wrapper&Itemid=88

http://lampung.bps.go.id

http://images.search.yahoo.com/images/view;_ylt=A0PDoQwTM9hRZUCAL0izbkF;_ylu=X3oDMT BlMTQ4cGxyBHNIYwNzcCRzbgDg5Wn?back=http%3A%2F%2Fimages.search.yahoo.com%2FSearchImages%3Fp%3Dburuh%2Banak%2Bdi%2Bperkebunan%2Bkelapa%26n%3D26%26e%3Dutf-8%26y%3DSearch%26fr%3Dsf

http://images.search.yahoo.com/search/images;_ylt=A0PDoS2EMthRJigA7XmJzbkF;p=buruh+anak+di+perkebunan+kelapa&fr=sfp-im

tt=Photo%3A+Pekerja+%3Cb%3EAnak%3C%2Fb%3E&sigi=142h228mf&sigb=13ggjb1nf&crumb=ZvJrburbRTt&fr=sfp-im


**LAMPIRAN**

**Lampiran 1 → Regresi Linier**

### Variables Entered/Removed

<table>
<thead>
<tr>
<th>Model</th>
<th>Variables Entered</th>
<th>Variables Removed</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Inmiskinlampung,</td>
<td></td>
<td>Enter</td>
</tr>
<tr>
<td></td>
<td>lnpengkaplampung</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. All requested variables entered.
b. Dependent Variable: lnkerjaanaklampung

### Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.973</td>
<td>.947</td>
<td>.938</td>
<td>.22796</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Inmiskinlampung, lnpengkaplampung

### ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Regression</td>
<td>10,268</td>
<td>2</td>
<td>5,134</td>
<td>98,795</td>
<td>.000</td>
</tr>
<tr>
<td>Residual</td>
<td>,572</td>
<td>11</td>
<td>.052</td>
<td></td>
<td>.</td>
</tr>
<tr>
<td>Total</td>
<td>10,840</td>
<td>13</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Inmiskinlampung, lnpengkaplampung
b. Dependent Variable: lnkerjaanaklampung

### Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>65,873</td>
<td>23,280</td>
<td>2,830</td>
<td>.016</td>
</tr>
<tr>
<td>lnpengkaplampung</td>
<td>-9,262</td>
<td>3,634</td>
<td>-1,81</td>
<td>-2,549</td>
</tr>
<tr>
<td>lnmiskinlampung</td>
<td>1,029</td>
<td>,073</td>
<td>.999</td>
<td>14,038</td>
</tr>
</tbody>
</table>

a. Dependent Variable: lnkerjaanaklampung
Lampiran 2 → Regresi Logistik

Logistic Regression

[DataSet1] F:\logit coba\olah tk anak.sav

Case Processing Summary

<table>
<thead>
<tr>
<th>Unweighted Casesa</th>
<th>N</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selected Cases</td>
<td>5375</td>
<td>100,0</td>
</tr>
<tr>
<td>Missing Cases</td>
<td>0</td>
<td>,0</td>
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<tr>
<td>Total</td>
<td>5375</td>
<td>100,0</td>
</tr>
<tr>
<td>Unselected Cases</td>
<td>0</td>
<td>,0</td>
</tr>
<tr>
<td>Total</td>
<td>5375</td>
<td>100,0</td>
</tr>
</tbody>
</table>

a. If weight is in effect, see classification table for the total number of cases.

Dependent Variable Encoding

<table>
<thead>
<tr>
<th>Original Value</th>
<th>Internal Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>,00</td>
<td>0</td>
</tr>
<tr>
<td>1,00</td>
<td>1</td>
</tr>
</tbody>
</table>

Categorical Variables Codings

<table>
<thead>
<tr>
<th>Parameter coding</th>
<th>Frequency</th>
<th>(1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>JK</td>
<td>Laki-laki</td>
<td>2846</td>
</tr>
<tr>
<td></td>
<td>Perempuan</td>
<td>2529</td>
</tr>
<tr>
<td>kriteria miskin</td>
<td>,00</td>
<td>4369</td>
</tr>
<tr>
<td></td>
<td>1,00</td>
<td>1006</td>
</tr>
</tbody>
</table>

Classification Tablea,b

<table>
<thead>
<tr>
<th>Observed</th>
<th>Predicted</th>
<th>Percentage Correct</th>
</tr>
</thead>
<tbody>
<tr>
<td>realtk_anak</td>
<td>0,0</td>
<td>4762</td>
</tr>
<tr>
<td></td>
<td>1,00</td>
<td>613</td>
</tr>
<tr>
<td>Overall Percentage</td>
<td>88,6</td>
<td></td>
</tr>
</tbody>
</table>

a. Constant is included in the model.
b. The cut value is ,500

Variables in the Equation

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>df</th>
<th>Sig.</th>
<th>Exp(B)</th>
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</thead>
<tbody>
<tr>
<td>Step 0</td>
<td>Constant</td>
<td>-2,050</td>
<td>,043</td>
<td>2282,463</td>
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<td>,000</td>
</tr>
</tbody>
</table>
### Variables not in the Equation

<table>
<thead>
<tr>
<th>Step 0</th>
<th>Variables</th>
<th>miskin(1)</th>
<th>4,973</th>
<th>1</th>
<th>,026</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>JK(1)</td>
<td>154,162</td>
<td>1</td>
<td>,000</td>
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</tr>
<tr>
<td>Overall Statistics</td>
<td></td>
<td>158,406</td>
<td>2</td>
<td>,000</td>
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</tr>
</tbody>
</table>

### Block 1: Method = Enter

#### Omnibus Tests of Model Coefficients

<table>
<thead>
<tr>
<th>Chi-square</th>
<th>df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td>166,952</td>
<td>2</td>
</tr>
<tr>
<td>Block</td>
<td>166,952</td>
<td>2</td>
</tr>
<tr>
<td>Model</td>
<td>166,952</td>
<td>2</td>
</tr>
</tbody>
</table>

### Model Summary

<table>
<thead>
<tr>
<th>Step</th>
<th>-2 Log likelihood</th>
<th>Cox &amp; Snell R Square</th>
<th>Nagelkerke R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3648.146a</td>
<td>,031</td>
<td>,060</td>
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</tbody>
</table>

a. Estimation terminated at iteration number 5 because parameter estimates changed by less than ,001.

### Hosmer and Lemeshow Test

<table>
<thead>
<tr>
<th>Step</th>
<th>Chi-square</th>
<th>df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>13,072</td>
<td>2</td>
<td>,001</td>
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### Contingency Table for Hosmer and Lemeshow Test

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<th>realtk_anak = ,00</th>
<th>realtk_anak = 1,00</th>
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<tbody>
<tr>
<td></td>
<td>Observed</td>
<td>Expected</td>
</tr>
<tr>
<td>Total</td>
<td>2070</td>
<td></td>
</tr>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
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<tr>
<td>1</td>
<td>1942</td>
<td>1956,858</td>
</tr>
<tr>
<td>2</td>
<td>443</td>
<td>428,142</td>
</tr>
<tr>
<td>3</td>
<td>1949</td>
<td>1934,142</td>
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<td>4</td>
<td>428</td>
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### Classification Table

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<tr>
<th></th>
<th>realtk_anak</th>
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<th>Percentage Correct</th>
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<td></td>
<td>,00</td>
<td>1,00</td>
<td></td>
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<tr>
<td>Step 1</td>
<td>realtk_anak</td>
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<td>0</td>
<td>4762</td>
<td>0</td>
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<tr>
<td>,00</td>
<td>613</td>
<td>0</td>
<td>,0</td>
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<tr>
<td>Overall Percentage</td>
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<td>88,6</td>
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a. The cut value is ,500
**Variables in the Equation**

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<tr>
<th></th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>df</th>
<th>Sig.</th>
<th>Exp(B)</th>
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<tbody>
<tr>
<td>Step 1a</td>
<td>miskin(1)</td>
<td>-2.20</td>
<td>.106</td>
<td>4,315</td>
<td>1</td>
<td>.038</td>
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<tr>
<td></td>
<td>JK(1)</td>
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<td>.100</td>
<td>140,928</td>
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<td>.000</td>
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<tr>
<td></td>
<td>Constant</td>
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<td>481,806</td>
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a. Variable(s) entered on step 1: miskin, JK.

**Correlation Matrix**

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<th></th>
<th>Constant</th>
<th>miskin(1)</th>
<th>JK(1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td>Constant</td>
<td>1.000</td>
<td>-0.698</td>
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<tr>
<td></td>
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<td>-0.698</td>
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<tr>
<td></td>
<td>JK(1)</td>
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**Lampiran 3** Data Jumlah penduduk miskin, jumlah tenaga kerja anak, dan pengeluaran perkapita yang disesuaikan di Provinsi Lampung enurut kabupaten/kota tahun 2011

<table>
<thead>
<tr>
<th>Kabupaten</th>
<th>jumlah penduduk miskin (000)</th>
<th>jumlah tenaga kerja anak</th>
<th>pengeluaran perkapita setahun (Rp.000)</th>
</tr>
</thead>
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<tr>
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<td>67.9</td>
<td>66.684</td>
<td>621.77</td>
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<tr>
<td>TANGGAMUS</td>
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<td>78.290</td>
<td>606.45</td>
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<td>LAMPUNG SELATAN</td>
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<td>100.038</td>
<td>623.22</td>
</tr>
<tr>
<td>LAMPUNG TIMUR</td>
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<td>LAMPUNG TENGAH</td>
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<td>LAMPUNG UTARA</td>
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<td>WAY KANAN</td>
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<td>51.910</td>
<td>607.79</td>
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<td>TULANG BAWANG</td>
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<td>KOTA METRO</td>
<td>19.0</td>
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<td>633.37</td>
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</table>

Sumber:
Basis data terpadu TNP2K
Badan Pusat Statistik Provinsi Lampung
Migration and The Incidence of Working Children: Evidence from Indonesia

Niken Kusumawardhani* and Nila Warda*1
SMERU Research Institute, Indonesia

INTRODUCTION

The primary aim of this paper is to examine the consequence of parents migration to working activities of their children in Indonesia. In order to do this, the method of Propensity Score Matching (PSM) is employed to address self-selection bias into migration before applying the probit model to estimate the significance of the effect.

The number of migrants in Indonesia has been increasing over time. Internationally, Indonesia is the country in Asia with the largest flow of documented migrants per year after the Philippines. In 2007, the World Bank estimated that Indonesia had as many as 4.3 million citizens working overseas (Bryant, 2005). Meanwhile, number of migrants internally has changed significantly and becomes more complex, larger in size and more advanced. About 5.5 million people were migrating inter-province during 2005-2010 which is increasing about 39 percent from the previous period (BPS, 2011). In addition, the recent migration pathways do not follow the "step by step" path outlined by Skeldon (1990). They now can "jump" migrating from rural areas directly to mega cities, without moving first to small towns, cities, or big cities (Ananta and Arifin, 2008).

As increases in the volume and diversity of migration, the number of families fractured by migration is also growing tremendously. How migration affects the left-behind families is highly variable and complex (Yeoh, Hoang and Lam, 2010). Migration is considered as the importance strategy for enhancing the livelihood of sender family through remittances. At the same time, migration bring on a loss of local support on the family left-behind, especially children. For them, a migration envisioned as lack of a caregiver, especially when the migrants are the parents who are identified as the main source of a trust and help. Those children then become vulnerable from any harmful activities such as being abused or engaging in child worker.

Considering the working activities of children, the potentially effect of parents migration could be either positive or negative. The incidence of working children could be decreasing among migrant families due to the remittance receipt which may increase resources owned by household and release some household’s financial burden (Yang, 2008; Park, Lee and deBrauw, 2010). Particularly for international migrant parents, the increased social protection among the 7-10 age cohorts can be attributed to increased knowledge about non-physical child discipline norms

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1 Both are researchers of SMERU Research Institute
obtained and brought back by return migrants from abroad (Moran-Taylor, 2008). In contrary, labor supply of children could be increasing along with increasing the parents absence time as found by Booth and Tamura (2009) in Vietnam in 1990s. It might be happened in the initial period of paternal migration when the flow of remittance may be volatile and unreliable to ensure households resources or when the remittances has been mismanaged (Asis, 2000).

Working children in migrant families are also considered as a consequence of the adjustment of caring arrangement change due to the absence of one or both parents. Children, usually the older ones, are performing such domestic works for instance caring the younger siblings or other household work traditionally done by the former (father or mother), includes family farm business (Yeoh, Hoang and Lam, 2010; Parrenas, 2005).

The participation rate of children to market works in Indonesia decreased between 2000 and 2006, reaching 2.6%, before dramatically reversing in 2007. While the participation rate in 2006 was lower than in 2000, the rate in 2007 was double the rate in 2006. The suggestive explanation comes from IFLS (Indonesia Family Live Survey) 2000 and 2007 where a higher proportion of child workers in 2007 were mostly working solely inside their own household compared to 2000 and only about 1% were working both inside and outside the household (Sim, Suryadarma and Suryahadi, 2012).

One of main findings from Syukri, et.al, (2011) in Sukabumi and Cianjur suggests that kinds of work children perform are various. Some children are farm hands during harvest seasons, other children work on assembly home industries, and others undertake full time paid jobs or become domestic work. The last kind of work was significantly involved by most children in the study areas. In addition, the enrollment rate at high school level is significantly lower than at primary level for some reasons includes parents being migrant workers. It relates to existing condition where those study areas are migrant workers sending districts.

Despite the possibility of migration parents which lead to children performing working activities, only few studies that focus on this issue, especially in Indonesia. Some of those studies are Mansuri (2006) in Pakistan; Carlo, Chiquiar, and Salcedo (2012) in Mexico; and Booth and Tamura (2009) in Vietnam. Meanwhile, many studies of migration impact on children in Indonesia examine the outcome of health, education, and emotional well-being, but lack of examining their working activities (for example Deb and Seck, 2009 and Graham, et.al., 2012). Nguyen and Purnamasari (2011) investigate empirically how international migration and remittances in Indonesia affect child outcome and labor supply behavior in sending household. However, they eliminate the potentially effect of internal migration.

This study will contribute to the discourse of migration study in Indonesia by focusing in child worker as a consequence of not only international migration but also internal migration. As Indonesia government has already ratified the International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families (UU No.6 Tahun 2012), the empirical findings on any issue of migrants families are needed to suggest in what aspects the implementation of the convention in Indonesia should focus on.

The organization of this paper is as follows. The next section discuss the conceptual background of child labor and parents migration. We then detail our empirical strategy on section III after explain the data used. Section IV presents the estimation results and finally concludes in section V.
BACKGROUND

Why Children Work?

Theoretical and empirical literature concerning causes and consequences of child labor has been growing rapidly. This section aims to briefly review underlying theories that have been tested empirically in recent years. The ultimate objective of the review is to identify policies applied under various perceived causes of child labor.

Under the neoclassical models of household decision-making, parents view children as assets and they face quantity-quality tradeoff upon raising their children. Becker and Lewis (1973) argue that parents consider number of children and investment in human capital as substitutes and they diversify risk by sending some of their children to school and putting the others to labor market. Becker and Lewis (1973) also argue that child labor is complementary to other type of household capital. For example, investment in a family enterprise can be optimized if it is combined with labor from household’s children; thus parents may prefer to send their children to labor market rather than to invest in children’s education. Empirical evidence for this hypothesis have shown mixed evidence. Patrinos and Psacharopoulos (1997) in Brown et al. (2001) find that children in larger families perform worse in school and are less well-nourished, while Chernichovsky (1985) in Brown et al. (2001) find that family size raises educational attainment in Botswana. We may think that positive correlation between family size and schooling may occur due to diminishing marginal returns in household’s production function, as large number of children available to engage in household work drives down the opportunity cost of schooling for a child in the family. Public policies that put constraints on options that parents can make for their children, such as minimum age of work and compulsory schooling are the typical policies induced by evidence on negative correlation between family size and educational attainment of children. Brown et al. (2001) argue that law of compulsory schooling and minimum age of work are not very effective, since supervision is costly. In fact, these policies can lead to proliferation of illegal child employment.

Another theory on the cause of child labor is the so-called poverty hypothesis, which basically states that child labor is a by-product of poverty and policy to reduce child labor should focus on economic development and increasing income (Brown et al., 2001). Poverty hypothesis argues that parents send their children to work because they consider that return from education is not high enough to compensate for foregone income while children are in school. Preference for education also plays role in explaining the relationship between poverty and child labor, as poor parents are likely to appreciate return to education less than wealthy parents if poor parents themselves are not educated. Study by Priyambada et al. (2005) supports this view by showing that profile of child labor in Indonesia is closely related to the profile of poverty, and poverty is found as an important determinant of working for children. Priyambada et al. (2005) shows that like poverty in Indonesia, child labor is a rural phenomenon from households whose livelihood depend on agricultural sector, and is very determined by educational attainment of household heads. According to poverty hypothesis, child labor can be eliminated through poverty alleviation. Policy that joins the efforts to combat poverty and to reduce child labor includes giving cash transfers or in-kind gifts based on school attendance (PROGRESSA in Mexico, Program Keluarga Harapan or PKH in Indonesia, etc.) which successfully stimulates increase in enrollment and attendance at school.

The most recent literature on the theory of child labor stems from the perspective that child labor emerges as a response to market failure. The source of market failure may come from rigidity in market for adult labor or capital market failure. Basu (1999) in Brown et al. (2001) argues that child labor is the consequence of rigidity in market for adult labor which gives rise to adult unemployment. Households send their children to labor market to compensate for foregone
income by unemployed adult. With regard to capital market failure, child labor emerges along with the possibility that households are liquidity constrained. Baland and Robinson (2000) in Brown et al. (2001) argue that child labor can be regarded as a form of household’s loan from child’s future income to finance the child’s education today due to household’s inability to access capital market. In other words, Baland and Robinson (2000) argue that for children, working and attending school can be performed simultaneously. This hypothesis is actually align with data from developing countries, where children work and attend school at the same time. Priyambada et al. (2005) mention that majority of child labor in Vietnam attend school and work in agricultural sector simultaneously because their workload at farms allow them to do so. Priyambada et al. (2005) also shows that half of the child labor aged 5-14 in Indonesia are still enrolled in schools, confirming the view that working does not always completely eliminate the opportunity for children to have formal education. With respect to this hypothesis, Brown et al. (2001) argue that policy aimed at improving labor-market function might lower incidence of child labor, as would government loan that is tied to child’s educational performance or government’s subsidy for education.

**Parental Migration and Labor Supply of Children**

Economic model of migration has been classified into two groups: one which emphasizes the individual determinants of migration, and the other which emphasizes household or family-level determinants of migration. Todaro (1969) predicts individuals migrate if income differentials are high enough and there are chances of getting employed; implying that migration is mainly driven by individual motivation and income disparity will induce migration. Human capital plays essential role in determining migrant selectivity based on Todaro (1969). On the other hand, family or household migration model by Mincer (1978) emphasizes family gain rather than personal gain to explain the cause of migration. Mincer (1978) argues that migration is the response of household to capital and insurance market imperfections and migrants provide additional financial sources for capital-constrained families. Family decides which member to participate in migration based on family gain rather than personal gain, and it may lead to intra-family bargaining between the appointed member and the rest of the family if personal gain is lower than family gain.

Theoretical literature has identified several channels through which migration may affect labor supply of children: 1) remittance effect, 2) disruptive family effect, and 3) immediate substitution effect. First of all, remittance sent by migrant parents may increase resources owned by household and release some of household’s financial burden. If parents send their children to labor market in order to gain additional resources for household, remittance can actually substitute the income earned by children and there is no need for households to send children to labor market anymore. On the other hand, in the case where cost of education was once unaffordable, remittance will relax credit constrain of households and allow them to enroll their children in education. Children who were previously idle or helped their parents at farm may now participate in schooling. Secondly, departure of parents in migrant households may cause children to have no role model in their critical growing period, or requires children to perform additional household responsibilities. Household with migrating parents face geographic separation which causes loss of manpower, which in turn could affect decision-making process at households. In the initial period of parental migration when parents are not settled yet in the migration destination, flow of remittance may be volatile and unreliable to ensure household resources. Thus, parental migration increases possibility of children (especially the older ones) to join labor market to compensate for foregone income. Lastly, parental migration may also induce future migration by household member, including children. Due to information and network effects, having a migrant parent increases the likelihood that children themselves will become migrant and it discourages child schooling at the origin. Possibility to migrate in the future can influence the expected return to education even if children migrate at the age older than the age when they
would be attending schools. Consequently, possibility to migrate in the future will lower the expected returns from schooling. In summary, the net-effect of parental migration on labor supply of children depends on the cumulative magnitude of the aforementioned effects.

Empirical literature has documented mixed evidence related to the impact of parental migration on the labor supply of remaining children. Using Vietnam Living Standard Survey, Booth and Tamura (2009) examines the impact of father’s temporary absence on children left behind in terms of their school attendance, household’s expenditure on education, and non-housework labor supply by focusing on 7-18 years old children. By focusing on households with paternal temporary absence and maternal presence, Booth and Tamura (2009) finds that paternal temporary absence increases son's non-housework labor supply and the impact is larger if absence is longer. Interestingly, this study doesn't find evidence on the impact of paternal absence on school attendance and education expenditure. This finding suggests that boys' labor are more substitutable for fathers' labor supply and Vietnamese children do not sacrifice schooling if they decide to join labor market. Study by Nguyen and Purnamasari (2011) using Indonesia Family Life Survey (IFLS) 2000 & 2007 finds that gender matters in determining the impact of international migration and remittances on child outcomes and labor supply. Nguyen and Purnamasari (2011) find that male migrant reduces working hours of remaining household members. Meanwhile, female migration only reduces non-housework labor supply by children, presumably due to the fact that migrant women have stronger bargaining power over investment choices related to children within a household. Nguyen and Purnamasari (2011) do not find any impact of migration on children's school enrollment, implying that reduction in non-housework labor supply doesn't coincide with improvement in school enrollment.

**Selection and Causation**

Empirical literature in migration has long been suffered from the issue of selection bias. And there is an intensified interest in addressing self-selection in recent years, particularly with respect to establishing the true causal relationship. In our study, the difficulty in assessing the impact of migration is mainly caused by the fact that migrant and decision to leave children at origin are not randomly dispersed across individuals or households. Source of selection may come from different aspects, such as welfare, health, cohort, gender, etc. In the case that migration is costly, it tends to select wealthy households because they are the only one who could afford the migration cost and they probably know better about migration network. If we believe that migration in Indonesia positively selects those from wealthier households, then we must remove the selection first to come at unbiased causal relationship between migration and child labor activity in remaining households. If migration selects a pool of relatively wealthier households, then it is unlikely for children from these particular households to engage in child labor activity because parental migration tends to be more successful and there is very low need for children to perform non-housework activity to compensate for foregone income at initial period of parental migration. On the other hand, migrant workers from Indonesia are dominated by women. Maternal migration may bring different consequences compared to paternal migration, considering that mother has a more nurturing role and also they are likely to prioritize education of their children. Migrant mother tends to be shorter in terms of duration, hence it is less likely to create intention for children to participate in migration. Departure of mother may cause children to do house chores because person who once was responsible to do housework is now not around. If migration selects women more than men, then it is more likely that migration increases housework activity of children at the origin only because the fact that women dominates the pool of migrants, and not necessarily explaining the true impact of migration.

The objective of this study is to examine the impact of migration on the labor supply of children who do not participate in the migration itself. Migration and decision to leave children at the
origin are considered to be household-level intervention. Within a household, parent may choose which children to bring along in the migration, and which children they decide to leave. That being said, decision to leave children at the origin is not randomly allocated among households and selection is likely. Parent may decide to leave children if children are too young and there is a member of the family that could take care of their children during migration. In the case that children who are left behind are dominated by relatively younger children, of course parental migration will give no impact on the likelihood of children actively participate in labor market since their age constrains them to do so. This self-selection poses a severe challenge to ascertain the impact of migration on labor supply of children at the origin. Consequently, this study should take potential selection bias into account to come up with unbiased result. In this case, OLS estimate is unable to reveal the true causal relationship.

DATA AND METHODOLOGY

Data

The dataset that we employ is Indonesia Family Life Survey (IFLS) wave 3 (2000) and wave 4 (2007). IFLS is the continuing longitudinal socioeconomic and health survey. It is based on a sample of households representing about 83% of the Indonesian population living in 13 of the nation’s 26 provinces in 1993. The survey collects data on individual respondents, their families, their households, the communities in which they live, and the health and education facilities they use. The first wave (IFLS1) was administered in 1993 to individuals living in 7,224 households. IFLS2 sought to re-interview the same respondents four years later. A follow-up survey (IFLS2+) was conducted in 1998 with 25% of the sample to measure the immediate impact of the economic and political crisis in Indonesia. The next wave, IFLS3, was fielded on the full sample in 2000. IFLS4 which is employed in this study was fielded in late 2007 and early 2008 on the same 1993 households and their split-offs; As many as 13,535 households and 44,103 individuals were interviewed (Strauss, et al, 2009). Overall, the IFLS iteration rate is high, and it represents one of the first efforts in social surveys to track migrants, which permits studying the migration as a dynamic process.

The IFLS provides the rich information both on children and migration. However, the survey is not designed to study migration issues and hence provide limited information on a small group of migrants. For instance, there are no specific questions asking about the children condition on migrant household. However, there is a specific module on parental information (B5-BAA) which ask the location of their parents live. The left behind children are defined as those whose parents (at least one) is/are reside not within the same village as they do.

Child worker has many different definition. IFLS added a particular module on working activities of children (B5-DLA). Those activities are divided into four category: working for wage, working for family farm business, working for family non-farm business, and special for IFLS4, the module records the household works. In this paper, we differentiate the outcome into two types of child worker. First, child who is engaged in any kinds of working activities in the past month. Second, child who is engaged in economic work in the past month, either inside (farm or non-farm family business) or outside household (work for wage) so we exclude the domestic worker children.

Those two modules are administered to children aged below 15 years old. Because we need to explore the children and the household condition in 2000 as base line, we limit the observation of children aged between 7-14 years old in 2007. The definition of children here is only by the age without considering their status in the household.
Methodology

This study implements Propensity Score Matching (PSM) to create comparable control group that resembles the treatment group with respect to probability to participate in migration or to receive household-level data to ensure for balanced sample. According to Dehejia and Wahba (2002), matching on the propensity score is essentially a weighting scheme, which determines what weights are placed on comparison units when computing the estimated treatment effect. Essentially PSM estimator is simply the mean differences in outcomes over the common support, appropriately weighted by the propensity score distribution of participants (Caliendo and Kopeinig, 2005). Matching puts the emphasis on observations that have similar observable characteristics, and so those observations on the margin might get no weight at all (Blattman, 2010). A weighted regression of outcome on treatment is thus a comparison of means across treatment and control groups, but the control group is reweighted to represent the average outcome that the treatment group would have exhibited in the absence of treatment (Nichols, 2008). Once the weights are obtained from PSM for each household in the observation, the model is estimated using weighted regression. Since the outcome of interest is at individual level, standard errors are clustered at household level to count for the fact that individuals belong to same household are correlated. Migration and remittance are considered as treatments at household level and household samples are divided into separate treatment group and control group: treatment group includes 824 children who are left behind during parental migration, while the control group 1544 children who also brought along during parental migration.

The major practical problem of matching arises when there are numerous differences between treated and untreated units to control for. The solution proposed by Rosenbaum and Rubin (1983) to the dimensionality problem is to calculate the *propensity score*, which is the probability of receiving the treatment given X, noted as P(D = 1 | X), or simply p(X). Rosenbaum and Rubin (1983) prove that when it is valid to match units based on the covariates X, it is equally valid to match on the propensity score. In other words, the probability of participation summarizes all the relevant information contained in the X variables. The major advantage realized from this is the reduction of dimensionality, as it allows for matching on a single variable (the propensity score) instead of on the entire set of covariates. In effect, the propensity score is a balancing score for X, assuring that for a given value of the propensity score, the distribution of X will be the same for treated and comparison units. To implement PSM, there are two assumptions that must be satisfied: 1) Conditional Independence Assumption (CIA or unconfoundedness) and 2) Common Support. The CIA assumption based on propensity score states that given the probability for an individual to participate in a treatment given his observed covariates X, potential outcomes are independent of treatment assignment:

\[ Y(0), Y(1) \sim P(D) \mid X, D \]

This is a strong assumption as it implies that selection into treatment is solely based on observable characteristics and that all variables influencing treatment assignment and potential outcomes simultaneously are observed. A further requirement besides independence is the common support or overlap condition. Matching seeks to mimic the identification of randomization by balancing key covariates that jointly determine selection into treatment and outcomes. It rules out the phenomenon of perfect predictability of D given X:

\[ 0 < P(D = 1 | X) < 1 \]

This assumption ensures that persons with the same X values have a positive probability of being both in treated group and control group. Covariate balance is implicit under randomization
because each unit of the experimental sample has an equal probability (or more generally, a probability that is known to the experimenter) of being assigned to treatment or control. Therefore, treatment is assigned independent of potential outcomes \( Y (1) \) and \( Y (0) \) under treatment \( (T = 1) \) and control \( (T = 0) \), respectively. In the absence of a treatment, one would expect similar average outcomes from both groups. Similarly, if both groups were to receive (the same) treatment, one would expect similar average outcomes from both groups. In other words, by ensuring that the distributions of key covariates are balanced across treatment and control groups, similar methods to those used in randomized experiments can be used to estimate ATT on matched datasets. Given that both CIA and common support hold, PSM estimator for ATT can be written as:

\[
\frac{\Delta E}{E_{ATT}} = E_{P(X)D} = E_Y[Y(1)|D = 1, P(X)] - E_Y[Y(0)|D = 0, P(X)]
\]

Once observations in treated and control group are matched based on propensity score proximity, differences in outcomes (child labor supply) between the two can be considered as the impact of migration.

**Propensity Score Estimation**

First step in PSM is to predict propensity score of participation into treatment. In general, little advice is available regarding which functional form to be used to predict propensity score. Caliendo and Kopeinig (2005) argue that for binary treatment case, where we estimate the probability of participation vs. non-participation, logit and probit models yield similar results. Hence, the choice is not too critical, even though the logit distribution has more density mass in the bounds. More advice is available regarding covariates to be included in the propensity score model. The choice of variables should be based on economic theory and previous empirical findings, and only variables that influence simultaneously the participation decision and the outcome variable should be included. These variables should either be fixed over time or measured before participation to ensure that they are unaffected by participation or anticipation of participation. Caliendo and Kopeinig (2005) argue that although the inclusion of non-significant variables will not bias estimation, it can increase the variance.

I identify several covariates that jointly influence parent’s decision to leave children and children’s participation in labor market. These covariates are used in the analyses to control for the observable differences between treated and control group, therefore, isolating the impact of being left behind. Since PSM only allows covariates that are measured before participation into treatment, we only take into account time-invariant covariates and time-variant covariates whose values could be re-estimated as of time before migration given that information of migration duration is available.
Table 1. Probability for Children in Migrant Households to be Left Behind

| Variable                          | Coefficient | Standard Errors | $P > |z|$ |
|----------------------------------|-------------|-----------------|-------|
| Gender dummy: boys               | 0.146       | 0.055           | 0.008 *** |
| Age of children                  | -0.646      | 0.057           | 0.000 *** |
| Rural                            | -0.421      | 0.059           | 0.000 *** |
| Household size                   | -0.117      | 0.058           | 0.045 *** |
| Quartile PCE                     | -0.088      | 0.028           | 0.002 *** |
| Dependency ratio                 | -0.398      | 0.057           | 0.000 *** |
| Provincial dummy: Java           | 0.405       | 0.071           | 0.000 *** |
| Provincial dummy: East           | 0.301       | 0.088           | 0.001 *** |

$N = 2368, \text{ Pseudo } R^2 = 0.0956, \text{ LR test (prob)} = 292.63 (0.000) ***$

*** Significant at 1%

All covariates in Table 1 are statistically significant in determining probability for children in migrant households to be left behind, and all of them are showing the sign as predicted by theory or by previous findings. Among children in migrant households, boys are more likely to be left behind compared to girls. On the other hand, children with older age decrease the probability to be left behind. With respect to characteristic at household level, household with bigger size are less likely to leave children behind.

Matching

The choice of proper algorithm is very important in this study given the small size of dataset. This section is dedicated to provide preliminary assessment of each algorithm considered and to assess balance across all covariates in treated and control group.

The sample consists of 824 treated children and 1544 control children. Density distribution of propensity score in both groups shows substantial overlap in each value of propensity score. Therefore, common support assumption required to apply PSM is satisfied. However, propensity score distributions are not similar in the treatment group and control group, as can be seen in Figure 1: there are a lot of treated observations with high propensity score and a lot of untreated observations with low propensity score. Table 2 provides information on performance of each matching algorithm.

Figure 1. Propensity Score Distribution Before Matching
**Table 2. Performance Comparison of Different Matching Algorithm**

<table>
<thead>
<tr>
<th>Algorithm</th>
<th>Average P-Score for Treated</th>
<th>Average P-Score for Control</th>
<th>Number of Treated used to Match</th>
<th>Number of Control used to Match</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Before Matching)</td>
<td>0.426</td>
<td>0.307</td>
<td>824</td>
<td>1544</td>
</tr>
<tr>
<td>NN without replacement, caliper (0.001)</td>
<td>0.392</td>
<td>0.392</td>
<td>626</td>
<td>626</td>
</tr>
<tr>
<td>NN with replacement, caliper (0.001)</td>
<td>0.423</td>
<td>0.341</td>
<td>795</td>
<td>226</td>
</tr>
<tr>
<td>5-NN matching with caliper, (0.001)</td>
<td>0.423</td>
<td>0.325</td>
<td>795</td>
<td>875</td>
</tr>
<tr>
<td>Kernel, bandwidth (0.001)</td>
<td>0.423</td>
<td>0.324</td>
<td>795</td>
<td>1325</td>
</tr>
</tbody>
</table>

NN matching without replacement produces highest quality of match at the cost of discarding too many observations. Since there are a lot of treated observations with high propensity score and only few control observations with high propensity score, using NN matching with replacement reduces the number of controls used to construct the counterfactual outcome (Caliendo and Kopeinig, 2005). K-nearest neighbor matching with 5 neighbors uses more information but at the cost of lower quality of matching compared to NN without replacement. Kernel matching uses almost all of the control units within the bandwidth to build counterfactual. Compared to the performance of NN matching, they result in lower variance but at the cost of high increase in bias. Figure 2 contrasts propensity score distribution after matching for each of the algorithm discussed.

**Figure 2. Propensity Score Distribution After Matching**

Upper panel: (a) NN-matching without replacement and caliper (0.001), (b) NN-matching with replacement and caliper (0.001). Lower panel: (c) 5-NN matching with replacement and caliper (0.001), (d) kernel matching with bandwidth (0.001)

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: propensity score distribution for untreated (control)

: propensity score distribution for treated
Visual comparison fails to show obvious difference in terms of propensity score distribution. As we can see that none of the algorithm is able to produce perfect match and matching produces little changes in terms of distribution of propensity scores. NN matching without replacement produces highest quality of matching, as distribution of propensity score in two groups after matching are most alike. But it comes at high cost of discarding too many variables, therefore increased variance. We decide to use 5-NN matching as primary algorithm in this case, as it still performs better compared to radius in terms of bias reduction.

To ensure that matching procedure is able to balance distribution of covariates used in predicting propensity score in both control and treatment group, we are going to perform two sample t-tests after matching. When two-sample t-test is used, we compare differences in covariate means for both groups after matching. Before matching differences are expected, but after matching the covariates should be balanced in both groups and hence no significant differences should be found. Table 3 summarizes balancing test for PSM.

### Table 3. Balancing Test for PSM

<table>
<thead>
<tr>
<th>Variable</th>
<th>Sample</th>
<th>Mean Treated</th>
<th>Mean Control</th>
<th>Difference</th>
<th>P &gt;</th>
<th>t</th>
<th></th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender dummy: boys</td>
<td>Unmatched</td>
<td>0.506</td>
<td>0.470</td>
<td>0.036</td>
<td>0.096</td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Matched</td>
<td>0.506</td>
<td>0.510</td>
<td>-0.004</td>
<td>0.837</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age of children</td>
<td>Unmatched</td>
<td>0.269</td>
<td>0.522</td>
<td>-0.253</td>
<td>0.000</td>
<td>***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Matched</td>
<td>0.273</td>
<td>0.281</td>
<td>-0.008</td>
<td>0.713</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dummy for rural</td>
<td>Unmatched</td>
<td>0.657</td>
<td>0.519</td>
<td>0.138</td>
<td>0.000</td>
<td>***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Matched</td>
<td>0.653</td>
<td>0.666</td>
<td>-0.013</td>
<td>0.574</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Household size</td>
<td>Unmatched</td>
<td>0.404</td>
<td>0.445</td>
<td>-0.041</td>
<td>0.052</td>
<td>**</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Matched</td>
<td>0.397</td>
<td>0.401</td>
<td>-0.004</td>
<td>0.873</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quartile PCA</td>
<td>Unmatched</td>
<td>2.020</td>
<td>2.188</td>
<td>-0.168</td>
<td>0.000</td>
<td>***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Matched</td>
<td>2.032</td>
<td>2.003</td>
<td>0.029</td>
<td>0.575</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dependency Ratio</td>
<td>Unmatched</td>
<td>0.442</td>
<td>0.593</td>
<td>-0.151</td>
<td>0.000</td>
<td>***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Matched</td>
<td>0.452</td>
<td>0.469</td>
<td>-0.017</td>
<td>0.466</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provincial dummy: Java</td>
<td>Unmatched</td>
<td>0.635</td>
<td>0.549</td>
<td>0.086</td>
<td>0.000</td>
<td>***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Matched</td>
<td>0.658</td>
<td>0.680</td>
<td>-0.022</td>
<td>0.335</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provincial dummy: East</td>
<td>Unmatched</td>
<td>0.203</td>
<td>0.183</td>
<td>0.02</td>
<td>0.252</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Matched</td>
<td>0.179</td>
<td>0.163</td>
<td>0.016</td>
<td>0.368</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Significant at 10%, ** Significant at 5%, *** Significant at 1%

As can be seen from Table 3, there is clear evidence of covariate imbalance between groups before matching. This means that selection occurs and PSM can help in balancing covariates across control and treated groups. The results from the test of equality of means for the matched sample are shown under label ‘matched’. Clearly, after matching the differences are no longer statistically significant, suggesting that matching has successfully reduced biased associated with selection from observable characteristics.
Notulensi Theme 3: 
Inclusive Social Protection 
Rabu, 11 September 2013

Notetaker: Sofni Lubis (SMERU)

Presenter 1:
Name: Simrin Singh – ILO Thailand
Title: Social Protection Initiatives and Their Ability to Tackle Child Labour: Examining the Case of Internal Child Migrants in Indonesia

Highlights of Conclusions and Recommendations:
• Migration does create a lot of vulnerability
• The age of migrant children is important when it’s related to child labor, whether they are really young, live with their family, or whether they are old
• In Indonesia, the chance of children falling into becoming domestic workers is very high
• Internal migration is projected towards not to leave away
• Child domestic workers are predominately girls
• One of the other shortcomings is that there is no particularly system and access when you are not migrated
• Birth certificate and ID card are the problems currently still faced by Indonesia
• Social protection schemes have not been more adaptive to this particular issue
• We need to have a good database system as part of the assessment and to know about the impact of child labor.
• Urbanization due to household economy in the place of origin
• The affordability of social protection
• Related to social protection, child rights have not been appropriately endorsed in Indonesia.

Presenter 2:
Name: Suharma – STKS Indonesia
Title: Perubahan Perilaku Anak Jalanan dalam Melakukan Aktivitas Mendapatkan Penghasilan dan Implikasinya bagi Kebijakan Sistem Perlindungan Sosial Anak Jalanan di Kota Bandung/ Behavioral Changes among Street Children throughout All Phases of Their Income-Generating Activities and the Implications for the Policy on Social Protection for Street Children in Kota Bandung

Highlights of Conclusions and Recommendations:
• What these children are doing is like income driven activity for street children
• Street children have very limited or no access to social security or social protection
• This income-generating program is still fragmented, not universal
• Based on the findings is there any organization for these street children? Because it looks like this behavior change is well prepared, well trained.

Presenter 3:
Name : Rizqa Fithriani – BPS Lampung

Highlights of Conclusions and Recommendations:
• Child labor does not come only from poor families, but we know that they do not go to school. Is this because of the social culture dimension or because there is no access to school? We have to conduct more in-depth study to elaborate and find more details to understand better the condition of child labor in Lampung
• Information about child rights was not found at the local government’s policy, so we were not able to find more detail information regarding child rights.

Presenter 4:
Name : Niken Kusumawardhani and Nila Wardha
Title : Migration and the Incidence of Child Labor: Evidence from Left-Behind Children in Indonesia

Highlights of Conclusions and Recommendations:
• If we only control the parent migrant policy, it will have a negative impact on children and social protection

Questions and Answers:

1. Tri Nuke - LIPI
Simrin Singh (ILO Bangkok)
Question: Is there any special characteristics of the family in migration and the incidence of child labor, or it is just common among poor family?

Answer: Regarding the characteristic of the migrating family, it is almost impossible to find their data, for example about their income level. We need a lot more information about the trend. They are probably poor to near poor families, and mostly looking for employment. This does need more research, though. Other characteristics are family size, also household chores, especially those carried out by the daughters.

Suharma (STKS)
Question: Kalau melihat anak jalanan di Bandung dengan model longitudinal dari observasi yang dilakukan, apakah ada faktor-faktor eksternal lainnya yang berpengaruh pada anak-anak untuk berkembang di jalanan? Persoalan ‘belief’, misalnya, yaitu di antara anak2 keluarga Muslim. Pemikiran saya adalah seharusnya atau mungkin sebaiknya bagaimana peran Dinas Sosial, dan
juga sebaiknya NGO/LSM ikut berperan dalam memberikan pendidikan kepada mereka sehingga mereka tidak turun ke jalan.


Rizqa (BPS Lampung)
Question: Bagaimana makna kemiskinan yang lain, bukan soal kemiskinan welfare tapi kemiskinan well-being. Karena ini bukan persoalan mereka miskin dan tidak punya uang, tapi kesadaran mereka untuk hidup lebih baik.

Answer: Karena adanya nilai cara berpikir bahwa anak bahwa opportunity cost, maka orang tua berpendapat lebih baik anak bekerja.

Niken (SMERU)
Question: Regarding the trend in the first slide, you mentioned about the trend of international migration in 2012. Based on the data of BNP2TKI, it seems that the situation is decreasing, but actually it is not for the whole year. Are there any organization that has concern on children left-behind? Based on my research in Karawang, there is one special organization in Karawang which gives social education to these children, for example: how to farm using simple knowledge. Are there any characteristics of the children to make them live in a better situation?

Answer: Data BNP2TKI bukan data jumlah migrant tapi data keberangkatan orang dari luar negeri. SMERU pernah melakukan studi kualitatif di Cianjur. Ada satu lembaga P2TP2A yang melakukan intervensi kepada anak-anak untuk internasional migration, tetapi kami juga menemukan satu panti asuhan anak-anak yang ditinggal migrasi. Untuk karakteristik anak kami memasukkan beberapa hal, silahkan membaca lebih jelas di dalam paper.

2. Chang
Suharma (STKS)
Question: Do you have the data of male and female? Does it allow them to make a living?


3. Melissa Siegel – Maastricht University
Niken (SMERU)
Question: We found it is very interesting regarding where the parents go. Do you know about the duration of the migration?

Answer: Yes, we admit that our data has many limitations. We know these variables should be incorporated, and therefore we incorporated these two variables in our survey. Actually, it is more important to know who are the caregivers, are the children left with the mother, are they left with the father, or are they left with the grandparents.
4. Ahmad Marzuki – JARAK
Simrin Singh (ILO Bangkok)

Question: I realize the importance of social protection. How to meet social protection more effectively in order to be able to cover the children with various social protection schemes? Family contributes significantly to the children. The question is how to empower the family. I think this is our challenge. The situation of migration is the impact of local government’s lack of attention.

Answer: I think this conference can give contribution towards this discussion. This is not rocket science, it is about coordination. One of the key problems is the issue of coordination. In terms of migration and the role of local government I think the initiative of one stop service, single window, and informing the resident is very important.
THEME 5
Enabling Environment for Social Protection

1. **Groundwork for Strengthening the Rural Health System: How to Revitalize the Roles of Village Midwives?**
   Markus Puthut Harmiko (WVI Indonesia)

2. **Meningkatkan Kapasitas Ibu dalam Melakukan Mediasi Perkembangan Kognitif Anak: Studi pada Ibu dengan Sumberdaya Terbatas di Daerah Endemik GAKI/Enhancing Mothers’ Capacity in Mediating Their Children’s Cognitive Development: Study on Mothers with Limited Resources in Areas with Iodine Deficiency Disorders**
   Leny Latifah (Litbangkes Kemenkes, Indonesia)

3. **Evidence-Based Planning in Improving the Health Service and Insurance Utilization in Addressing Child Survival**
   M. Daozi Kurniawan (Pusat Kebijakan dan Manajemen Kesehatan, Indonesia)

4. **Mother’s Social Capital and Child Health in Indonesia**
   Suwarwoto (Universitas Brawijaya, Indonesia)
Groundwork for Strengthening the Rural Health System: How to Revitalize the Roles of Village Midwives?

Wibowo L1, Santika O
SEAMEO-RECFON, Jakarta

Harmiko MP, Aristyanita V
World Vision Indonesia

ABSTRACT

The establishment of Village-based Midwife Program (VBMP) is anticipated to improve access to, equity and coverage of, PHC especially for mother and child living even in the remote areas. However, problems on its performance had been reported, while the root of the problems was limitedly studied. This study was then focused on the MOA (management-organization-administration) of VBMP which was related to the VMs’ capacity in delivering PHC. This is reporting the results of formative research prior to the development of a comprehensive VBMP plan in Area Development Program (ADP) of Wahana Visi Indonesia at Nias District. Supportive objectives such as assessing the potential determinants of VMs’ performance in delivering VBMP, community acceptance, participation, and utilization of VBMP at rural Nias were also carried out.

The study was conducted in 3 sub-districts namely Hiliduho, Botomuzoi and Hiliserangkai from August 2011 to March 2012. Following two conceptual models: Health System Model at meso and micro levels (Kielmann, 2008) and Organizational Behavior Model (Wibowo, 2009), data were gathered using mixed (quantitative and qualitative) methods from various sources.

The utilization of VBMP was considerably low (66%) relative to its acceptance (96%) by mothers. This was attributed to some factors, but mainly its accessibility because most of the VMs did not reside in the village (71%). The fact that no such responsive monitoring system to detect and immediately correct the program fallacies might indicate the poor comprehension on the pre-designed VBMP master plan as well as the inexistence of its detail operational plan at the district level and below. In such affected the clarity on management responsibilities of each institution and its individual stakeholders within it. With no pre-designed management system to ensure the proper implementation and evaluation of the program, what had been performed so far was still relied mainly on personal initiative rather than resultant of a well-established system. This was

1 To whom correspondence and reprint request should be addressed, email: lindoey13@yahoo.com
reflected on the patchiness, loss of continuity, inefficiency, and unsustainable approaches in running the program.

**Recommendations and Policy Implication.** With respect to the VBMP functioning: (1) Improving the overall management and Monitoring-Evaluation (MonEv) system at all administrative levels through periodic advocacy for policy makers and any relevant stakeholders to ensure their performance quality. (2) Improving the internal management and MonEv system at district level and HC through periodic advocacy and capacity building for staff to ensure their performance quality. With respect to community acceptance and participation: (1) Optimizing the utilization of VMs as the spearhead of MCH Care at the village level. (2) Optimizing the community mobilization within the VBMP.

**Key words:** Village Midwives, Primary Health Care, formative, Programmatic Study
INTRODUCTION

Despite more than three decades after the Alma-Ata declaration, achieving health for all through the provision of Primary Health Care (PHC) remains a globally unfinished agenda, also for most of the South-East Asian Region (SEAR). The fact that more than half a million mothers - the majority of whom from the rural poor population segments - still die every year is a reflection of inequality of risk factors, inequity of health care, and inappropriate midwifery skills of birth attendants (Ronsmans et al, 2006; Costello et al, 2006). In rural Indonesia, this fact may well be used as an indicator of a health system malfunction, partly because of poor performance, poor management, and inadequacy of service inputs (MMM2 and support system) of the locally implemented PHCs. Since the epidemiologic profiles may vary even within a country, then there is no “one size fits all” solution in addressing such problems, a common strategic shall be proposed that a given approach shall fit well within the settings in which they are implemented, and are managed by capable and motivated people (Bryce et al, 2003; Fillipi et al, 2006; Campbell et al, 2006).

In Indonesia, the assignment of many midwives at rural areas – where most of the underserved populations resided - is anticipated to improve access to, equity and coverage of, PHC especially for mother and child (MoH, 1989; Shankar et al, 2008; Hatt et al, 2007). Village Midwives (VMs) can be seen as the frontliners of formal health service delivery because they (are suppose to) live with the community they served, are larger in term of number but paid or remunerated less than medical doctors, and still categorized as formal health staff who are able and legally allowed to deliver health care to some extent which cannot or shall not be done by the community members (i.e. community health workers, traditional birth attendants). By nature of their work in providing pre- and postnatal care, the frequent contacts of midwives with mothers during these critical periods may potentially determine birth outcomes and child care should they carry out their work properly (Frankenberg et al, 2005; SUMMIT Study Group, 2008). However, problems on community’s acceptance (MoH, 2008) and VMs’ performance had been reported, therefore preparing VMs to be powerful health agents of change must become the rule rather than an exception. Only once an individual VM can carry out her roles optimally, they can gain both their standing within the community as well as the community’s trust at the same time. Realizing the significant roles of VMs, it is surprising that only few studies that were widely published have highlighted these issues (Ray et al, 2004; Shankar et al, 2008; Makowiecka et al, 2008; Hatt et al, 2007). However, as far as the knowledge of the writers, there were limited studies thoroughly assessed the Management-Organization-Administration (MOA) aspects of the village-based midwife program although problems on it had also been presumed (Shankar et al, 2008). Therefore, this study was focused on two aspects: the MOA of village-based midwife program and VMs’ capacity in delivering PHC.

This is reporting the preliminary investigation for compiling detail essential information for the development of a comprehensive village-based midwife program (VBMP) plan in Area Development Program (ADP) of Wahana Visi Indonesia at Nias District.

METHODOLOGY

The methodology employed in this programmatic study consists of a mix of quantitative (epidemiological) and qualitative (social) methods using both deductive and inductive approaches.

2 Manpower, material, and money
Study site

The study was conducted at rural Nias District, Indonesia, where child undernutrition (RISKESDAS, 2007) and maternal mortality are highly prevalent (UNDP, 2004). This district consists of nine sub-districts with 119 rural villages. However, there were only three sub-districts as the WVI-ADP: Gunungsitoli, Botomuzoi and Hiliserangkan were purposively selected as the preliminary study areas. The local climate is humid with the highest rainfall in September while the lowest in February. More than half of the area is hilly and mountainous, with the altitudes ranging from 0 – 800 meters above the sea level. The indigenous people are called Ono Niva whom is majority Christians. Most of the inhabitants are working on agriculture (i.e. food crops, plantation, forestry, livestock and fishery), public transportation, or as civil servants or traders.

The health service delivery system is organized around a district hospital at the capital – Gunungsitoli, and Health Centers (Puskesmas), Satellite Health Centers (Pustu) and health posts (Posyandu) at sub-district, village and sub-village levels, respectively. In 2009, there are 201 health facilities available within the district, consist of one District Hospital located at Gunungsitoli, eight Puskesmas, 28 Pustu, and two Maternal Child Health Stations (Balai Kesehatan Ibu dan Anak/BKIA). At the district hospital there usually are surgical, medical, pediatric, and obstetric specialty services available both on inpatient and outpatient basis. In the study areas, three Puskesmas were headed by non-medical doctors as the directors. In addition there always is at least one, usually more than one midwife, several nurses of either gender, sometimes a nutritionist and a varying number of auxiliary staff – cleaners, clerks, security guards, etc. Aside from Pustu, there are Polindes and Poskesdes represent the next lower, formal health care facilities and are managed entirely by one village midwife. This individual is responsible for delivering VBMP as well as guiding and supervising activities performed by the community-appointed health workers (CHWs) at the Posyandu at village or sub-village level. The system is pyramidal in that the lower levels refer patients they cannot adequately take care of to the next higher levels.

Study Design

This first stage of study was designed as the formative research prior to the development of strategic plan for improving VBMP. In this phase, several investigations were carried out to examine the functioning of VBMP through interviews with various key informants and document reviews. The information gathered ranging from the MOA aspects, capacity of VMs in delivering VBMP within the community, potential determinants of VMs performance, and community involvement toward the program including its potential determinants. As the study outcome, all identified problems were ranked based on priority, presented with their feasible-preferable solutions - as collected through participatory approach with the key informants - , and classified into short and long-term approaches. The findings of the formative research and VMs” proposed problem-solving will be utilized as the basis of the following phase as the intervention phase.

The information from the formative research will also be utilized as the baseline for the intervention phase. A plausibility evaluation design using historical control group (before-after approach) will be applied to determine the efficacy of the future interventions for strengthening the MOA and subsequently functioning of VBMP.

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3 Puskesmas Pembantu or Extension of Health Center
4 Pos Persalinan Desa or Village Midwifery Post
5 Pos Kesehatan Desa or Village Health Post
**Conceptual Frameworks**

To guide the data collection activities, there were two conceptual frameworks were used; one for the system review on VBMP and another one for identifying the performance of VMs with its determinants. Since the main focus of this study was on the VBMP functioning at the district level and below, thus the Kielmann Model on Health System at meso and micro levels (Kielmann, 2008) was taken as the relevant model for guidance. While an Organizational Behavior Model (Wibowo, 2009) was utilized for studying the performance of VMs with its related determinants.

**Approach using a “System Lens”**

This approach was adopted while using the Kielmann Model to conduct the system review on VBMP. In this, VBMP was seen as a system that consisted of several essential components that are interrelated and determined the program functioning. For illustration of this, below is the presentation of the Health System model (see Figure 1).

**Figure 1. Health System Model (Kielmann, 2008)**

**Organizational Behavior Approach**

To study the determinants factors of VMs performance, a model was constructed based on the combination of the organizational behavior references and one of the writers’ experiences on programmatic studies (see Figure 2).
Partnership in the Study

This study was initiated by both the representatives from SEAMEO-RECFON (LW) and WVI (MPH) as the PI and Co-PI, respectively. The first idea of working on the proposal of VBMP was instigated from the discussion between the PI and Co-PI on the previous qualitative study done by the WVI team (MPH, VA, RT) in Nias ADP on maternal breastfeeding practices (unpublished report). In summary, the study discovered that such poor practices were actually deep-rooted on the lack of competent resource persons at the community level for mothers to consult with. The existence of VBMP in the district was not yet seen as problem solving, because of two major problems identified in this program: that midwives were rarely, if not at all, stayed in the villages and mostly did not have sufficient knowledge on MCHN. By taking those issues into consideration, while assuming the potential of VBMP provided that it is fully function (see Introduction, paragraph 2), a research proposal was then prepared aiming at the effort on optimizing VBMP as the integral part of the existing health system. This approach was considered more sustainable than the other alternative approach such as providing training directly to mothers or community health workers (i.e. cadres) without improving the capacity of and/or optimizing the local health care delivery system.

In the course of the study, three-party collaboration (i.e. SEAMEO-RECFON, WVI, and DHO) had been pursued with clear division of roles and responsibilities of each. With respect to the

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6 Maternal-Child Health and Nutrition  
7 SouthEast Asian Ministry of Education Organization – Regional Center for Food and Nutrition  
8 Wahana Visi Indonesia  
9 District Health Office
strengths and limitations of each party, then a form of partnership between SEAMEO-RECFON and WVI was then established. As an academic institution, SEAMEO-RECFON has the strength on preparing a master plan for either nutrition/health research project or program, given the prevailing problems have been identified. However, for the conduct, especially of a long term approach that required intensive intervention and monitoring, partnerships with the local institution such as WVI was necessary. With their adequate resources and local office at Nias District, this kind of study became feasible for implementation. With respect to the commitment of WVI in serving the community in their ADP, which was inline with the vision and mission of SEAMEO-RECFON, then this partnership could be seen as a mutual and complementing collaboration for both parties.

With the aim of studying VBMP, in implementing the study, other collaboration was established with the local government body as represented by the local DHO and its technical implementing units (so-called UPTD\textsuperscript{10}) such as Puskesmas\textsuperscript{11}, Polindes\textsuperscript{12}, or Poskesdes\textsuperscript{13}. This collaboration allowed the research team members in gaining access to the documents related to and doing interviews with all relevant stakeholders involved in VBMP.

**Preparation Phase and Flow of the Study**

The study was framed within the regular, ongoing health care delivery of the VBMP at the district level and below.

In the implementation, the study was carried out through a cascade of events. As described previously, the study was initiated from the discussion between the representatives of SEAMEO-RECFON and WVI, followed by the writing of proposal and signed MoU for a collaborative work between parties. Prior to the conduct of the study, approvals from both government and ethical committee for research on human subjects were sought. It was decided that the study would be conducted in WVI-ADP at Nias district, which consisted of three sub-districts. Based on the selection criteria of an ADP, these sub-districts met the criteria due to their high poverty level and poor profiles on health, economical, as well as education (unpublished report). Once determined, as the first data collection activity, secondary data on MCHN indicators was collected from the reports available at Puskesmas. These secondary data were utilized in the scoring system for selecting villages as the sites (i.e. cluster unit) of primary data collection activities.

Aside from doing document review, information was also gathered through in-depth and structured interviews. In this case, the PI and Co-PI prepared the guidelines, tools, and also capacity building for the enumerators in the form of training-workshops. In parallel to that, the PI and Co-PI, together with the WVI team, had also socialized this study to the DHO staff for the purpose of gaining their approval for its conduct as well as their compliance as the key informants in the formative study.

The field works at the community level were done in stages. It was started from the in-depth interviews with mothers of infants aged 6-9 months old. The results were then used to develop guidelines for the subsequent in-depth interviews with the other identified informants in the community such as cadres and the head of villages. Once interviewed, the information from them were used as the basis to prepare a guideline for interviewing the VMs. In addition to that, the

\textsuperscript{10} Unit Pelaksana Teknis Daerah or Local Technical Implementing Unit

\textsuperscript{11} Sub-district Health Center

\textsuperscript{12} Maternity Care Unit at village level

\textsuperscript{13} Health Post at village level
overall information gathered through in-depth interviews with the community key informants was summarized and utilized as the basis of developing the structured questionnaires for the surveys among mothers and VMs.

The surveys were managed according to the standardized procedure. First, the sampling frame was prepared and then training was provided for the enumerators prior to the surveys.

To prepare the in-depth interviews with key informants within the local health system, guidelines were provided by the PI and Co-PI for the enumerators. Those guidelines were made on the basis of the findings of the community study as well as some programmatic information and theories on VBMP. Once the in-depth interviews carried out, the results were summarized, linked, or triangulated with the findings from the community study.

The pool of summaries was then presented in the workshops with the key stakeholder as organized by the WVI team at Nias District. The first workshop was delivered by inviting the VMs and Puskesmas staff as the attendances, following by the second workshop inviting the Puskesmas and DHO staff. The purposes of carrying out these workshops were to clarify the findings of the study, rank the identified problems for prioritizations, and listed down any relevant possible solutions for them.

Finally, the findings from the mixed studies and the results of workshops were compiled to elicit a comprehensive picture about the local VBMP functioning with its determinants factors. And this was then conveyed to the WVI team at Nias District in the internal workshop for brainstorming on potential problem solving.

As illustrated in Figure 3, the boxes highlighted in green and turquoise were comprised of activities described above. However, the development of thorough plan of action shall be done through repeated workshops (i.e. not only once) between the local key stakeholders and the WVI team. Therefore, the box highlighted in turquoise was indicating the unfinished agenda (i.e. need repetition) prior to the conduct of the subsequent step – the intervention phase - as those in the boxes highlighted in blue.
Subject of the Study

This study included several subject groups as the key informants. The subject groups, type of information collected, method used and the respective sample sizes presented in the Table 1.

Table 1. Subjects of the study

<table>
<thead>
<tr>
<th>No</th>
<th>Subject of the study</th>
<th>Type of information</th>
<th>Method</th>
<th>Sample size</th>
</tr>
</thead>
</table>
| 1. | Mothers of children 0-3 months of age | • Socio-demographic conditions of the household  
• Knowledge and perception of the mothers related to VBMP and its obstacles  
• Experiences of the mothers related to VBMP  
• Expectation of the mothers related to VBMP | • Quantitative: structured interview | census at 3 Sub-districts (Hiliduo, Botomuzoi and Hiliserangkai); 44 mothers |
<table>
<thead>
<tr>
<th></th>
<th>Mothers of children 6-9 months of age</th>
<th>Village Midwives</th>
<th>Key informants within the community</th>
<th>Key informants within the health system</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.</td>
<td>Socio-demographic conditions of the household</td>
<td>Age of VMs</td>
<td>Educational background of the cadre or head of village</td>
<td>MOA of VBMP with respect to their roles as the supervisors/mentors of VMs and the roles of VMs within the VBMP</td>
</tr>
<tr>
<td></td>
<td>Knowledge and perception of the mothers related to VBMP and its obstacles</td>
<td>Educational background of VMs</td>
<td>Working experience as a cadre or head of village</td>
<td>Qualitative: in-depth interview</td>
</tr>
<tr>
<td></td>
<td>Experiences of the mothers related to VBMP</td>
<td>Working experience of VMs</td>
<td>Knowledge and perception of cadre/head of village related to VBMP and its obstacles</td>
<td>Qualitative: in-depth interview</td>
</tr>
<tr>
<td></td>
<td>Expectation of the mothers related to VBMP</td>
<td>Knowledge, perception, and experiences of the VMs related to their roles and functions</td>
<td>Experience of cadre/head of village related to VBMP</td>
<td>Qualitative: in-depth interview</td>
</tr>
<tr>
<td></td>
<td>Qualitative: in-depth interview</td>
<td>o Expectation as a VMs</td>
<td>o Expectation as a VMs</td>
<td>Qualitative: in-depth interview</td>
</tr>
<tr>
<td></td>
<td>Randomly selected from the sampling frame; 7 mothers; @ one mother per village</td>
<td>o Perceived roles and functions of a VMs</td>
<td>o Perceived roles and functions of a VMs</td>
<td>Purposive sampling; 7 VMs who stayed outside the villages and 4 VMs who stayed in the villages</td>
</tr>
<tr>
<td></td>
<td></td>
<td>o Motivating and de-motivating factors of being a VMs (managerial back-ups, living within the community)</td>
<td>o Motivating and de-motivating factors of being a VMs (managerial back-ups, living within the community)</td>
<td>Purposive sampling; 7 cadres; 7 heads of villages</td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td>Topic covered in the courses during the training periods (formal &amp; informal) related to their assignment as VMs</td>
<td></td>
<td>Document review</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Preferable method (-s) for capacity building</td>
<td></td>
<td>Purposive sampling: 11 persons</td>
</tr>
</tbody>
</table>
Sampling Technique and Determination of Sample Size

The potential subjects of this study were recruited in different ways. Since only few mothers met the criteria and only one midwife assigned in each village, thus we recruited them all as the studied subjects. While for the other subjects were either recruited purposively or randomly selected from the sampling frame.

For sampling some of the respondents in both quantitative and qualitative studies, multistage sampling was applied. First, there was a selection of village as the Primary Cluster Unit (PSU) based on the scoring system of the VBMP performance. From the program reports, there were 53 relevant indicators selected for indicators of VBMP performance (this was determined based on the job-description of VMs: DHO, 2010). However, based on the completeness and reliability of the data, only 21 indicators were then used on the scoring system. By seeing the data distribution of each indicator, the values were classified based on quartiles: below 25th percentile, 25th to 50th percentiles, 50th to 75th percentiles, and above 75th percentile. For each category, a score ranging from 1 to 4 was assigned representing the lowest to the highest scores, respectively. For example, any value below the 25th percentile was categorized as score 1 as the most un-ideal state, while those fell above the 75th percentile was categorized as score 4 as the most ideal state. After the assignment of scores for each indicator, then the scores of 21 indicators were summed up for each village. Due to the small variation of total scores, these were then grouped into three categories using 33rd and 66th percentiles as the cut off points. The classification of villages ranging from those with “poor”, “medium” to “high” VBMP performance when their total scores fell below the 33rd percentile, within 33rd to 66th percentiles, and above 66th percentile, respectively.

Once classified, there were about 50% of 32 villages randomly selected from each Puskesmas or sixteen villages in total were sampled using the probability-proportional-to size method (see Table 2). These 16 villages were assigned for the quantitative survey areas among mothers of infants 0-3 months old. Subsequently, there were 45% of those 16 villages (n=7) randomly selected using also the probability-proportional-to size method. The selection of these seven villages was for conducting the qualitative study, in which in-depth interviews with mothers of infants aged 6-9 months old, cadres, heads of villages, and VMs were carried out. However, for the purpose of keeping the anonymity of the respondents from these seven selected villages, the list of those villages was not presented in this report.

Tabel 2. The selected villages for quantitative study

<table>
<thead>
<tr>
<th>Puskesmas</th>
<th>Category I (&lt; 33rd p)</th>
<th>Category II (33rd p – 66th p)</th>
<th>Category III (&gt; 66th p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Botomuzoi</td>
<td>Simanae</td>
<td>Hiligodu</td>
<td>Tuhegafoa I</td>
</tr>
<tr>
<td></td>
<td>Hiliwaele I</td>
<td>Fulolo</td>
<td>Loloanaa</td>
</tr>
<tr>
<td>Hiliserangkai</td>
<td>Lōlōwua</td>
<td>Lawa-lawa</td>
<td>Lalai I/II</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lōlōfaōsō Lalai</td>
<td>Fulōlō lalai</td>
</tr>
<tr>
<td>Hiliduho</td>
<td>Onozitoli Dulu</td>
<td>Sisobahili Tanoseo</td>
<td>Sinarikhi</td>
</tr>
<tr>
<td></td>
<td>Tuhegafoa II</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

14 Nutrition, Surveillance, and Immunization reports
15 Some program indicators with 100% coverage or achievement at all villages were not used and considered imprecise
Qualitative and Quantitative Studies among Mothers

To determine the program functioning as perceived and experienced by mothers, information was gathered through in-depth interview and survey. The in-depth interviews were done among mothers of infants aged 6-9 months, while the survey was done among mothers of infants aged 0-3 months. These different target groups were decided purposively with consideration on the starting time of each activity:

1. The in-depth interviews were conducted among mothers of infants aged 6-9 months. We expected to capture the roles of VMs within the VBMP (as described in the job-description: DHO, 2010) among this group of mothers because of the range of VM’S responsibilities on prenatal up to the antenatal cares.

2. From the in-depth interviews, however, we found a massive placement of VMs happened on March – April 2011. It means that selecting mothers of children aged 6-9 months old as the survey’’s subjects might not be ideal because of their non-exposure to the program, especially during the prenatal period (starting from April – July 2010) and delivery (ranging from January – April 2011). Thus, the PI and Co-PI had decided to change the target group to mothers of infants aged 0-3 months old instead. With consideration of not delaying the survey time in one hand, the selection of this group of mothers was made with also consideration that they might be exposed to the program at least starting from their late pregnancy period (ranging from April – June 2011). And since only few mothers of infants aged 0-3 months old found in the study areas (N=44 persons), thus census was chosen instead of sampling them.

Qualitative and Quantitative Studies among VMs

As the spearhead of VBMP, information from the VMs was gathered using both in-depth as well as structured interviews. First, it was decided that the in-depth interviews with VMs were carried out in the seven selected villages. However, in the course of the study, we found none of those VMs lived in the villages, thus we purposively selected four VMs from the other villages who happened lived within the community during their assignment. The purpose of selecting them was simply triggered by the aim to compile more information on why this group of VMs was willing to reside in the village while the rests were not.

Qualitative Study among Cadres, Heads of Villages, and Governmental Health Staff

For the purpose of triangulating and complementing information obtained from mothers or VMs, key informants from both community and local health system were purposively selected for in-depth interviews. Among cadres, only the leaders were interviewed to represent the rests with assumption that she knew VBMP better.

Quality Control

All enumerators were trained by both the PI and Co-PI for two purposes: to uniform their perception on the interview guidelines or tools and also to standardize their ability to carrying out the interview with the subjects. Prior to the interview, the surveys’’ tools were also pre-tested twice by each enumerator for the purpose of checking the fluidity as well as consistency of the questions with respect to the objectives of the surveys. These tools were revised accordingly and immediately (i.e. on the same day of interview) after the field pre-testing by the Co-PI together with the enumerators.
For the qualitative study, capacity building process in carrying all in-depth interviews were delivered by the PI through a discussion session before and immediately after each and every interview for the first two consecutive days. Prior to the interview, the interviewers were familiarized with each and every guideline through for about eight hours discussion session. And this process was tape-recorded so as each enumerator could listen again the discussion for further comprehension on the interview technique. After each interview trial, each recorded interviews were played and discussed between the interviewers and PI for comments and suggestions.

Some of the interviews were conducted only by the local enumerators using the local language to ensure the validity of the answer from the respondents who could not understand Indonesian language properly. Due to this matter, in every stage of data collection activity, and for developing the interview guidelines or tools, the summary of the obtained information was discussed together with the local enumerators for the correct understanding.

**Data Analysis**

The quantitative data was entered, cleaned, and statistically analyzed using SPSS for windows version 15. The statistical summary was mainly presented descriptively in proportion values or absolute frequency.

Qualitative data derived from recorded interviews were transcribed *ad verbatim*. Right after each in-depth interview with certain target group ended, a preliminary analysis was carried out to roughly summarize the important information for the development of guideline of the subsequent in-depth interview with other subjects. The listed key issues were compiled in a matrix so that content comparison could also be done. Triangulation of source and analyses were employed to ensure the validity of the qualitative data. Information from various key informants obtained through in-depth interviews and workshops were compiled, summarized, and linked to each others. For these, three analysts (LW, MPH, VA) worked simultaneously to confirm emerging themes and relationship between categories.

**Ethical Consideration**

There was no invasive treatment will cause any pain or harmful for the respondents. Any sensitive questions were phrased to avoid embarrassment of the respondents. Signed informed consent was obtained from all respondents, and their involvement in the study was on voluntarily basis. The confidentially of the information was maintained, thus the respondents’ IDs were not revealed in any part of this report.

This study followed the ethical guideline of the Council for International Organization of Medical Sciences (CIOMS, 1990) to elicit an approval from the ethical committee on studies with human subjects, of the Faculty of Medicine, University of Indonesia, Jakarta, Indonesia.

The government approvals were also obtained at all administrative levels and the DHO staff was sensitized with the study objectives and purposes.

**RESULTS AND DISCUSSION**

Despite more than two decades of its establishment (Binkesmas, 1989; Presidential Instruction, 1992), the VBMP functioning at Nias district was still far from optimal. Problems on the program implementation at the grass root level which had been identified earlier (Widayatun, 1999)
elsewhere were similar to what happened in Nias when this study conducted in 2011. The findings of the study also showed that even the stakeholders within the local health system have different understanding on VBMP with respect to its planning, MOA, implementation, and MonEv. One may assume that this could be due to poor socialization of the program and/or high turn-over rate of staff without clear handing over mechanism from the former officer to the successor. The shortage of VMs in many villages within the district in 1990s to 2010 was worsened by the inability (i.e. felt powerless) of the local health authorities to encounter this shortcoming. Only after 2011, the shortage of VMs was lessened up to 34% within the district, but the persons in charge in the DHO still did not know clearly the mechanism of this happening. In other words, the dependency on the allocation of VMs by the central and provincial offices to the district was still high, while the role of DHO was rather trivial as the reservoir of this workforce.

In doing the system review on VBMP, information was compiled from many different stakeholders within the community as well as the local health system. The assessments were done thoroughly for each program component as illustrated in the Kielmann Model (see Figure 1) as the health system model for meso and micro levels. The resultants of the system review were also linked to the potential determinants of VMs performance indentified using the organizational behavior model (see Figure 2). Thus, based on the summary findings, one could understand the complexity of the systemic problem on the implementation of VBMP. Below is the detail description of the findings extracted from the information obtained from beneficiaries of and stakeholders within the program.

**Performance of VBMP at the Community Level indicating the program outputs and outcomes**

As the program outcome, the VBMP performance was determined based on two proxy indicators: the community acceptance toward the program and the utilization of it. With consideration that program utilization might not merely determine by its acceptance, thus assessments were done separately on each indicator for the purpose of identifying the gap – if any – between these two community elements which were supposed to be highly correlated. With respect to the roles of VMs, most of the key informants, including the VMs repeatedly mentioned antenatal, delivery, and postpartum cares as the main tasks of the VMs within the rural health care delivery system. Therefore, the questions on VMs performance were centered mostly on those three services, with assumption that if such services were not well-delivered, it would be even worse for the other tasks. As the representative of the program beneficiaries, mothers of infants resided in three studied sub-districts were interviewed. They were mostly aged around 20 years old and above (93%) with rather low educational level (i.e. 91% of them had experienced less than 9 schooling years). One fourth of them were housewives, while majority (73%) worked in agricultural sector receiving daily or irregular wages. Although none of husbands were jobless, but they have more or less similar characteristics with their spouses, and had irregular and/or small income to sustain the family life (data not shown). Since there were only two villages without VMs during the survey time and based on the selection criteria of studied mothers, it was assumed that the VMs health services could be sought given they were accessible or mother preferred to utilize such services.

From both the qualitative (n=8) and quantitative (n=44) studies with mothers, the interviews results showed that majority of them had high acceptance toward the VBMP. However, the utilization considerably low (66%) relative to their acceptance which was attributed to some factors. Since majority of the VMs did not reside in the village (71%), in those villages, the accessibility of their services was then considered limited by the mothers with respect to ANC.\(^\text{16}\)

\(^{16}\) Antenatal Care
(30%), delivery (66%), and postpartum care (63%). For those who never utilized the VMs’ services (41%), their reasons were varied. Some of them had complained about the absence or irregular visits of the VMs to the villages (39%), while some others did not even recognize their VMs (39%). These of course limited the accessibility to the service aside from other reasons such as geographical distance (20%), no trust on the VMs capability (17%), or financial constraint (6%). Although not revealed in the survey, but during in-depth interviews, some mothers and also the other key informants\(^{17}\) had complaining the inability of the VMs to socialize or their incapability in providing IPC\(^{18}\).

**Table 3. The utilization of health services by mothers who did not go to the VMs by type of care (multiple answers)**

<table>
<thead>
<tr>
<th>No</th>
<th>Utilization of health services</th>
<th>ANC (n=22)</th>
<th>Delivery (n=42)</th>
<th>Postpartum (n=35)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Traditional birth attendance</td>
<td>14%</td>
<td>5%</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>Puskesmas midwife</td>
<td>77%</td>
<td>52%</td>
<td>23%</td>
</tr>
<tr>
<td>3</td>
<td>Nurse</td>
<td>9%</td>
<td>21%</td>
<td>3%</td>
</tr>
<tr>
<td>4</td>
<td>General practitioner</td>
<td>-</td>
<td>7%</td>
<td>-</td>
</tr>
<tr>
<td>5</td>
<td>Family member</td>
<td>-</td>
<td>10%</td>
<td>-</td>
</tr>
<tr>
<td>6</td>
<td>None</td>
<td>-</td>
<td>5%</td>
<td>74%</td>
</tr>
</tbody>
</table>

Among mothers who did not (always) go to the VMs, the pattern of health service utilization was varied based on the types of cares they sought (see Table 3). During antenatal and delivery periods, mothers tended to seek helps from either formal or non-formal birth attendances, but mostly from Puskesmas midwives. Such behavior then sharply declined during post-partum period when around one-fourth of the mothers did not go for health seeking any longer. Although we have no hard evidence to explain this pattern, but one may assume that this related to the sense of “emergency” among mothers during pregnancy and delivery relative to the post-partum phases. Considering the high mortality risk at any stages of the maternity period, the detail explanation of such pattern needs to be pursued for the purpose of improving the future delivery of service package from antenatal to post-partum cares.

Among mothers who utilized the VMs services (26 out of 44 interviewed mothers), majority of them came for ANC (84%), about one third (36%) for postpartum care, and only few (4%) for delivery. The same phenomenon had been identified more than a decade ago (Widayatun, 1999). There was a couple of reasons explaining this, ranging from the inaccessibility of the service when needed (i.e. timeliness and distance), doubt on the VMs capability (especially on the fresh graduate, young, and unmarried ones who were considered inexperience), to simply the unavailability of it (i.e. VMs rarely came to the village, was not recognized by mothers, or no VMs) at the village (see Table 4). Yet, in overall, the reason why mothers did not use the VMs services was mainly due to its accessibility. In relation to the unpredictable need of delivery care, one may argue why the utilization of such service was very low if the VMs did not reside in the villages. As the substitute, mothers (n=44) then preferred to go to the other health providers for delivery such as the senior midwives (47%), nurses (24%), general practitioners (8%), or non-formal health providers such as family members (8%) and traditional birth attendants (5%). Few of them even delivered their babies without any birth attendances (5%). Among those who did not go to VMs for delivery, majority (65%) had complaining the accessibility of services from their VMs, while

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17 Cadres, heads of villages, Puskesmas staff

18 Inter-Personal Counseling
some others (24%) questioned on the quality of the services instead. Contrasting with the objective of VBMP for bringing quality health service close the community, these facts pinpointed that the settlement of VMs within the community and proper capacity building or orientation for them prior to their assignments is unexceptional. In line with that, almost all of the interviewed mothers also expected their VMs resided in the village. By knowing the consequence of their task (e.g. reside in the village) prior to the assignment, some personal reasons such as no family supports (18%), felt reluctant to live a village life (24%) or hesitant to stay at the houses of the local dwellers (12%) should no longer be excuses for the VMs to live outside the villages.

Table 4. Reasons why mothers did not use the VMs services (multiple answers)

<table>
<thead>
<tr>
<th>No</th>
<th>Reasons*</th>
<th>ANC (n=22)</th>
<th>Delivery (n=42)</th>
<th>Postpartum (n=35)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>No VMs</td>
<td>27%</td>
<td>14%</td>
<td>17%</td>
</tr>
<tr>
<td>2</td>
<td>VMs did not reside in and/or rarely came to the village</td>
<td>27%</td>
<td>62%</td>
<td>54%</td>
</tr>
<tr>
<td>3</td>
<td>VMs were considered no experience</td>
<td>18%</td>
<td>21%</td>
<td>17%</td>
</tr>
<tr>
<td>4</td>
<td>VMs were unrecognized</td>
<td>18%</td>
<td>12%</td>
<td>6%</td>
</tr>
<tr>
<td>5</td>
<td>“Too far” in term of distance</td>
<td>18%</td>
<td>7%</td>
<td>17%</td>
</tr>
<tr>
<td>6</td>
<td>Psychological comfortability or economical reason</td>
<td>-</td>
<td>5%</td>
<td>3%</td>
</tr>
<tr>
<td>7</td>
<td>Medical reason</td>
<td>-</td>
<td>2%</td>
<td>-</td>
</tr>
</tbody>
</table>

For mothers who utilized the VMs services, their degree of satisfaction to the services were assessed with the underlying reasons (data not shown). For antenatal and delivery cares, most of mothers were satisfied with the VM services. The responsiveness to the needs as requested or perceived by mothers as well as the social skills of VMs were mentioned as the main reasons why mothers satisfied with the services. However, the proportions of mothers who satisfied and not satisfied to the VM service for post-partum care were equal, as such signaling the need to improve it in the near future.

As the community members who were supposed to get involved also within the program, cadres and heads of villages were interviewed to gather their comprehension about VBMP. Besides, such information was utilized for re-confirming on what had been stated by mothers as described above. What had been extracted from the interviews with them reflected their limited understanding on their roles within the VBMP. With respect to the VMs assignments, both stakeholders actually had specific tasks to assist the VMs in carrying out their duties in the form of partnerships. In delivering services at Posyandu19 or health promotion activities at the village level, the VMs shall be assisted by cadres for the implementation. And the heads of villages were supposed to minimally secure the placement as well as safety of VMs to live within and ensure their acceptance by the community. However, the problems related to these were rather complex. Since none of the village leaders aware of their roles within the program, many of the VMs had no place to live or deliver their services in the villages (63%). Some other reasons of staying outside the village such as safety issue (18%) and acceptance by the community (18%) were also expressed by the VMs. All these arguments then provided excuses for the VMs for not staying or even coming to the village on regular basis. Given the willingness to fix this situation, but none of these village leaders knew the procedure to do so (e.g. to whom they should send request for problem solving). Only those who initiated supported the program have their VMs resided within the community (29%). And due to the unawareness of their roles and also the notion of powerless, some of village leaders even consciously gave their “approval of absence” by

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19 Monthly Integrated Health Post
signing the attendant forms of their VMs although in fact they did not come or irregularly came to the villages. As the further consequence of this, most of the VMs assignments could not be delivered properly – if not at all – and collaboration with cadres was interrupted. This complexity was also signaling the need to optimally socialize the VBMP to the key stakeholders at the village level while at the same time also explaining to them on their roles and competence on improving the program functioning.

Input and Input Distribution of VBMP: 3-M\textsuperscript{20} and Infrastructures

To study on the program fallacies, a system review was carried out by looking at each essential program component as well as the interlinkages of those components to one another. If the above explanations were focused more on the program outcomes, here we elaborated the program inputs and its distribution. In correspond to the objectives of VBMP as enlisted in the program guideline (MoH, 1991), we assumed that the program inputs shall minimally compose of:

a) The sufficient number of well trained and skillful VMs to deliver the program,
b) An orientation platform for VMs before the assignment,
c) The VBMP plan that comprises of an integrated implementation and MonEv plans,
d) Periodic refreshment trainings for updating the VMs on the new health service guideline, management backups, networking, and program policies,
e) Program finance and infrastructures,
f) Program promotion and its related materials.

As the most essential input for the program, the scarcity of well-trained and skillful VMs to deliver the program at the community level was evidenced. Despite its establishment in 1989 and before 2011, only few villages had VMs although requests to the PHO had been made as admitted by the stakeholders in the DHO. It was only in 2011; an extensive assignment of such workforce to Nias district happened, while none of the DHO staff knew what the reason of that was. Nevertheless, this could be considered as a significant undertaking in fulfilling the gap in human resources within the program as had been indicated by only two - from previously 25 - out of 30 villages within the study areas had no VMs yet. However, with the limited understanding on program objectives and subject know-how on the primary health care among those VMs, their sufficiency in term of number could not yet ensure the proper program functioning. These findings were inline with the recent presentation by the MoH representative (Hernawati, 2011) extracted from three data sources: RISKESDAS\textsuperscript{21} (2010), SDKi\textsuperscript{22} (2007), and MCH routine report (2010). It was found that only the number of midwives who lived in villages, but not their total number, did associated with the declining on maternal mortality rate.

With respect to the orientation prior to their assignments, all VMs received it either at both the DHO and Puskesmas (54%), DHO only (8%), or Puskesmas only (38%). At the DHO level, the orientation for VMs, took about two to three days, has been focused more on the management area of the program with respect to the policy, organization structure within the DHO, and administrative aspects of the program (see Table 5). The detail technical issues related to the program implementation especially emphasizing on the tasks and functions of VMs, recording-reporting of data, and basic medical care (especially immunization and MCH) were elaborated

\textsuperscript{20} Materials, Man-power, and Money

\textsuperscript{21} Riset Kesehatan Dasar or Basic Health Survey

\textsuperscript{22} Survei Demografi dan Kesehatan Indonesia or Indonesian Demographic and Heath Survey
during the orientation at the Puskesmas level (see Table 5). This session took for about one-week period and delivered by the Puskesmas team. However, out of 24 VMs being interviewed during the study time, 42% of them felt not sufficiently equipped with the relevant program knowledge and skills during orientation sessions. And what had been emphasized during the orientation (as admitted by the VMs) has also been reflected on the VMs’ activities which were mostly centered on eight functions related to MCH, basic medical care, and recording-reporting data (see Table 6, highlighted in grey). While only few were aware of their roles on community mobilization for health promotion and surveillance, fewer had really implemented it partially through Posyandu sessions.

**Table 5. Issues delivered during orientation at either DHO or Puskesmas**

<table>
<thead>
<tr>
<th>No</th>
<th>Issues delivered during orientation</th>
<th>DHO* (15 out of 24)</th>
<th>Puskesmas* (22 out of 24)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Socialization of the organization structure</td>
<td>1%</td>
<td>2%</td>
</tr>
<tr>
<td>2</td>
<td>Socialization of the program administration</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>3</td>
<td>Socialization of the program policy (including tasks and functions of VMs)</td>
<td>14%</td>
<td>12%</td>
</tr>
<tr>
<td>4</td>
<td>Technical issues related to the recording-reporting of program data</td>
<td>-</td>
<td>11%</td>
</tr>
<tr>
<td>5</td>
<td>Technical issues related to scheduling of practices in Puskesmas and/or Posyandu</td>
<td>-</td>
<td>5%</td>
</tr>
<tr>
<td>6</td>
<td>Technical issues related to basic medical care (especially immunization and MCH)</td>
<td>-</td>
<td>10%</td>
</tr>
<tr>
<td>7</td>
<td>Technical issues related to the supply and request of program logistics (e.g. medicines) from Puskesmas</td>
<td>-</td>
<td>4%</td>
</tr>
<tr>
<td>8</td>
<td>Technical issues related to the placement of VMs within the community (e.g. where to live, how to socialize with the local people)</td>
<td>-</td>
<td>3%</td>
</tr>
<tr>
<td>9</td>
<td>Other technical issues related to the implementation of VMs tasks and functions</td>
<td>-</td>
<td>1%</td>
</tr>
</tbody>
</table>

**Table 6. The delivery of tasks and functions by VMs (n=24 interviewees)**

<table>
<thead>
<tr>
<th>No</th>
<th>Tasks and functions of VMs</th>
<th>Number of VMs who carried out their tasks and functions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>To provide health care for the community, maternity care (antenatal, delivery, and post-partum cares), child care, and family planning services</td>
<td>24</td>
</tr>
<tr>
<td>2</td>
<td>To carry out demography survey together with village leaders (formal and non-formal)</td>
<td>21</td>
</tr>
<tr>
<td>3</td>
<td>To early detect the prevailing health problems among pregnant women, post-partum mothers, infants, and young children</td>
<td>23</td>
</tr>
<tr>
<td>4</td>
<td>To refer the severe/emergency cases to the relevant health facilities</td>
<td>NA (spontaneous)</td>
</tr>
<tr>
<td>5</td>
<td>To regularly cooperate with traditional healers and cadres</td>
<td>21</td>
</tr>
<tr>
<td>6</td>
<td>To provide nutrition and health promotion within the community</td>
<td>19</td>
</tr>
<tr>
<td>7</td>
<td>To deliver immunization and basic medical care at Posyandu, Poskesdes/Posyandu Plus</td>
<td>24</td>
</tr>
</tbody>
</table>

23 collaboration and coordination with cadres, local leaders, and any other key persons in the community they served
<table>
<thead>
<tr>
<th>No.</th>
<th>Task Description</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>To coordinate and establish Alert Village program in their working areas</td>
<td>3</td>
</tr>
<tr>
<td>9</td>
<td>To get involved in the social events in their working areas</td>
<td>10</td>
</tr>
<tr>
<td>10</td>
<td>To carry out evaluation and monthly reporting of program implementation to Puskesmas</td>
<td>22</td>
</tr>
<tr>
<td>11</td>
<td>To have consultation on technical and program related issues to the head of Puskesmas in Mini lokakarya (monthly meeting at Puskesmas) and technical meeting between midwives</td>
<td>24</td>
</tr>
<tr>
<td>12</td>
<td>To maintain the health infrastructure and facilities within their working areas and regularly report it to the head of Puskesmas</td>
<td>11</td>
</tr>
<tr>
<td>13</td>
<td>To convey inputs to the supervisors with respect to their tasks and functions at their working areas</td>
<td>23</td>
</tr>
<tr>
<td>14</td>
<td>To collect, record, and report data (including the indicators of health services at Pustu, Poskesdes, Posyandu Plus) related to their tasks and functions as VMs to the DHO on monthly basis</td>
<td>0</td>
</tr>
<tr>
<td>15</td>
<td>To carry out other assignments given by the head of Puskesmas</td>
<td>13</td>
</tr>
</tbody>
</table>

Since majority of the VMs (71%) did not reside in the village, then some of their tasks might not be delivered optimally. Even with daily visit to the village, but their short stays (usually within 08:00 a.m. to 04:00 p.m.) could only be allocated for delivering mainly maternity cares, basic medical cares, and monthly Posyandu. Given their capacity to socialize, yet such time constraint would not allow them to properly mingle with the community members. In addition to the problem on community distrust, the lack of social encounters between VMs and the community were also consistently complained by some of the community members\(^{24}\) and seemed to exacerbate the already low utilization of the VM’s services. With respect to the subject knowledge, we had no hard evidences on the comprehension of relevant knowledge and skills of VMs, but some mothers had doubted on that (17%). And this argument was also supported by the key informant\(^{25}\) who identified the poor knowledge and skills of many of the VMs during the internship period at the district hospital.

During the data collection, we could not get the documentation of program plan or even the program guideline at any levels within the local health system. Due to inconsistent responses of the program stakeholders about VBMP, we then assumed that most of them did not have standardized and complete understanding about the program itself. In relation with the implementation plan, we only found the document on the job description (i.e. tasks and functions) of VMs which comprised of 15 points (see Table 5) with no detail description for each of it. However, even this job description was not optimally socialized or at least properly distributed to the VMs (i.e. none of the VMs could present the document to the interviewers) so as it provided argument for their unawareness on their tasks within VBMP. With minimum supervision and enforcement to follow the guideline, we assumed that most of the VMs had merely carried out the tasks they could recall from the orientation session and/or during their study time. In other words, the repetition of some general tasks of midwives (e.g. MCH, basic medical care, recording-reporting) might result on their deep internalization, but masked the other tasks (e.g. community mobilization) which were newly or not yet introduced once they were assigned as VMs.

In Nias district, the VMs were not prioritized to receiving period refreshment trainings because of their status as non-permanent staff within the local health system. Based on what had been described by one of the informants, most of the interns (i.e. VMs) did not have sufficient

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\(^{24}\) Mothers, cadres, and village leaders

\(^{25}\) One of the training team members in the recent internship program for VMs at Nias District
knowledge and skills yet to handle even a normal delivery (e.g. could not identify correctly the dilatation of effaced cervix). Yet, due to financial constraint and also misconception on the effectiveness of training, capacity building program was not prioritized in the DHO agenda. In relation to the concern on the status of VMs, one informant had given example on the ineffectiveness of training for them:

| “……without the knowledge of the head of Puskesmas, the VM has processed her transfer of duty while she was assigned for an internship……” |

However, an internship program at the district hospital was still given for the VMs at the beginning of 2012. Aside from its aim, but it was assumed that such program did not yet match to the need on capacity building for VMs because of these following reasons:

1. The imbalance ratio between the number of VMs and the number of normal partus in the hospital, thus only few of the interns could experience to directly assist in the delivery process,
2. Too short internship program period (one week for one batch which consisted of around 40 VMs),
3. The type of exposure they had at the district hospital majority were partus with complication, which a midwife was not authorized to handle,
4. No evaluation system prepared to assess the improvement, if any, on the capacity of VMs after the internship program.

Aside from the VM” job desk, the grand implementation plan of VBMP was not available at the district level and below to ensuring the community participation for program promotion and the establishment of support system at the village level. For an example, one could argue on the roles of Puskesmas to actively involve stakeholders at the village level within the program due to the unavailability of the SOP for such activity. With poor engagement of the village stakeholders, then the establishment of support system such as settlement for or safety of the VMs was mainly relied on generosity rather than awareness of the village leaders on their functions within the program. This phenomenon was reflected from the fact that such essential support system was not always available at all villages. And the almost no involvement of village leaders in the program promotion was also revealed during in-depth interviews.

In this study, the problem on the provision of midwifery kits could not be easily tracked down because all the responsible stakeholders either at the DHO or Puskesmas levels were newly assigned staff within the supply system. During in-depth interviews, it was found that some of the VMs were not equipped with midwifery kits. Therefore, during the workshop between the WVI team and the local health staff, an agreement was made to tackle this shortage of equipment. Since the stocks of the kits were actually available at the DHO, then its representative explained the mechanism of request once there is a need identified by Puskesmas.

**Support System of the VBMP**

Although there was a feasibility review by the DHO on the properness of the construction of Poskesdes prior to preparing its plan, but the implementation was not proper yet in some cases.

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26 Capacity building activity or training was under-valued as an ineffective approach to strengthen the health program performance

27 As guided by the document on requirements for building Poskesdes
Due to several non-technical issues (e.g. availability of the land, budget allocation), some Poskesdes were still built in remote places that required extra costs to boost its accessibility (e.g. for building the road to it or for flattening the landscape). Such extra costs were then compromised the allocated budget for constructing the essential installation such as water supply in Poskesdes. As had been admitted by the staff at the DHO, the electric supply was still hardly installed and required further coordination between the DHO and the Governmental Electric Supply Company. Thus, intensive advocacies to and coordination between all stakeholders in the village up to district levels was urgently needed to prepare better planning and implementation on infrastructure construction in the future.

As one of the essential sub-systems, surveillance within the VBMP did also not function yet as intended. In most cases, all VMs still valued the surveillance system as equal to recording-reporting system. When cases found, some but not all, were recorded and reported to Puskesmas based on the pre-established guidelines (e.g. timing, forms, indicators). The reported data was not complete mainly because of time constraint and insufficient knowledge and/or skills of VMs on data management. As had been admitted by some of the VMs, there was limited, if not at all, assistance of community members to find cases in regular basis. With their short stays in the village, the hurdle on finding cases became more significant. Due to lack of training, the mastery on data recording and reporting was also compromised as reflected by the statement of one midwife as the following:

“……I don’t know….but the formula (to calculate) is given……never been trained thus far, only the forms are given, then (I) don’t know it is right or not (to fill the forms)…..maybe each Puskesmas have different ways to fill the same forms…….”

In addition to that, the lack of data validity was also attributable to data manipulation by the VMs and resulting on imprecision of reported cases. Such practice indicated their incomplete and incorrect understanding on the data utilization as reflected in the statements of the informants below:

“……based on our experiences, the coverage will always set (intentionally) equal to the “target” (calculated based on the pre-determined formula), even in fact it surpasses such calculation. For example, based on the calculation, we’ve got about 30 pregnant women (PW), whereas we’ve actually found 34 PW ….We can use the number “34” as the denominator (for calculating the program coverage), but it will go beyond the “calculated target” (cut off point: 95%). Thus, it is better we kept the four “extra “cases to be reported next year….but it will look odds……it (the coverage) should not also fall too far from the target, not below 50%…….they might think we did not work properly…..”

“…..for sure there is a discrepancy (between the predicted and actual data), but we (VMs) follow them (Puskesmas) because if it’s different, the DHO will ask us and it will be too complicated……the report will be for the DHO…..it will be used for…..(the midwife could not answer and just laughed)…..”

“……if it (the predicted target) is given…….we could not change it……with this (the predicted target), it is impossible to reach the (real) target…..thus we adjust…..for example, if there are two PW reported, they will be counted in the report although they did not go for ANC……it will be shameful if we could not meet the target……thus, we adjust the data although the fact is not really like that…….”

However, during the interview, we also found that they actually realized the negative consequence of such manipulation:
While the existing recording-reporting system was not fully clarified to the implementers (e.g. VMs), it was not also efficient for its implementation. There were too many redundancies in such that some similar indicators were calculated differently and recorded as well as reported in different forms by an individual staff. Such disintegration was highly related to the problems on program-ego and poor coordination among stakeholders within the health sector as described in next two sections.

The common pitfall of VBMP was laid on the “absence” of its overall MonEv system. During the study time, we hardly found any documents on the program planning for implementation as the “basis” to evaluate the program achievement. Although the recording-reporting system was embedded in the program, but it did not catered many measures of process evaluation (e.g. service inputs to outputs). Although some obstacles in program implementation were known and acknowledged by the stakeholders (during the interviews), but no significant actions were taken so far. While most of the compiled data were outcome indicators (e.g. program coverage), they were notoriously imprecise (see the above description) and was not yet optimized in utilization. In fact, it was also identified in the MoH report (MoH, 2012) that Nias District was one among others that did not actively send the MCH data to the central level.

Management and Organization of VBMP

In the course of the study, there was an indication that the VBMP was run rather based on the spontaneous decisions of the local authorities (i.e. with no clear program plan) at each administrative level. The high dependency on the flow of resources supplies from either the province or central offices was evidenced. As the spearhead of the program implementation, the active involvements from the DHO or any institutions below in program management were still considered trivial. This might be deep-rooted on the minimum understanding on the management areas among those at each administrative level combined with high turn-over rate of the staff within the health sector. With such fallacies, it was hardly possible to determine the management responsibilities of the stakeholders and to set their Key Performance Indicators (KPI) within the program. The intertwining of human resource management, program financing, and the overall program performance was elaborated in this paragraph. As described by the informants, the payroll system for the VMs was centralized and became the responsibility of the MoH. This caused misconceptions among the stakeholders at the district level and below as explicitly stated by the key informants within the local health system:

“……we have no control to our VMs because they are paid directly by those at the central level……how the process (of selection and recruitment) at the central level, we do not know, it’s their business, I do not want to bother……the recruitment is by MoH through PHO……all of sudden PHO sent a notification (to the DHO) that the VM has been transferred to……thus working in Nias was only a “stepping stone” (for their career)……without the knowledge of the head of Puskesmas28, the VM has processed her transfer of duty …..”

Although the applications for the VM candidates could be sent either to the DHO or PHO, in fact, only few native applicants were recruited, as described by one informant:

28 As supposed to be the direct supervisor of VM
“……mostly are outsiders….do not know why….those who were sent here are not qualified….they could not speak the local language and were not ready to live a village life……”

But the complexity also relied on the ability of the local midwifery academics to produce a “ready to compete” workforce for selection (i.e. qualified and certified). This issue was revealed during the workshop between the WVI team and the Puskesmas staff. Until the local academics could guarantee the certification of their graduates, thus the native applicants could hardly meet the qualification for recruitment. And this became one of the arguments why most of workforce was then recruited from other places outside the district. The perceived “sense of powerless” among the DHO staff in the selection, recruitment, and remuneration of VMs became the major constraint to manage such workforce within the program. Although - on paper - the recruitment of VMs seemed to be sufficient to the need, in fact there was still a gap in this workforce. Among the recruited ones, some did not report to the DHO, and it means that they did not also come to work at the district eventually. As described by one informant, although requested, their replacement was also uncertain:

“……ten of the selected VMs did not report to us (DHO), we reported this to PHO and Human Resource Bureau at the MoH, but no response yet until now…..”

The fact that the DHO perceived their detachment from the selection-recruitment process of their VMs was actually contradict with the existing regulation as recently presented by the Head of Human Resource Bureau of MoH (MoH, 2012).

Coordination across Programs and Collaboration with Other Sectors at the District level and Below

In the course of the study, we found no document available to plan the coordination across program and collaboration with other sectors to ensure proper implementation of VBMP. As results of this, it was admitted by the staff at all levels that program- and sector-ego were relatively bold and disrupted the program performance. As the examples, we found indication that the placement of VMs was not well coordinated with the other sections and their remuneration sometimes disregarded their absences in the villages. Establishment of Poskesdes at a village level was also subjected to the lack of coordination between sectors or even within the health sector itself. The common practice, any collaboration or coordination found at any levels was mainly due to personal initiatives rather than following a pre-established system. Therefore, there was no uniform action prevailed yet and the sustainability of such networking was highly determined by each individual decision maker. Similar to the involvement of village leaders, it was mainly driven by their personal initiation rather than a resultant of a functioned system.

Community characteristics and participation within VBMP

As it is acknowledged that the community participation must be the essential and integral part of VBMP, in this exercise, we also compiled the community expectations toward the program. In overall, as we could identified from the table below (see table 7), there were no such overwhelming expectations from the community toward their VMs, instead they were actually essential to the proper program implementation. As the answers were ranked from the most to the least expected, accessibility of the service became the main issue. Either it was related to the physical distance or sufficiency and quality of the services (e.g. information, care, home visits) delivered by the VMs.
Table 7. Community expectations toward the VMs

<table>
<thead>
<tr>
<th>No</th>
<th>Suggestions of mothers for the improvement of VBMP performance</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>VMs shall reside in the village to ensure the timely accessibility of the service</td>
<td>15</td>
</tr>
<tr>
<td>2</td>
<td>VMs shall do home visit when needed</td>
<td>11</td>
</tr>
<tr>
<td>3</td>
<td>VMs must be informative (through counseling or campaign)</td>
<td>11</td>
</tr>
<tr>
<td>4</td>
<td>VMs shall be responsible to ensure the implementation of Posyandu activities</td>
<td>8</td>
</tr>
<tr>
<td>5</td>
<td>VMs must have good social skills (e.g. sensitive, attentive, kind, sociable, impartial)</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>VMs shall carry out a surveillance for pregnant women, mothers, and children</td>
<td>3</td>
</tr>
<tr>
<td>7</td>
<td>VMs must have enough experiences to deliver the services</td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td>VMs shall be equipped with sufficient program logistics (e.g. tools, medicine, vitamin)</td>
<td>2</td>
</tr>
<tr>
<td>9</td>
<td>VMs shall deliver services according to the SOP</td>
<td>2</td>
</tr>
<tr>
<td>10</td>
<td>VMs must not be profit oriented</td>
<td>1</td>
</tr>
<tr>
<td>11</td>
<td>VMs shall provided basic health services for all</td>
<td>1</td>
</tr>
<tr>
<td>12</td>
<td>VMs must be responsive to the health need</td>
<td>1</td>
</tr>
<tr>
<td>13</td>
<td>Settlement in the village for VMs must be available</td>
<td>1</td>
</tr>
</tbody>
</table>

Until the formative study ended, the community was not yet significantly participated in the program. Thus far, the community members were still seen as merely the program recipients either by those at the health sector or the community itself. Their active involvement was not challenged and designed yet within the health system, although their potency was wide open and not impossible to release. During the formative study, we could even identify their strengths to ensure the availability of resources with respect to 3-M (i.e. manpower, money, and materials) and infrastructure (e.g. proper permanent places for VMs to deliver their services). Cadres could be recruited and community leaders could be actively involved in ensuring the provisions of human resources for assisting the health promotion, surveillance, or referral system for severely ill patients. The village governance could also establish an operational financing to support the program either from ADD (Anggaran Dana Desa) or independent-collective financing by the community members (so-called “saweran or iuran”). With such financial resources, some essential materials for program as well as infrastructures could be afforded by the community itself and made available to run the program better.

As it was presumed that the common pitfall of VBMP functioning at Nias district was laid on two major problems: poor comprehension of the pre-designed VBMP master plan as well as the inexistence of its detail operational plan at least for the district level and below. In such affected the clarity on management responsibilities of each institution and its individual stakeholders within it. With no pre-designed management system to ensure the proper implementation and evaluation of the program, what had been performed so far was still relied mainly on personal initiative rather than resultant of a well-established system. In addition to the lack of coordination within the health sector and collaboration with other sectors, it resulted on patchiness, loss of continuity, inefficiency, and un-sustainability of approaches in running the program.

From the formative research, one could identify that problems on VBMP at Nias district were strongly intertwined and thus shall be tackled only through multiple systemic approaches to

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29 A financial support from the Ministry of Internal Affair that is allocated and directly transferred to the village governance. This support was rather flexible in term of budget utilization, in such it was independently determined by the village officers through musrenbang (i.e. meetings among the village leaders to prepare yearly planning for village development)
ensure its sustainable problem solving prior to the improvement of program performance. With respect to the VBMP functioning: (1) Improving the overall management and Monitoring-Evaluation (MonEv) system at all administrative levels through periodic advocacy for policy makers and any relevant stakeholders to ensure their performance quality. (2) Improving the internal management and MonEv system at district level and HC through periodic advocacy and capacity building for staff to ensure their performance quality. With respect to community acceptance and participation: (1) Optimizing the utilization of VMs as the spearhead of MCH Care at the village level. (2) Optimizing the community mobilization within the VBMP.

**LIST OF REFERENCES**


Makowiecka K, et al. Midwifery provision in two districts in Indonesia: how well are rural areas served?. Health Policy and Planning 2008;23: 67–75.


The circular of Binkesmas General Directorate no 429/Binkesmas/Per/IX/1989 and the presidential instruction in 1992 tentang kebijaksanaan penempatan bidan desa

Meningkatkan Kapasitas Ibu dalam Melakukan Mediasi Perkembangan Kognitif Anak: Studi pada Ibu dengan Sumberdaya Terbatas di Daerah Endemik GAKI

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Abstrak

Latar Belakang: Risiko multifaktor yang menyertai GAKI memperberat defisit perkembangan kognitif anak di daerah endemik GAKI, dan faktor yang terpenting adalah stimulasi pada anak serta kondisi pengasuhan di lingkungan rumah yang kurang.

Tujuan: mendapatkan gambaran sumberdaya pengasuhan, anemia, dan stunting pada anak pra sekolah, serta dampak pelatihan pengasuhan pada keterampilan ibu melakukan mediasi perkembangan kognitif pada anak secara verbal.


Hasil: Risiko rendahnya sumberdaya keluarga, baik sumberdaya ekonomi maupun pengasuhan, ditunjukkan dengan pekerjaan bapak sebagian besar petani penggarap (59%), dan ibu sebagai ibu rumah tangga (71%). Ibu dan bapak, sebagian besar berpendidikan SD ke bawah (60.3%), dengan tingkat kecerdasan ibu yang kurang (rata-rata 66,4 ± 14,5) termasuk risiko mental defektif. Sesudah intervensi, efikasi diri serta kemampuan mediasi perkembangan kognitif ibu meningkat, terutama pada level ketiga, kemampuan elaboratif (p<0.05), yang ditandai dengan kemampuan mengajukan pertanyaan terbuka, menghubungkan dengan pengalaman anak, mengembangkan materi, dan memberikan komentar positif.
Kesimpulan dan Rekomendasi: risiko multifaktor hambatan perkembangan anak di daerah endemik GAKI memerlukan penanganan terpadu dan lintas sektor, serta penguatan kualitas pengasuhan keluarga. Penggunaan teori perubahan perilaku dalam tahap pelatihan yaitu modifikasi teori Health Action Process Approach mendukung peningkatan efikasi diri ibu melakukan perubahan perilaku. Prinsip-prinsip dan materi intervensi dapat diterapkan pada program parenting yang sudah ada, atau diujicobakan pada kader program pos PAUD berbasis komunitas, terutama di daerah dengan sumberdaya terbatas, untuk meningkatkan efikasi diri dan keterampilan kader/guru untuk mendayagunakan kearifan dan sumberdaya lokal dalam proses belajar mengajar di sekolah.

*Kata Kunci:* stimulasi kognitif, pengasuhan, mediasi perkembangan kognitif, anak pra sekolah, daerah endemik GAKI
PENDAHULUAN

Setiap tahun, di negara berkembang, lebih dari 200 juta anak di bawah 5 tahun gagal mencapai potensi perkembangannya karena kemiskinan, kesehatan dan gizi yang buruk, serta kurangnya pengasuhan (Grantham-McGregor, et al., 2007). International Child Development Steering Group menyebutkan stimulasi kognitif yang tidak memadai, GAKI (Gangguan Akibat Kekurangan Iodium), anemia, dan sebagai 4 faktor risiko utama kegagalan perkembangan bagi anak di negara-negara berkembang (Walker et al., 2007).


Negara berkembang masih menghadapi besarnya masalah kemiskinan dan risiko kekurangan gizi, dan oleh karena itu lebih dari 300 juta anak usia prasekolah di negara berkembang masih memerlukan intervensi dan perhatian khusus (UNDP, 2005). Stimulasi kognitif sebagai salah satu daya unik peningkatan kemampuan kognitif di daerah endemik GAKI perlu dilakukan sejak dini. Salah satu potensi stimulasi kognitif anak adalah melalui pengasuhan. Penelitian-penelitian intervensi stimulasi kognitif dengan komponen pengasuhan belum banyak menjelaskan bagaimana perubahan perilaku diperoleh dan determinan perilaku yang menjadi target perubahan agar terjadi peningkatan kualitas pengasuhan.


TINJAUAN LITERATUR

Vygotsky menjelaskan bahwa perkembangan kognitif berlangsung pada dua bagian. Pertama ketika terjadi interaksi antarmanusia, dan kedua berlangsung pada saat internalisasi pada diri individu (Kozulin, 2003) Kemampuan mediasi perkembangan kognitif memungkinkan ibu mengorganisasi lingkungan menjadi sumber belajar anak sehingga anak tidak hanya dapat belajar secara efektif, tetapi juga memunculkan keyakinan terhadap kemampuan belajarnya (Kim & Mahoney, 2004). Hasil penelitian terdahulu menunjukkan bahwa ibu dengan tingkat pendidikan lebih tinggi dan penghasilan keluarga lebih besar melakukan interaksi yang lebih sering dengan anaknya, melibatkan anak dengan lebih banyak aktivitas keluar, dan menyediakan lebih banyak stimulus dan pengajaran di lingkungan rumah (Bradley & Corwyn, 2002; Baharudin & Luster, 1998; Campbell & Parcel, 2010; Dearing & Taylor, 2007). Berkaitan dengan perkembangan kognitif anak, masih diperlukan pemahaman tentang peran perilaku pengasuhan yang spesifik
Pentingnya efikasi pengasuhan dalam perubahan perilaku pengasuhan telah diketahui dari berbagai hasil penelitian (Hsu dan Sung, 2008; Pierce, et al, 2010). Kognisi sosial pengasuhan, antara lain efikasi diri pengasuhan, yaitu persepsi orangtua tentang kemampuannya untuk mengembangkan berbagai tugas, disebut menjadi bagian penting dalam pengembangan keterampilan pengasuhan (Bornstein, 2002). Efikasi diri pengasuhan didefinisikan sebagai kepercayaan orangtua untuk secara efektif mengelola tugas yang bervariasi yang berkaitan dengan pengasuhan (Sanders dan Woolley, 2004). Penelitian-penelitian menunjukkan bahwa efikasi diri pengasuhan mempengaruhi apakah ibu terlibat dalam aktivitas pembelajaran di rumah (Yamamoto, et al., 2006). Ibu yang memiliki perasaan mampu dan merasa memiliki peran pengajaran cenderung lebih terlibat dalam aktivitas-aktivitas yang menstimulasi kognitif bersama anak di rumah daripada yang tidak melihat peran pengajaran sebagai bagian dari perannya sebagai orangtua (Balat, et al., 2010).


panjang (<16 sesi), karena tingkat partisipasi dan komitmen orangtua pada jumlah sesi yang terlalu panjang menjadi tidak efektif. Upaya orang tua mengelaborasi keseluruhan proses dan tujuan pelatihan, serta menerjemahkan dalam aktivitas pengasuhan juga menjadi kabur dengan waktu dan jumlah sesi yang terlalu panjang (Bakermans-Kranenburg, et al., 2005).

**METODE**

**Desain penelitian**

Penelitian ini adalah penelitian quasi eksperimen, pre pos with control group design. Ibu yang menghadiri sesi pelatihan stimulasi kognitif berbasis pengasuhan selama tiga bulan disertai pemberian garam beriodium, dibandingkan dengan ibu dan anak yang mendapatkan pemberian garam beriodium disertai penyuluhan gizi dengan materi pencegahan dan penanggulangan GAKI, anemia, dan kurang gizi di tingkat keluarga. Penelitian mendapatkan review dari komisi ilmiah serta persetujuan etik komisi etik Badan Litbang Kesehatan Kementrian Kesehatan RI.

**Sampel**

Sampel diambil dengan cara randomized cluster sampling. Pertama-tama dipilih daerah penelitian secara purposif, yaitu daerah yang berdasarkan surveilans GAKI diidentifikasi sebagai daerah endemik GAKI. Dilakukan registrasi kelompok sasaran yaitu anak usia 4-5 tahun. Dilakukan random dengan cluster desa, untuk menentukan kelompok yang mendapat stimulasi atau non stimulasi. Sebanyak tiga desa terpilih sebagai daerah intervensi dan tiga desa sebagai daerah kontrol. Penelitian dilakukan di Kecamatan Pituruh, kabupaten Purworejo terhadap 78 ibu dengan anak 4-5 tahun. Usia 4-5 tahun dipilih karena keterampilan kognitif dan pre akademik pada usia pra sekolah menjadi prediktor bagi keberhasilan pendidikan dan kemampuan kognitif pada usia sekolah dasar, bahkan menetap sampai masa awal dan remaja akhir. Kriteria inklusi terhadap ibu yang mengikuti pelatihan antara lain: (a) kondisi badan sehat, yang ditentukan dengan pemeriksaan kesehatan oleh dokter, (b) ibu kandung sebagai pengasuh utama anak, (c) ibu dan anak bertempat tinggal di daerah penelitian setidaknya dua tahun terakhir, (d) bersedia mengikuti prosedur penelitian yang dinyatakan dengan ibu menandatangani informed consent. (e) Syarat yang lain adalah anak belum mengikuti PAUD, untuk menghindari bias efek peningkatan kemampuan kognitif sebagai hasil pendidikan PAUD, karena akan dievaluasi juga dampak stimulasi ibu terhadap perkembangan kognitif anak. Kriteria eksklusi, menderita sakit kronis atau cacat fisik.

**Pengukuran**

**Karakteristik status gizi dan perkembangan anak**

Status gizi diukur dengan antropometri meliputi tinggi badan diukur dengan microtoise, tingkat ketelitian 0.1 cm. Berat badan diukur dengan timbangan injak SECA tingkat ketelitian 0.1 kg. Hasilnya berupa prevalensi stunting. Status anemia merupakan level hemoglobin dalam darah yang merupakan indikator anemia defisiensi besi diukur dengan metode CyanmetHb sesuai anjuran WHO. Batas normal: ≥ 11 mg/dl (Unicef, 2001). Pengambilan sampel darah untuk pemeriksaan Hb dilakukan oleh Analis Kesehatan.

Pada perkembangan kognitif anak, dilakukan pengukuran pada fungsi dan perkembangan anak berkaitan dengan proses berpikirnya, yang meliputi kemampuan pemecahan masalah, konsep angka, generalisasi, klasifikasi, daya ingat, dan bahasa. Pengukuran dilakukan dengan tes WPPSI.
Kemampuan

Anak dites secara individual, dengan lama pengetesan satu sampai dua jam per orang. Anak di tes dalam ruangan yang tenang dengan didampingi oleh ibu. Pengukuran tes IQ dilakukan tersendiri, tidak dilakukan dengan pengukuran yang lain, agar tester dan anak dapat berkonsentrasi penuh. Tes IQ dilakukan oleh sarjana psikologi dengan supervisi psikolog. Tes psikologi dilakukan oleh tim psikolog independen, di luar tim peneliti, secara blinding antara kelompok intervensi dan kelompok kontrol, untuk menjaga netralitas. Sebelum pengetesan, pada semua tester dilakukan pelatihan untuk penyamaan persepsi terhadap prosedur tes, serta uji reliabilitas inter rater. Hasil pengukuran berupa IQ verbal, non verbal, dan IQ total.

Karakteristik Keluarga

Data karakteristik pekerjaan, dan pendidikan orangtua diungkap dengan kuesioner data pribadi yang diukur dengan cara wawancara.

Outcome variabel ibu

Efikasi dan Perencanaan Pengasuhan


Perencanaan stimulasi dalam pengasuhan yaitu dimilikinya rencana detil berkaitan dengan kapan, dimana, dan bagaimana mengenali situasi dan kesempatan yang menjadi sumber stimulasi kognitif pada anak serta melakukan kegiatan yang menstimulasi perkembangan kognitif anak. Jumlah item kuesioner sebanyak 10 item. Pilihan jawaban akan berkisar dari sangat yakin, yakin, tidak yakin, dan sangat tidak yakin. Indikator dalam perencanaan ibu dalam melakukan stimulasi kognitif pada anak meliputi keyakinan ibu dalam mengenali sumber-sumber stimulasi dan melakukan stimulasi sesuai usia anak. Pada uji coba kuesioner, sebanyak satu aitem gugur, sehingga 10 aitem dimasukkan dalam analisa, dengan skor alpha 0,79.

Kemampuan ibu melakukan mediasi perkembangan kognitif pada anak

Kemampuan ibu untuk melakukan mediasi perkembangan kognitif diukur dengan tugas mother child picture talk task (MCPTT). Mother-child picture-talk task mengevaluasi peran ibu sebagai mediator perkembangan kognitif anak melalui serangkaian tugas interaksi verbal ibu dan anak. Tester memberi ibu selentar kertas berlaminating yang bergambar di kedua sisinya dan berkata bahwa ia ingin melihat bagaimana anak berbicara dengan ibu mengenai gambar tersebut sebagaimana biasanya anak beracak-cacak dengan ibu sehari-hari. Satu sisi bergambar pemandangan, sisi gambar kedua berupa enam gambar dalam kotak. Rangkaian gambar yang
disajikan saat pretest berbeda dengan postest. Tester memberi kode pada setiap perkataan ibu, dengan kode: level 0 negatif (mengkritik, tidak mendukung tugas); level 1 mengarahkan (memerintah, memberi nama); level 2 bertanya, menjawab pertanyaan anak, menjelaskan detil lebih lanjut (tidak sekedar memberi nama); level 3 menghubungkan dengan perilaku/pengalaman anak, mendorong anak untuk bertanya atau memperluas cerita, meminta anak untuk menjelaskan sesuatu dengan pertanyaan terbuka; memberi komentar positif. Frekuensi dari setiap kode juga dicatat. Tes berlangsung sekitar 4-5 menit. Ucapan anak juga dikode berdasar kategori: tidak berkaitan dengan tugas, mengulang kata-kata ibu, menjawab, memberi nama, bertanya, dan mendeskripsikan detil (Aboud dan Akhter, 2011; Aboud, 2007). Pada penelitian ini, digunakan extended version dari MCPTT, skoring dan pelaporan dilakukan pada setiap level. Sebelum penelitian dilakukan penyamaan persepsi pada tiga rater yang terlibat. Semua hasil tes direkam dan 30% diantaranya di rating bersama-sama oleh tiga rater untuk mendapatkan reliabilitas inter rater.


**Intervensi:**

Karena penelitian dilakukan di daerah endemic GAKI, pada kelompok kontrol diberikan garam beriodium kadar 30ppm serta pelayanan rutin. Pada kelompok intervensi diberikan intervensi pelatihan pada ibu untuk melaksanakan stimulasi kognitif berbasis pengasuhan selama tiga bulan.

Pada tahun sebelumnya telah disusun dan diuji coba modul pelatihan pengasuhan bagi ibu di daerah endemic GAKI (Latifah, 2011). Aktivitas pelatihan pengasuhan disebut sebagai kelas ibu cerdas. Pelatihan ini diharapkan dapat meningkatkan akses orangtua dengan risiko hambatan pengasuhan dan sumber daya terbukti untuk mengembangkan kapasitas pengasuhan melalui tahap-tahap terstruktur dalam sesi-sesi pelatihan pengasuhan, yang diperlucas dengan lembar-lembar interaksi untuk dikerjakan bersama anak di rumah.

Tujuan perkembangan yang ingin dicapai mengacu pada teori perkembangan kognitif pada anak pra sekolah dari Piaget, yaitu tahap pre operasional. Piaget menyediakan ciri-ciri dan tahap-tahap perkembangan kognitif yang jelas dan operasional. Sekuen masing-masing aspek perkembangan diperinci dengan penelitian-penelitian lanjutan yang terkait.


Teori perubahan perilaku yang digunakan sebagai dasar pengembangan program adalah modifikasi teori Health Action Process Approach (Schwarzer, 2008) yang menyebutkan bahwa ada dua fase utama dalam perubahan perilaku. Masing-masing fase terdiri dari beberapa tahap:
Fase Pertama: motivasional. Fase ini bertujuan untuk membangun motivasi orang tua untuk melakukan stimulasi kognitif dalam kerangka pengasuhan sehari-hari. (i) Penyadaran risiko dilakukan dengan pemaparan Gangguan Akibat Kekurangan Iodium dan kurangnya stimulasi kognitif sebagai dua dari empat faktor risiko utama hambatan perkembangan pada anak balita di seluruh dunia, agar orangtua menyadari bahwa anak-anak mereka berisiko untuk tidak berkembang secara optimal. (ii) Pemaparan secara persuasif bahwa jika kedua faktor risiko tersebut diintervensi akan mengoptimalkan perkembangan anak dan menjadi bekal seumur hidup bagi anak, diharapkan dapat meningkatkan motivasi orang tua untuk bertindak. (iii) Meningkatkan efikasi dari orangtua untuk bertindak memecahkan masalahnya. Materi program yang disesuaikan dengan budaya, memementingkan pemakanan dari pengalaman sehari-hari, dan menggunakan material yang terjangkau, mudah didapat, dan dapat dibuat secara mandiri, diharapkan dapat membantu orangtua merasa lebih percaya diri atas kemampuannya melakukan stimulasi kognitif dalam kerangka pengasuhan sehari-hari. (iv) Orangtua dilatih untuk mengamati perilaku diri, perilaku anak, dan dengan mengenali hal-hal yang masih perlu dikembangkan dibangkitkan motivasinya untuk berlatih dan mengembangkan kemampuan untuk mengenali sumber-sumber stimulasi dan keterampilan melakukan stimulasi kognitif pada anak.

HASIL DAN ANALISA

Penelitian dilakukan di kecamatan Pituruh kabupaten Purworejo. Data BPS tahun 2000 menyebutkan bahwa kecamatan Pituruh memiliki luas wilayah 71 km² jumlah penduduk 52.089, dengan kepadatan 732 jiwa/km². Terdapat 49 desa/ kelurahan di wilayah kecamatan Pituruh. Terdapat dua Puskesmas di wilayah kecamatan Pituruh, yaitu Puskesmas Pituruh dan Puskesmas Karanggetas. Sebanyak enam desa mengikuti penelitian ini, antara lain desa Luweng Lor, Prapag Lor, Girigondo, Brengkol, Pekacangan, dan Tasikmadu, yang merupakan desa‐desa yang di wilayah kerja Puskesmas Karanggetas.


Gambaran Masalah Sumberdaya Pengasuhan, Status Gizi, dan Perkembangan Kognitif Anak di Daerah Endemik GAKI
Tabel 1. Karakteristik Demografis Keluarga

<table>
<thead>
<tr>
<th>Variabel</th>
<th>Prosentase</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pendidikan Ibu</strong></td>
<td></td>
</tr>
<tr>
<td>Tidak pernah sekolah</td>
<td>1 (1.3%)</td>
</tr>
<tr>
<td>Tidak tamat SD</td>
<td>16 (21.1%)</td>
</tr>
<tr>
<td>Tamat SD</td>
<td>30 (39.5%)</td>
</tr>
<tr>
<td>Tamat SLTP</td>
<td>19 (25%)</td>
</tr>
<tr>
<td>Tamat SLTA</td>
<td>10 (13.6%)</td>
</tr>
<tr>
<td><strong>Pendidikan Bapak</strong></td>
<td></td>
</tr>
<tr>
<td>Tidak pernah sekolah</td>
<td>1 (1.3%)</td>
</tr>
<tr>
<td>Tidak tamat SD</td>
<td>13 (17.1%)</td>
</tr>
<tr>
<td>Tamat SD</td>
<td>32 (42.1%)</td>
</tr>
<tr>
<td>Tamat SLTP</td>
<td>20 (26.3%)</td>
</tr>
<tr>
<td>Tamat SLTA</td>
<td>10 (13.6%)</td>
</tr>
<tr>
<td><strong>Pekerjaan Ibu</strong></td>
<td></td>
</tr>
<tr>
<td>Ibu rumah tangga</td>
<td>52 (68.4%)</td>
</tr>
<tr>
<td>Pegawai swasta</td>
<td>2 (2.6%)</td>
</tr>
<tr>
<td>Wiraswasta/Pedagang/Jasa</td>
<td>4 (5.3%)</td>
</tr>
<tr>
<td>Petani pemilik</td>
<td>6 (7.9%)</td>
</tr>
<tr>
<td>Buruh tani</td>
<td>12 (15.8%)</td>
</tr>
<tr>
<td><strong>Pekerjaan Bapak</strong></td>
<td></td>
</tr>
<tr>
<td>Tidak bekerja</td>
<td>1 (1.3%)</td>
</tr>
<tr>
<td>PNS/TNI/POLRI</td>
<td>1 (1.3%)</td>
</tr>
<tr>
<td>Pegawai swasta</td>
<td>5 (6.6%)</td>
</tr>
<tr>
<td>Wiraswasta/Pedagang/Jasa</td>
<td>11 (14.5%)</td>
</tr>
<tr>
<td>Petani pemilik</td>
<td>16 (21.1%)</td>
</tr>
<tr>
<td>Buruh tani</td>
<td>41 (53.9%)</td>
</tr>
<tr>
<td>Lainnya</td>
<td>1 (1.3%)</td>
</tr>
</tbody>
</table>

Sebagian besar ibu bekerja sebagai ibu rumah tangga (68.4%), dan bapak bekerja sebagai buruh tani (53.9%). Sebagian besar ibu (60.5%) dan bapak (60.5%) berpendidikan SD ke bawah. Hal ini menunjukkan risiko kurangnya sumberdaya keluarga, baik sumberdaya ekonomi, maupun sumberdaya pengasuhan.
Tabel 2. Karakteristik Keadaan Gizi Subyek Penelitian

<table>
<thead>
<tr>
<th>Variabel</th>
<th>rerata ± SD/ persentase</th>
</tr>
</thead>
<tbody>
<tr>
<td>BB (kg) anak *</td>
<td>14.5 ± 1.5</td>
</tr>
<tr>
<td>TB (cm) anak *</td>
<td>99.95 ± 6.6</td>
</tr>
<tr>
<td>Stunting anak (TB/U)*</td>
<td></td>
</tr>
<tr>
<td>• Stunting</td>
<td>24 (30.3%)</td>
</tr>
<tr>
<td>• Baik</td>
<td>42 (69.7%)</td>
</tr>
<tr>
<td>Status goiter ibu</td>
<td></td>
</tr>
<tr>
<td>• Normal</td>
<td>12 (15.8%)</td>
</tr>
<tr>
<td>• Pembesaran</td>
<td>64 (84.2%)</td>
</tr>
</tbody>
</table>

Berdasarkan kriteria pembesaran goiter, sebanyak 15.4% ibu ditemukan memiliki pembesaran goiter, sehingga masuk kategori endemik ringan.

Tabel 3. Keadaan Anemia Anak Pra Sekolah

<table>
<thead>
<tr>
<th>Variabel</th>
<th>rerata ± SD/ persentase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kadar HB</td>
<td>11.01 ± 0.781</td>
</tr>
<tr>
<td>Anemia</td>
<td></td>
</tr>
<tr>
<td>• Normal</td>
<td>43 (55.2%)</td>
</tr>
<tr>
<td>• Anemia</td>
<td>35 (44.8%)</td>
</tr>
</tbody>
</table>

Prosentase anak dengan anemia yang sangat tinggi, yaitu 44.9% menunjukkan bahwa anemia merupakan masalah kesehatan masyarakat yang berat di daerah penelitian (WHO, 2001). Penelitian ini serupa dengan penelitian di Pantai Gading barat pada anak sekolah yang menunjukkan bahwa 37-47% anak sekolah mengalami anemia (Hess, et al., 2002).

Tabel 4. IQ Ibu dan Anak Pra Sekolah

<table>
<thead>
<tr>
<th>Variabel</th>
<th>rerata ± SD/ persentase</th>
</tr>
</thead>
<tbody>
<tr>
<td>IQ verbal</td>
<td>85.3 ± 14.3</td>
</tr>
<tr>
<td>IQ performance</td>
<td>91.1 ± 11.6</td>
</tr>
<tr>
<td>IQ total</td>
<td>86.2 ± 12.9</td>
</tr>
<tr>
<td>IQ verbal</td>
<td></td>
</tr>
<tr>
<td>• Normal</td>
<td>44 (57.1%)</td>
</tr>
<tr>
<td>• Terhambat</td>
<td>33 (42.8%)</td>
</tr>
<tr>
<td>IQ performance</td>
<td></td>
</tr>
<tr>
<td>• Normal</td>
<td>39 (50.6%)</td>
</tr>
<tr>
<td>• Terhambat</td>
<td>38 (49.4%)</td>
</tr>
<tr>
<td>IQ total</td>
<td></td>
</tr>
<tr>
<td>• Normal</td>
<td>44 (57.1%)</td>
</tr>
<tr>
<td>• Terhambat</td>
<td>33 (42.8%)</td>
</tr>
<tr>
<td>IQ ibu</td>
<td>66.4 ± 14.5</td>
</tr>
<tr>
<td>Normal</td>
<td>44 (57.1%)</td>
</tr>
<tr>
<td>Terhambat</td>
<td>33 (42.8%)</td>
</tr>
</tbody>
</table>
Rendahnya sumber daya pengasuhan, selain ditunjukkan dari tingkat pendidikan yang rendah dan pekerjaan orangtua, juga diperberat dengan tingkat kecerdasan ibu yang kurang (rata-rata 66,4 ± 14,5) termasuk risiko mental defektif. Hal ini sejalan dengan penelitian berbagai penelitian yang menunjukkan bahwa spektrum GAKI pada populasi defisiensi iodium mencakup masa perkembangan dari janin sampai lanjut usia (Hetzel, 2005). Penelitian di Baihuyao China menunjukkan bahwa 72% orang dewasa di daerah endemik GAKI (lahir pada periode GAKI berat) memiliki skor tes IQ di bawah 70, mengindikasikan defisit sedang sampai berat dalam kapasitas intelektual. Kapasitas intelektual yang kurang pada orang dewasa juga berdampak pada meningkatnya risiko kualitas pengasuhan dan ketidakmampuan orangtua menyediakan stimulasi kognitif yang memadai bagi anak-anak (Boyages, 1993). Kurangnya dukungan sumberdaya pengasuhan disertai defisiensi gizi mikro dan makro meningkatkan risiko kurangnya perkembangan kognitif anak, yang ditandai dengan tingginya prevalensi masalah kognitif anak (43%).

Penelitian ini menunjukkan risiko multifaktor hambatan perkembangan anak di daerah endemik GAKI cukup besar, terutama aspek kondisi sosial ekonomi, sumberdaya pengasuhan, serta defisiensi gizi, yang ditandai dengan stunting dan anemia. Mengingat prevalensi masalah kognitif disertai masalah gizi cukup besar, penguatan sumberdaya keluarga perlu dilakukan, baik dengan meningkatkan kemampuan pengasuhan, maupun upaya memperoleh sumber-sumber pangan bergizi tinggi yang terjangkau dan tersedia di lingkungan sekitar.

**Dampak Intervensi Pengasuhan Terhadap Peningkatan Kapasitas Pengasuhan Ibu**

Kualitas pengasuhan dicerminkan melalui dua indikator, yaitu indikator kesiapan berperilaku dan keterampilan pengasuhan. Kesiapan berperilaku diukur dengan efikasi dan perencanaan pengasuhan dari konsep HAPA (*Health Action Process Approach*). Keterampilan pengasuhan melalui kemampuan ibu melakukan mediasi perkembangan kognitif yang diukur dengan tugas *mother child picture talking task (MCPTT)*. Dilakukan analisis data untuk melihat kesetaraan kelompok intervensi dan kontrol pada masing-masing indikator kualitas pengasuhan.

Hasil analisis menunjukkan, kedua kelompok perlakuan memiliki kondisi awal kualitas pengasuhan yang sama dalam indikator kemampuan mediasi perkembangan kognitif. Penelitian ini, antara lain menggunakan teori Vygotsky dalam pengembangan materi stimulasi pengasuhan, oleh karena itu salah satu indikator kualitas pengasuhan yang digunakan adalah keterampilan ibu melakukan mediasi perkembangan kognitif anak secara verbal.
Tabel 5. Uji Beda Indikator-indikator Kualitas Pengasuhan Antar Kelompok Sebelum Intervensi

<table>
<thead>
<tr>
<th></th>
<th>Intervensi rerata ± SD</th>
<th>Kontrol rerata ± SD</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kesiaian Berperilaku Sebelum Intervensi</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Efikasi</td>
<td>52.1 ± 13.178</td>
<td>60.9 ± 9.2</td>
<td>-3.358</td>
<td>0.001*</td>
</tr>
<tr>
<td>Perencanaan</td>
<td>19.05 ± 4.515</td>
<td>21.83 ± 4.638</td>
<td>-2.682</td>
<td>0.009*</td>
</tr>
<tr>
<td>Keterampilan mediasi kognitif</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sebelum Intervensi</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level 0 (negatif-kritik)</td>
<td>0.5 ± 0.9</td>
<td>1.3 ± 2.1</td>
<td>-2.04</td>
<td>0.035*</td>
</tr>
<tr>
<td>Level 1 (perintah dan kata sederhana)</td>
<td>11.3 ± 7.0</td>
<td>13 ± 5.5</td>
<td>-1.62</td>
<td>0.249</td>
</tr>
<tr>
<td>Level 2 (deskripsi dan pertanyaan tertutup)</td>
<td>17.3 ± 8.1</td>
<td>16.3 ± 5.5</td>
<td>0.65</td>
<td>0.519</td>
</tr>
<tr>
<td>Level 3 (elaboratif)</td>
<td>5.5 ± 6.6</td>
<td>7 ± 6.1</td>
<td>0.215</td>
<td>0.310</td>
</tr>
<tr>
<td>Total MCPTT</td>
<td>33.4 ± 8.8</td>
<td>38.8 ± 10.1</td>
<td>1.94</td>
<td>0.053</td>
</tr>
</tbody>
</table>

Pada awal penelitian, kedua kelompok tidak menunjukkan perbedaan yang signifikan pada indikator ini, akan tetapi kelompok kontrol menunjukkan perilaku level 0 (komentar negatif dan kritik) yang lebih banyak daripada kelompok eksperimen. Kelompok kontrol memiliki skor perencanaan dan efikasi pengasuhan yang lebih baik daripada kelompok eksperimen. Efikasi dan perencanaan merupakan indikator kesiapan berperilaku.

Tabel 6. Uji Beda Perubahan Keterampilan Pengasuhan Ibu (Mediasi Perkembangan Kognitif) Antar Kelompok Sesudah Intervensi

<table>
<thead>
<tr>
<th></th>
<th>Intervensi rerata ± SD</th>
<th>IodiumKontrol rerata ± SD</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>ΔLevel 0 (negatif-kritik)</td>
<td>-0.36 ± 1.2</td>
<td>-0.34 ± 2.7</td>
<td>-0.05</td>
<td>0.960</td>
</tr>
<tr>
<td>ΔLevel 1 (perintah dan kata)</td>
<td>-2.8 ± 6.1</td>
<td>-2.7 ± 7.5</td>
<td>-1.62</td>
<td>0.249</td>
</tr>
<tr>
<td>ΔLevel 2 (deskripsi dan pertanyaan tertutup)</td>
<td>0.70 ± 9.9</td>
<td>4.2 ± 7.9</td>
<td>-1.7</td>
<td>0.101</td>
</tr>
<tr>
<td>ΔLevel 3 (elaboratif)</td>
<td>5.2 ± 4.2</td>
<td>8.6 ± 9.4</td>
<td>3.0</td>
<td>0.004*</td>
</tr>
<tr>
<td>Total</td>
<td>6.4 ± 10.2</td>
<td>2.4 ± 8.4</td>
<td>1.7</td>
<td>0.941</td>
</tr>
</tbody>
</table>

Secara keseluruhan, tidak ada perbedaan signifikan antara kedua kelompok dalam skor total indikator keterampilan ibu melakukan mediasi perkembangan kognitif. Hal ini berarti, interaksi verbal ibu dan anak secara kuantitatif tidak berbeda antara kelompok kontrol dengan intervensi. Sebetulnya, jika dilihat dari rerata perbedaannya terdapat perbedaan cukup besar antar kelompok. Kelompok intervensi (6.4 ± 10.2) mengalami peningkatan total lebih dari dua kali lipat dari kelompok (2.4 ± 8.4). Tidak adanya perbedaan signifikan ini tampaknya disebabkan karena standar deviasi tinggi, sehingga tidak sensitif terhadap perbedaan skor.
Analisis lanjut pada aspek-aspek tugas MCPP menunjukkan bahwa secara statistik secara signifikan ibu dalam kelompok eksperimen menunjukkan kemampuan yang lebih baik dalam mediasi level yang ketiga, yaitu berbicara elaboratif, antara lain kemampuan mengajukan pertanyaan terbuka, menghubungkan dengan pengalaman anak, mengembangkan materi, dan memberikan komentar positif, yang berhubungan dengan tujuan stimulasi kognitif berbasis pengasuhan.

**Tabel 7. Uji Beda Perubahan Efikasi dan Perencanaan Pengasuhan Ibu Antar Kelompok Sesudah Intervensi**

<table>
<thead>
<tr>
<th></th>
<th>Kel. Intervensi rerata ± SD</th>
<th>Kel. Kontrol rerata ± SD</th>
<th>t</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efikasi2</td>
<td>63.5±17.6</td>
<td>64.5±10.2</td>
<td>-0.286</td>
<td>0.775</td>
</tr>
<tr>
<td>Rencana2</td>
<td>15.2±7.8</td>
<td>14.4±5.3</td>
<td>-0.573</td>
<td>0.568</td>
</tr>
<tr>
<td>ΔEfikasi</td>
<td>-3.8 ± 7.8</td>
<td>-7.4 ± 5.2</td>
<td>2.394</td>
<td>0.019</td>
</tr>
<tr>
<td>ΔPerencanaan</td>
<td>11.5 ± 16.2</td>
<td>3.6 ± 12.1</td>
<td>2.383</td>
<td>0.020</td>
</tr>
</tbody>
</table>

Kelompok eksperimen menunjukkan perubahan yang lebih baik daripada kelompok intervensi pada indikator efikasi dan perencanaan pengasuhan. Sebelum intervensi, kelompok kontrol menunjukkan skor yang lebih baik. Pada pengukuran kedua, kedua kelompok tidak menunjukkan perbedaan dalam indikator efikasi dan perencanaan pengasuhan.
Meskipun menunjukkan peningkatan rerata efikasi diri, kedua kelompok melaporkan penurunan dalam perencanaan pengasuhan. Mengingat kelompok intervensi mendapatkan pelatihan dan melaksanakan penugasan rumah mingguan, penurunan rerata perencanaan dapat disebabkan karena ibu dalam kedua kelompok lebih realistis dalam menilai rencana dan menghubungkannya dengan perilaku aktal pengasuhan.


Gambar 4. Membuat Buku Cerita dari Bahan di Sekitar Rumah
Ibu-ibu peserta pelatihan juga dapat menerjemahkan aktivitas stimulasi anak yang disusun dengan prinsip Piaget, seperti klasifikasi dan seriasi, dengan memanfaatkan sumber daya yang tersedia, seperti bahan-bahan di alam atau di dapur.

Gambar. 5 Menerjemahkan Tugas Penalaran dengan Bahan-bahan Sekitar

Dalam mengerjakan tugas bersama anak ibu membawakannya dengan cerita, dan hal ini ditunjukkan dengan tulisan-tulisan yang dibuat ibu pada lembar penugasan. Aktivitas pengasuhan seperti menulis, membuat dan membacakan buku kepada anak yang sebelumnya jauh dari praktek keseharian ibu dengan percaya diri dilakukan ibu, ketika mengerjakan tugas aktivitas interaksi.

Peningkatan efikasi ibu melakukan stimulasi kognitif menyebabkan ibu memulai dengan perasaan kepercayaan diri mengenai kompetensi mereka mengasuh anak. Ketika ibu menjadi lebih sadar tentang keterampilan mereka sendiri, maka muncul perilaku-perilaku untuk meningkatkan kualitas pengasuhan terhadap anak. Ibu menuliskan pengetahuannya tentang hal-hal yang dekat dengan keseharian seperti manfaat tumbuh-tumbuhan, cara bertani, beternak, memasak, atau nasehat-nasehat sederhana yang biasa diucapkan kepada anak. Prinsip program ini adalah ibu dilatih dan diberdayakan sehingga mereka percaya diri dan mampu melakukan program ini secara mandiri. Keterampilan pengasuhan orangtua ditingkatkan. Bukan dengan ide-ide yang asing sama sekali yang bertentangan dengan cara dan kebiasaan pengasuhan mereka, melainkan dengan memanfaatkan nilai kultural serta pengetahuan mereka, dengan demikian, resistensi dapat dihindari.

Pengajaran untuk mengenalkan hal-hal yang dekat dengan keseharian dan lingkungan ibu dan anak selain mengurangi resistensi juga dapat meningkatkan penghargaan anak terhadap lingkungan sekitar, bahkan kepada orangtua. Seperti seorang ibu yang menuliskan dan membacakan cerita “Bapakku” untuk anaknya yang menceritakan kebanggaan seorang anak kepada bapaknya yang bekerja keras menjadi penjual dawet, yang merupakan pekerjaan keseharian suaminya. Kemampuan orangtua un

Hasil penelitian menunjukkan bahwa intervensi stimulasi kognitif berbasis pengasuhan selama tiga bulan mampu meningkatkan kualitas pengasuhan ibu. Indikator pengasuhan yang menunjukkan peningkatan antara lain efikasi dan perencanaan pengasuhan, yang merupakan indikator kesiapan berperilaku. Indikator efikasi diri diambil dari konsep HAPA (Health Action Process Approach) yang menjadi dasar pengembangan intervensi untuk perubahan perilaku pengasuhan. Penelitian pendahuluan pada uji coba modul menunjukkan bahwa ketika orangtua merasa kurang percaya diri untuk menjadi pendidik bagi anak, maka orangtua kurang efektif menyampaikan materi stimulasi pada anak (Latifah, 2011). Pentingnya efikasi pengasuhan dalam
perubahan perilaku pengasuhan juga telah diketahui dari berbagai hasil penelitian. Kognisi sosial pengasuhan, antara lain efikasi diri pengasuhan, yaitu persepsi orangtua tentang kemampuannya untuk mengembangkan berbagai tugas, disebut menjadi bagian penting dalam pengembangan keterampilan pengasuhan (Bornstein, 2002). Penelitian menunjukkan efikasi diri pengasuhan mempengaruhi apakah ibu terlibat dalam aktivitas pembelajaran di rumah. Ibunya memiliki perasaan mampu dan merasa memiliki peran pengajaran cenderung lebih terlibat dalam aktivitas yang menstimulasi kognitif bersama anak di rumah daripada yang tidak melihat peran pengajaran sebagai bagian dari perannya sebagai orangtua (Balat, et al., 2010).

Meskipun secara umum kelompok intervensi tidak menunjukkan perbedaan signifikan dalam skor total keterampilan pengasuhan melalui kemampuan ibu melakukan mediasi perkembangan kognitif (mother child picture talking task), serta skor total kualitas lingkungan pengasuhan dengan skala HOME adaptasi dari Bradley (1983), akan tetapi analisis lanjut pada aspek-aspek dari keduanya menunjukkan bahwa kelompok eksperimen menunjukkan peningkatan yang signifikan pada aspek-aspek dalam kualitas lingkungan pengasuhan serta kemampuan melakukan mediasi perkembangan kognitif yang berhubungan dengan intervensi stimulasi berbasis pengasuhan.

Pada indikator kemampuan mediasi perkembangan kognitif, ibu di kelompok eksperimen menunjukkan peningkatan yang sangat signifikan dibandingkan kelompok kontrol pada level 3, yaitu kemampuan berbicara elaboratif, yang ditandai dengan penggunaan bahasa yang lebih kaya dalam berinteraksi dengan anak. Salah satu asumsi dasar dalam psikologi perkembangan adalah bahwa interaksi orangtua dan anak-lebih spesifik lagi percakapan orangtua-anak, merupakan instrumen penting dalam proses dan outcome perkembangan (Fivush, et al., 2006). Berbicara elaboratif ditandai dengan ciri-ciri: 1) penggunaan kalimat tanya terbuka, yang memungkinkan anak untuk menjawab dengan luas, 2) kemampuan menghubungkan, yang teknik dasarnya adalah saat berbicara dengan anak, ibu membicarakannya dalam hal yang terjadi saat ini dan menghubungkan dengan hal lain serupa yang sudah diketahui anak, atau pengalaman di waktu sebelumnya, 3) mengembangkan, yaitu saat berbicara dengan anak ibu mendukung anak untuk membahas lebih lanjut aspek-aspek kejadian yang dibicarakan anak atau hal-hal yang menjadi keteraturan anak, dan 4) komentar atau evaluasi positif adalah saat berbicara dengan anak, ibu memberi tanggapan positif, baik terhadap anak maupun terhadap situasi.


Penelitian ini menunjukkan, intervensi stimulasi kognitif berbasis pengasuhan selama tiga bulan dengan 12 pertemuan mampu meningkatkan kualitas pengasuhan. Beberapa hal mendukung keberhasilan intervensi. Intensitas intervensi, yaitu pertemuan mingguan yang disertai dengan penugasan rumah yang terpantau, pemanfaatan sumberdaya lokal dalam pengasuhan, dan penggunaan kerangka kerja Health Action Process Approach (HAPA) dalam perubahan perilaku,
mampu meningkatkan kualitas lingkungan stimulasi dan keterampilan pengasuhan orangtua yang relevan dengan peningkatan kemampuan kognitif anak.

Robinson (2009) menyebutkan bahwa berkaitan dengan perkembangan kognitif anak, masih diperlukan pemahaman tentang peran perilaku pengasuhan yang spesifik untuk mengembangkan intervensi, terutama bagi anak-anak yang memiliki risiko mengalami hambatan perkembangan kognitif dan pencapaian prestasi akademik yang buruk, karena lingkungan yang kurang mendukung. Ibu-ibu pada penelitian ini memiliki latar belakang pendidikan yang rendah, dengan kemampuan kognitif yang sangat kurang, dan tingkat sosial ekonomi yang kurang. Penelitian ini memberikan sumbangan untuk menggali aspek-aspek pengasuhan yang dapat ditingkatkan dalam kondisi sumberdaya terbatas untuk meningkatkan kemampuan kognitif anak.

**KESIMPULAN**

Penelitian ini menunjukkan bahwa risiko multifaktor hambatan perkembangan anak di daerah endemik GAKI cukup besar, terutama dari aspek kondisi sosial ekonomi, sumberdaya pengasuhan, serta defisiensi gizi, yang ditandai dengan stunting dan anemia.

Terjadi peningkatan pada indikator kesiapan berperilaku, yaitu efikasi pengasuhan ibu. Pendayagunaan teori perubahan perilaku dalam tahap pelatihan yaitu modifikasi teori Health Action Process Approach mendukung keberhasilan kesiapan ibu melakukan perubahan perilaku. Selama proses pelatihan ibu menunjukkan kepercayaan diri melakukan, mengembangkan, dan memodifikasi berbagai aktivitas pengasuhan yang sebelumnya tidak dilakukan seperti menulis dan membacakan buku untuk anak, atau membuat lembar aktivitas stimulasi dengan memanfaatkan sumberdaya sederhana yang ada di sekitar rumah.

Pelatihan pengasuhan pada ibu dengan sumberdaya ekonomi dan pengasuhan terbatas mampu meningkatkan keterampilan pengasuhan ibu, yaitu kemampuan ibu melakukan mediasi perkembangan kognitif pada anak, terutama kemampuan berbicara elaboratif. Prinsip-prinsip scaffolding dan berbicara elaboratif disampaikan dalam poin ringkas dan dilatihkan melalui berbagai aktivitas stimulasi.

**REKOMENDASI KEBIJAKAN**

1. Mengingat prevalensi masalah kognitif disertai masalah gizi cukup besar, penguatan sumberdaya keluarga perlu dilakukan, baik dengan meningkatkan kemampuan pengasuhan, maupun upaya memperoleh sumber-sumber pangan bergizi tinggi yang terjangkau dan tersedia di lingkungan sekitar.

2. Beberapa program yang melibatkan orangtua untuk melakukan stimulasi pada anak, seperti Deteksi dan Intervensi Dini Tumbuh Kembang Kemenkes, atau program parenting di BKKBN dan Kemendiknas, dapat menggunakan prinsip peningkatan kemampuan orangtua untuk melakukan mediasi perkembangan anak agar intervensi berbasis pengasuhan berjalan lebih efektif.

3. Prinsip-prinsip dan materi intervensi juga dapat diterapkan atau diuji cobakan pada kader program pos PAUD berbasis komunitas, terutama di daerah dengan sumberdaya terbatas, untuk meningkatkan efikasi diri dan keterampilan kader/guru untuk mendayagunakan kearifan dan sumberdaya lokal dalam proses belajar mengajar di sekolah. Diharapkan, hal ini dapat mengurangi ketergantungan pada paket alat permainan edukatif sekaligus dapat
melibatkan anak secara langsung dan mengajarkan nilai-nilai penghargaan terhadap kekayaan alam sekitar.

4. Kesadaran dan praktek penegahan literasi melalui bercerita, menulis, dan membaca buku perlu dan dapat dikembangkan dalam berbagai kondisi dan keterbatasan, baik berbasis pengasuhan atau berbasis PAUD. Keterampilan guru PAUD dan ibu perlu dilatih melalui praktek, agar menjadikan penegahan literasi sebagai bagian dari praktek pengasuhan dan kegiatan belajar mengajar.

**Ucapan Terima Kasih**

Peneliti mengucapkan banyak terima kasih atas bantuan dan kerjasama yang telah diberikan, kepada : Kepala Badan Litbang Kesehatan, Kepala Balai Litbang GAKI Magelang, Psikolog dari LPT Metamorfosa, Dinas Kesehatan Kabupaten Purworejo, Puskesmas Pituru II beserta Bidan dan Kader, ibu-ibu dan anak-anak yang terlibat dalam penelitian di desa Prapag Lor, Girigondo, Luweng Lor, Brengkol, Pekacangan, Tasikmadu.

**Daftar Pustaka**


4

Mother's Social Capital and Child Health in Indonesia

Sujiwoto

Universitas Brawijaya, Indonesia

ABSTRACT

Social capital has been shown to be positively associated with a range of health outcomes, yet few studies have explored the association between mother’s social capital and children’s health. This study examines the relation between mothers’ access to social capital (via participation in community activities) and child health. Instrumental variable estimation was applied to cross sectional data of the Indonesian Family Life Survey (IFLS) 2007 which consist of face-to-face interviews among the adult population in Indonesia (Nmothers ≈ 3450, Nchildren ≈ 4612, Ncommunities ≈ 309, and participation rate at 92%). The findings show strong evidence for the causal flow running from a mother’s social capital to her children’s health. All instruments are highly correlated with mothers’ social capital but uncorrelated with child health. The findings are also robust to individual and community characteristics associated with child health, and suggest that enlarging mothers’ social capital through various community activities is a particularly relevant intervention for reducing child health disparities in Indonesia.

Keywords:
Mother’s social capital Child health Instrumental variable estimates Indonesia

* Corresponding author. E-mail addresses: sujarwoto.sujiwoto@postgrad.manchester.ac.uk, sujarwoto@hotmail.com (S. Sujiwoto). 0277-9536/$ e see front matter © 2013 Elsevier Ltd. All rights reserved. http://dx.doi.org/10.1016/j.socscimed.2013.04.032
Introduction

In the past two decades, social capital has increasingly gained attention in health research (Kawachi, Subramanian, & Kim, 2008). Social capital can be conceptualised as the property of individuals and communities. Portes (1998:12) believes social capital as “the capacity of individuals to command scarce resources by virtue of their membership in networks or broader social structures”. In contrast, Putnam (1995:67) conceives social capital as community-level resource and a distinctly social feature that is reflected in the structure of social relationships. He defines social capital as: “features of social organisation such as networks, norms, and social trust that facilitate coordination and cooperation for mutual benefit”. In this study, we conceive social capital as community-level resource accessed by individuals, specifically mothers. Child health is affected by mothers’ access to networks via their participation in community activities. In these networks, information about health (among others) circulates. Mothers’ access to networks may differentially depend on the extent to which they participate in community activities and the availability of such networks.

Kawachi and Berkman (2000) describe the mechanisms by which community social capital affect health. Firstly, social capital provides channels for the distribution of knowledge and information related to health. Health promotion can be distributed more rapidly through social networks, channels which again are found to be especially important in developing countries. Secondly, social capital can serve as a mechanism for maintaining healthy behaviour norms and exerting social control over detrimental health behaviour. Thirdly, social capital allows for the promotion of access to services and amenities, as more cohesive neighbourhoods are a better equipped to mobilise collective action to champion the development of and access to health-related services. Fourthly, social capital serves as a conduit for psycho-social processes, including the development of social support and mutual respect. Such norms can translate into easier child-rearing, improved self-governments, and the maintenance of a healthy social environment. In addition, the Marmot reviews (2010) notes that social capital also enables communities to be responsive to the national and local initiatives, including those instigated by government or health organisations.

The mechanisms linking mothers’ social capital and children’s health are channelled via improvements in mothers’ knowledge that in turn affects their parenting behaviour (Anderson & Damio, 2004; De Silva & Harpham, 2007; Martin & Rogers, 2004). De Silva and Harpham (2007) suggest that social networks, through their participation, enable mothers to know more due to knowledge transfer (e.g. where to obtain additional cheap sources of food), to think differently due to attitude influences (e.g. attitudes towards hygiene practices), and to do things differently (e.g. breastfeeding for longer). These mechanisms are illustrated by research from the United States, which shows that women with more social capital have increased odds of breastfeeding their child for longer (Anderson & Damio, 2004). Other research shows that both household and community-level social capital is associated with reduced odds of household hunger (Martin & Rogers, 2004). In a setting such as Indonesia, where most adult females have only attained a primary level of education, social networks may provide mothers with information they have not obtained through schooling (Wibisana, Trihono, & Nurwati, 1999). This information ranges from the benefits of oral rehydration therapy to the location of preventive care providers.

Two research gaps exist within the literature on social capital and health. Firstly, most focuses on adult health in developed countries (for reviews, see Kawachi & Berkman, 2000). However, given that the effect of social capital is hypothesised to vary by sub-groups and contexts (Cutrona & Russell, 2000; De Silva & Harpham, 2007), it is important to study the effect of social capital on child health in developing countries. This study provides this focus, and is thus a contrast with the far more extensive work on social capital and adult health that draws on data from developed countries, mainly the United States and Western Europe. Indonesia is particularly suitable for this
study, not only because of the government concern to improve child health status, but also because many re-gions of the country boast a long-standing indigenous tradition of community involvement (or social capital) (Beard, 2005, 2007; Grootaert, 1999; Miller, Schiffer, Lam, & Rosenberg, 2006). Rela-tively little research however has examined the implications of this tradition for social capital and child health.

Secondly, several empirical studies examining the relationship between mothers’ social capital and child health do not take into account the reverse causality issue which compromises the relationship (for example De Silva & Harpham, 2007; Macinko & Starfield, 2001; Tuan, Harpham, & De Silva, 2006). The characteris-ticsthatpromotemother’ssocialcapitalarelikelytobeinfluencedby children’s health. For example, a sick child may prevent the mother from participating in community activities, hence a reduction in social capital (Tuan et al., 2006). Failure to take this into account will lead to bias estimate of the relationship between mother’s social capital and child health. In this study, instrumental variable esti-mates are used to establish the direction of causal effect between a mother’s social capital and her child’s health. This method is increasingly gaining ground, even among biomedical researchers who study, among others, chronic obstructive pulmonary disease (Lindenauer et al., 2010), prostate cancer (Lu-Yao et al., 2008), and acute myocardial infarction (Stukel, 2007). Studies also show that thismethodperformswellinrulingoutreversecausality,fromsocial capital to various determinants such as welfare (Narayan & Pritchett, 1999), poverty and welfare (Grootaert, 1999), employment (Bayer, Ross, & Topa, 2005), violent crime (Lederman, Loayza, & Menendez, 2002), and health (D’Hombres, 2010). Because this approach in part reflects the aspects of the Indonesian setting, we turn to a discussion of contexts and then describe the data and methods employed.

Community development and health in Indonesia

Indonesia’s economic growth has been robust since the financial crisis of 1998, and appears well positioned with an average of 4e6% since 2002 (World Bank, 2008). Mother and child health status improved after the crisis. Mother mortality ratio decreased sharply from 340 per 100,000 live births in 2000 to 220 per 10,000 live births in 2010. Malnutrition, measured using both height for age and weight for age, decreased during this period (from 42% and 25% in 2000 to 37% and 18% in 2010 respectively). Female and male life expectancy at birth increased from 67 years and 64 years in 2000 to 71 years and 67 years in 2010 respectively (World Bank, 2012).

Many regions of Indonesia have been known for indigenous tradition of community involvement (Beard 2005, 2007; Bowen, 1986; Geertz, 1962; Grootaert, 1999). This tradition is often recognised with a set of key Indonesian terms: gotong royong (Bowen, 1986; Koentjaraningrat, 1961), arisan or binda (Geertz, 1962), koperasi, rukun and musyawarah (Bowen, 1986), and kerja bakti (Beard, 2005). In Indonesia the generalised reciprocity aspect of social capital is best illustrated by the sociocultural ethic of gotong royong (meaning generalised reciprocity) both in rural and urban areas; this remains a strong social norm in Indonesia as well as a powerful determinant of social capital (Bowen, 1986). In many instances, this tradition of community involvement leads to the formation of grassroots organisations, which government subse-quently adopts as part of its regional and national programmes. These programmes have often been cited by donor organisations as an example of community development success stories (Shiffman, 2002). Their goals differ, but include improving healthcare, edu-cation, sanitation, security and village upkeep (Wibisana et al., 1999).

Programmes that involve mothers are found across local com-munities. At least one type of volunteer programme was existed in each of the 309 communities included in the 2007 IFLS. We focus on the involvement of mothers in five specific programmes: com-munity meetings, village
cooperatives, voluntary labour, village upkeep, and women’s associations. Table 1 draws on the data and presents descriptive statistics of mothers volunteering in these programmes. Forty-three percent of mothers report getting involved in at least one programme in the year prior to interview. In addition, among those who participated, about one-third was involved in more than one programme. With respect to the type of activity in which the women were involved, participation is highest for voluntary labour, community meetings and the women’s association.

None of these five programmes are specifically geared towards improving children’s health, a feature which is essential to the interpretation of the results. If the programmes in which mothers participate did target child health, a positive association between mothers’ social capital and child health would be likely to reveal the effect of the programme and not necessarily the social capital of mothers generated by participating in that programme.

Methods

Indonesian Family Life Survey (IFLS) 2007

IFLS is an on-going longitudinal survey that began in Indonesia in 1993. It represents 83% of Indonesia’s population living in 13 provinces and 262 districts (Frankenberg & Thomas, 2000), and brings together a rich set of information on individuals and households, the communities they live in, and the facilities that are available to them. Households (defined as a group of people who reside together and ‘eat from the same cooking pot’) were randomly selected from within the communities. IFLS data is representative of the non-institutionalised adult population in Indonesia. The participation rate of IFLS 2007 is high with 92% (Thomas et al., 2012).

Table 1 Mothers’ social capital in various community programme.

<table>
<thead>
<tr>
<th>Type of community programme</th>
<th>Percentage participating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mother participation in any program Mother participation at least in one program</td>
<td>43% 27%</td>
</tr>
<tr>
<td>Women association</td>
<td>10%</td>
</tr>
<tr>
<td>Community meeting Cooperatives Voluntary labour Village upkeep</td>
<td>11% 3% 12% 8%</td>
</tr>
</tbody>
</table>


This study uses IFLS 2007 data, applying its cross-sectional structure rather than its panel structure. The time interval between IFLS 1993 and IFLS 2007 is almost ten years. During this long interval, most of the children who were measured in 1993 have entered puberty in 2007 (age above ten years). Literature on child growth and organ development shows a marked difference in growth curves of child height and weight before and during puberty (Buckler, 1997). During puberty, factors which affect child height and weight are more complex. These factors are not only nutritional status, but also other factors, especially sex characteristics (Rogol, Clark, & Roemmich, 2000). Therefore, since this study is aimed at examining child nutritional status, using panel regression ignoring this long period is inappropriate as parameter constancy during childhood and during puberty is likely to be violated. Such an assumption is necessary for estimation (Hendry, 1995).

IFLS 2007 consists of two main sources information: household information books and community facilities information books. Information on mother and child health comes from the first books. In this study, we restricted the sample to children of whom there is complete information on
height and weight, and mothers of whom there is complete information on social capital. This yields a sample of 4612 children with 3450 mothers living in 309 communities. Respondents who migrate to other regions are excluded from the analysis (about 9.2% of mothers move to other regions between 1993 and 2007). Community facilities information books consist of extensive information about community in which households are sampled. Information was collected from community leaders and from staff at schools and health facilities available to community residents. In total 309 communities representing 13 provinces were surveyed in the survey. Information about community social capital and instrumental variables are taken from this book (Frankenberg & Thomas, 2000).

**Measures**

Table 2 presents summary statistics for the key measures used in the analysis. A more detailed description of each of these measures follows.

Child height-for-age and weight-for-age

Child health is measured by child height and weight-for-age (Fogel, 1994; Foster, 1995). Child weight is widely thought to be a more responsive measure of child health to shock in the very short-run (Foster, 1995). Meanwhile, child height has been viewed as a very useful summary indicator of child health which reflects all health events since birth (Martorell & Habicht, 1986). Child height will be strongly related to final adult height, which has been increasingly used as a useful summary indicator of health of a population (Fogel, 1994).

IFLS 2007 used data on height and weight measures for all household members collected by trained nurses. Since height and weight vary systematically with age and gender, we standardise children height and weight relative to sex-and age-specific height and weight medians of children in the United States (Nobles & Frankenber, 2009; Strauss et al., 2004). For each child, a z-score is computed that expresses the child’s height-for-age and weight-for-age as the number of standard deviations above or below the median for a child of that sex and age in the United States. As most Indonesian children are shorter and less heavy than the American children, the median z-score for Indonesian children is negative. The median z-score for height is _1.70 for females and _1.60 for males, while the median z-score for weight is _1.41 for females and _1.47 for males.
Table 2 Descriptive statistics of analytic sample.

<table>
<thead>
<tr>
<th></th>
<th>Percent</th>
<th>Mean</th>
<th>Median</th>
<th>S.D.</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mother’s social capital</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children characteristics: (n = 4612)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Height-for-age z score (median)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boys</td>
<td>0.50</td>
<td>0.84</td>
<td>0.84</td>
<td>0–5</td>
<td></td>
</tr>
<tr>
<td>Girls</td>
<td>0.30</td>
<td>0.70</td>
<td>0.70</td>
<td>0–1</td>
<td></td>
</tr>
<tr>
<td>Weight-for-age z score (median)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boys</td>
<td>–1.80</td>
<td>1.32</td>
<td>1.32</td>
<td>–4.95</td>
<td>4.25</td>
</tr>
<tr>
<td>Girls</td>
<td>–1.70</td>
<td>1.39</td>
<td>1.39</td>
<td>–4.70</td>
<td>4.97</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A boy</td>
<td>0.00</td>
<td>1.00</td>
<td>1.00</td>
<td>0–5</td>
<td></td>
</tr>
<tr>
<td>Birth weight (kg)</td>
<td>0.18</td>
<td>5.05</td>
<td>5.05</td>
<td>0–5</td>
<td></td>
</tr>
<tr>
<td>Mothers characteristics: (n = 3450)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>33.3</td>
<td>7.00</td>
<td>7.00</td>
<td>0–100</td>
<td></td>
</tr>
<tr>
<td>Completed primary education or less</td>
<td>44%</td>
<td>151</td>
<td>151</td>
<td>133</td>
<td>169</td>
</tr>
<tr>
<td>Height (cm)</td>
<td>4%</td>
<td>151</td>
<td>151</td>
<td>133</td>
<td>169</td>
</tr>
<tr>
<td>Poor health</td>
<td>3%</td>
<td>5.00</td>
<td>5.00</td>
<td>0–5</td>
<td></td>
</tr>
<tr>
<td>Household size</td>
<td>42%</td>
<td>2.00</td>
<td>2.00</td>
<td>0–5</td>
<td></td>
</tr>
<tr>
<td>Kinship ties</td>
<td>5%</td>
<td>2.00</td>
<td>2.00</td>
<td>0–5</td>
<td></td>
</tr>
<tr>
<td>Household below median per capita expenditure</td>
<td>4%</td>
<td>2.00</td>
<td>2.00</td>
<td>0–5</td>
<td></td>
</tr>
<tr>
<td>Community characteristics: (n = 391)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community social capital</td>
<td>44%</td>
<td>9.00</td>
<td>9.00</td>
<td>0–5</td>
<td></td>
</tr>
<tr>
<td>Village head with graduate education or above</td>
<td>41%</td>
<td>10.00</td>
<td>10.00</td>
<td>0–20</td>
<td></td>
</tr>
<tr>
<td>Average community per capita expenditure (IDR 1000)</td>
<td>428</td>
<td>18.00</td>
<td>18.00</td>
<td>155</td>
<td>2000</td>
</tr>
<tr>
<td>Total community population</td>
<td>11,419</td>
<td>10,444</td>
<td>10,444</td>
<td>209</td>
<td>209,000</td>
</tr>
<tr>
<td>Received underdeveloped village funds</td>
<td>18%</td>
<td>38%</td>
<td>38%</td>
<td>0–5</td>
<td></td>
</tr>
<tr>
<td>Urban areas</td>
<td>47%</td>
<td>50%</td>
<td>50%</td>
<td>0–5</td>
<td></td>
</tr>
<tr>
<td><strong>Instruments</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Program dissemination</td>
<td>74%</td>
<td>56%</td>
<td>56%</td>
<td>0–5</td>
<td></td>
</tr>
<tr>
<td>Number of neighbourhood association</td>
<td>9%</td>
<td>13</td>
<td>13</td>
<td>0–29</td>
<td></td>
</tr>
<tr>
<td>Number of saving and borrowing institution</td>
<td>2%</td>
<td>1</td>
<td>1</td>
<td>0–6</td>
<td></td>
</tr>
<tr>
<td>Presence of kinship groups</td>
<td>8%</td>
<td>28%</td>
<td>28%</td>
<td>0–5</td>
<td></td>
</tr>
<tr>
<td>Ethnic similarity</td>
<td>87%</td>
<td>17%</td>
<td>17%</td>
<td>0–5</td>
<td></td>
</tr>
</tbody>
</table>


**Mothers’ social capital**

Mothers’ social capital is measured through their links in five key community activities: community meetings, cooperatives, voluntary labour, village upkeep, and women’s associations. These community activities are commonly found in both urban and rural communities in Indonesia; their goals vary, and include improving healthcare, education, sanitation, financial support and community upkeep (Wibisana et al., 1999). Higher mothers’ social capital is related to more access to the resources that reside in network ties in those activities.

IFLS 2007 asks respondents about their participation in these activities in the 12 months prior to the interview. Interviewers asked respondents: “During the last 12 months did you participate in or use these activities?” A list of activities is presented to respondents. This item has been validated and generally used in social capital study (for Indonesia see among others Beard, 2005, 2007; Miller et al. 2006; Nobles and Frankenberg, 2009). A continuous score was created that takes on a value between zero and five, which measures the number of activities in which mothers participate. Mothers’ social capital is modest with about a half of mothers reporting that they participate at least in one programme in the last year.

**Control variables**

Mother characteristics such as education, age, kinship ties, height and general health are included as control variables. To measure their level of education a dummy determinant indicating mother completing primary education or less is constructed; this accounted for about 44% of the sample. We create an indicator of whether mothers report having frequent person-to-person contact with their own mothers to measure kinship ties. Around a half of mothers say that they do.

Mothers’ height and child birth weight are included as indicators for health endowment. A mother’s height captures many aspects of her background, including health behaviours and...
genetic predisposition that may be related to child health (Kuh & Wadsworth, 1989). Child birth weight captures the health condition of the child during pregnancy, which has been shown to have a strong relationship with a child’s physical development (Conley, Bennet, & Strully, 2003). The mean of the mothers’ height and the children’s birth weight is 151 cm and 3.2 kg respectively. We include a control for whether mothers are in good health and poor health. All respondents in the sample report on self-rated health which predicts chronic disease in many settings, including Indonesia (Frankenberg & Jones, 2004). This information is elicited by the question: “In general, would you say that your health is very healthy, sufficiently healthy, less than healthy, and unhealthy?” The first two categories are combined to be good health, while the last two categories are combined to be poor health. Three percent of mothers report having poor health.

Household controls include household size and household with below median per capita expenditure. Household size is included to address the issue that women with more household members may have less time to participate in community programmes or other-wise acquire social capital. Household size is relatively large, with an average of five to six members per household. Household with below median per capita expenditure is used to control whether household financial resources affect mother’s social capital. We prefer to use monthly per capita household expenditure rather than income to capture household financial resources: in developing countries such as Indonesia, it is not income but expenditure measured from consumption that more accurately captures levels of long-term economic resources (Deaton & Zaidi, 2002). The authors further explain that formal employment is less common in developing country, many households have mul-tiple and continually changing sources of income and home pro-duction is more widespread. In these contexts, income data is less accurate than consumption data to measure financial resources. Since the price levels of consumer goods and services in Indonesia vary across rural and urban regions (Strauss et al., 2004), the household expenditure figures were deflated with the consumer price index for urban and rural regions. Rural inflation is taken to be 5% higher than urban inflation (Resosudarmo & Jotso, 2009). This calculation produces real household expenditure adjusted with urban and rural inflation. The Consumer Prices Index 2006 data are retrieved from the government central bureau of statistics. The average real household expenditure in 2007 was IDR575,000 (US$57,5). About 49% of households are living below median per capita expenditure.

Community control variables include community social capital, community per capita expenditure, community leadership capacity, community receipt of underdeveloped village funds, commu-nity population and urban status. IFLS 2007 provides information about various community activities, i.e. village cooperatives, youth groups, religious activities, family groups and neighbourhood se-curity groups, which were conducted on a routine basis. Aggregate number of those activities per each community is calculated to measure community social capital. To control for the effect of community wealth we include community per capita expenditure, the average being IDR428,000 (US$42,8). Village heads with grad-uate education and above is included to control whether community leadership capacity affects child health. The level of community receipt of undeveloped village funds captures many aspects of village social, economic and political conditions in Indonesia including poverty and low institutional capacity. The model also includes community population and urban/rural status; the proportion of respondents living in rural and urban areas was relatively balanced.

**Instrumental variables**

Instruments are elicited not from the mothers but from independent informants in community facilities information books (Frankenberg & Thomas, 2000). This enhances accuracy or at least reduces measurement error. The use of instrumental variables data from separated sources also
alleviates concerns arising from the use of aggregate of individual and household variables using same sources in the estimation (Deaton, 2001).

Five instruments are used in the analysis. Firstly, social and financial associations that facilitate social interaction feature prominently in the day-to-day activities of Indonesians (Beard, 2005; Geertz, 1962; Grootaert, 1999). They include neighbour-hood associations, self-help groups, and saving and borrowing institutions. In Indonesia, they are more than mere economic institutions. These institutions also function to strengthen the solidarity of the community (Beard, 2005; Grootaert, 1999). Likewise, neighbourhood associations and self-help groups (rukun warga) facilitate people within the neighbourhood to carry out such cooperation and joint activities. The function of rukun warga in the daily life of Indonesians is important as the present media for meeting together and for strengthening soli-darity among neighbourhood members, including mothers (Koentjaraningrat, 1961). Thus we expect that mother’s social capital is likely to increase in communities which have more of Instrumental variable estimates these kinds of financial and social institutions. The presence of these associations, however, is not affected directly by child. Our empirical model of child health can be represented by the health, nor do they affect child health directly except through following estimation equation: mother’s social capital.

Secondly, we turn to dissemination of information about community activities. Lack of access to information is well-documented as an important factor causing low participation of women and Where the subscript i stands for the individual, the subscript j for men in community programmes across developing countries the community; Cj is a vector of explanatory variables at commu-
(World Bank, 2004). This is important, particularly in rural in Indonesia, since women in those areas often lack access to information about community programmes. Hence whether local disturbance term, and Hij is child height and weight for age. Stan-community volunteers inform mothers about the programmes is likely to motivate them to attend and to engage within such acunbiased results if E(Scij tivities. For example, mother participation in community women association (perkumpulan wanita) is higher when local community volunteers regularly disseminate information about the pro-grammes (Wibisana et al., 1999). Likewise, mothers are likely to engage within cooperatives when they are informed the benefits of such activities for improving their family well-being (i.e. provide cheap financial credit). There is also no reason to assume that dissemination of information about community programmes will directly affect children’s health, except through mothers participating.

Thirdly, ethnic similarity and presence of kinship groups are assumed directly correlated with mothers’ social capital. The ethnographic literature on Indonesia suggests that ethnic customs and languages have an important role in shaping com-munity activities or social groups (Bowen, 1986; Geertz, 1962; Koentjaraningrat, 1961). Individuals within the same ethnic groups are more likely to interact in social settings, due to simi-larities of custom or language. For example, in Javanese ethnic regions women and men engagement in village labour (kerja bakti) and community meeting (pertemuan masyarakat) is bonded within traditional custom namely sambatan and rukun (Koentjaraningrat, 1961). Such ethnic custom also exists throughout the archipelago; and they are known in each ethnic by a local name (i.e. subak in Bali, pangalo in Aceh, paralek and ban-galek in eastern Kalimantan, mapalus in northern Sulawesi and so on) (Bowen, 1986; Davidson & Henley, 2007). Hence, the possi-bility for mothers to join and be active in community programmes may increase due to higher ethnic similarity and the presence of kinship groups: mothers living in communities that have both are likely to participate more or have more social capital. We have no reason to assume that ethnic similarity and the presence of kinship groups have a direct effect on child health except through mothers’ participation.
Fafchamps (2005) explain that the orthogonally condition could fail due to reverse causality. To address this problem, we use instrumental variable estimates (Baum, 2006). The validity of the instrumental variable results will depend on the admissibility of the exclusion restrictions. Therefore, we need to identify variables that satisfy the two necessary conditions for instrument validity. First, they must be both strongly correlated with mother social capital (‘relevance condition’) and orthogonal to the disturbance term of the child health equation (‘orthogonality’ condition) (D’Hombres, Rocco, Suhrcke, & McKee, 2010).

Instrumental variable estimates also mitigate bias which arises if unobserved mother’s characteristics affect both her social capital and her child health. For instance, some evidence suggests that people who participate in voluntary community programmes are advantaged with respect to otherwise unobserved socio-economic status (Schady, 2003;Thoits & Hewitt, 2001). If we fail to control for these factors and they are also positively related to child health, as is almost certainly the case, regression results will bias the contribution of social capital. To address this issue, we identify variables related to mothers’ social capital and control for these in the first stage regression. A number of individual, household and community predictors, including the instruments associated with mothers’ social capital, are included in the regression.

**Results**

**Mothers’ social capital and child health**

We begin by presenting bivariate correlation of mother’s social capital, community social capital and instrumental variables in Table 3. Mothers’ social capital and community social capital are positively associated with child health. All instruments are signif-icantly associated with mothers’ social capital.

Table 4 presents the results of OLS and IV (second stage) for the relationship between mother’s social capital and child health. The estimated effect of mother’s social capital in IV is substantially larger than in the OLS estimates and is strongly statistically sig-nificant. One standard deviation increase in mother’s social capital is associated with an increase in the initial height-for-age by nearly 18% and weight-for-age by 15%.

The effect of children, mothers, household and community characteristics show expected results. Mothers’ height and child birth weight which capture health endowment are significantly associated with child health. The importance of mothers’ health status for their children health is shown from the significance of mothers’ health endowment and self-rated health (Frankenberg & Jones, 2004; Kuh & Wadsworth, 1989). Children whose mothers are educated only up to the end of primary school are less healthy than those with more educated mothers. These confirm the

<table>
<thead>
<tr>
<th>Table 3 Bivariate correlation of selected variables.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Child height for age</strong></td>
</tr>
<tr>
<td>--------------------------</td>
</tr>
<tr>
<td>Child height for age</td>
</tr>
<tr>
<td>Child weight for age</td>
</tr>
<tr>
<td>Mothers’ social capital</td>
</tr>
<tr>
<td>Community social capital</td>
</tr>
<tr>
<td>Program dissemination</td>
</tr>
<tr>
<td>Presence of kinship groups</td>
</tr>
<tr>
<td>Number of saving and borrowing institution</td>
</tr>
<tr>
<td>Ethnic similarity</td>
</tr>
<tr>
<td>Number of neighbourhood association</td>
</tr>
</tbody>
</table>
results found by Thomas (1997) in developed and developing countries. Likewise, children living in poor households (as measured by household below median expenditure) are less healthy than children from better-off households. The detrimental effect of poverty on child health in both developed and developing countries has also been well-documented in prior studies (Aber, Bennet, Conley, & Li, 1997).

Controlling for household resources, community per capita expenditure is strongly related to child health. A negative association is shown between indicators of community underdevelopment (i.e. in receipt underdeveloped funds) and child health. This evidence reflects the fact that children living in poor communities are more disadvantaged with respect to their health compared to those living in better-off communities (Nobles & Frankenberg, 2009). Furthermore, living in urban areas increases children health, due to the existence of better public health services in urban areas. The number of community activities or community social capital increases child health but it is only significant for child weight. Community leadership seems not to matter for child health.

Table 4 Mothers’ social capital and child health, second stage regression.

<table>
<thead>
<tr>
<th></th>
<th>OLS</th>
<th>IV</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Height for age</td>
<td>Weight for age</td>
</tr>
<tr>
<td></td>
<td>Coef.</td>
<td>se</td>
</tr>
<tr>
<td>Mother’s social capital</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.023**</td>
<td>0.022</td>
<td></td>
</tr>
<tr>
<td>Community social capital</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.019*</td>
<td>0.010</td>
<td></td>
</tr>
<tr>
<td>Children characteristics:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(n = 4612)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.139**</td>
<td>0.008</td>
<td></td>
</tr>
<tr>
<td>A boy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.075</td>
<td>0.036</td>
<td></td>
</tr>
<tr>
<td>Birth weight (kg)</td>
<td>0.227**</td>
<td>0.055</td>
</tr>
<tr>
<td>Mothers characteristics:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(n = 3490)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>0.000</td>
<td>0.003</td>
</tr>
<tr>
<td>Completed primary education</td>
<td>0.207**</td>
<td>0.039</td>
</tr>
<tr>
<td>Height (cm)</td>
<td>0.058**</td>
<td>0.004</td>
</tr>
<tr>
<td>Poor health</td>
<td>0.063</td>
<td>0.325</td>
</tr>
<tr>
<td>Household size</td>
<td>0.025**</td>
<td>0.011</td>
</tr>
<tr>
<td>Kinship ties</td>
<td>0.008**</td>
<td>0.038</td>
</tr>
<tr>
<td>Household below median per</td>
<td>0.228**</td>
<td>0.042</td>
</tr>
<tr>
<td>capita expenditure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community characteristics:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(n = 390)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Log average community per</td>
<td>0.389**</td>
<td>0.064</td>
</tr>
<tr>
<td>capita expenditure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Log total community</td>
<td>0.042**</td>
<td>0.025</td>
</tr>
<tr>
<td>population</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Received underdeveloped</td>
<td>0.124**</td>
<td>0.048</td>
</tr>
<tr>
<td>village funds</td>
<td>0.042**</td>
<td>0.028</td>
</tr>
<tr>
<td>Village head with graduate</td>
<td>0.177**</td>
<td>0.045</td>
</tr>
<tr>
<td>education or above</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>16.499**</td>
<td>1.197</td>
</tr>
</tbody>
</table>

*p < 0.10; **p < 0.05; ***p < 0.001.

Mothers’ social capital and child health: two-way causality?

Table 5 shows results of the first stage regression. All in-struments are highly correlated with mothers’ social capital. Tests of instrument strength and relevance (Hansen, Lagrange multipliers; Wald, KleibergenePaap statistics) reveal their usefulness in identifying the effects of mothers’ social capital. The Hansen test of over-identifying restrictions does not lead one to reject the orthogonality of our instrument set with respect to the disturbance term with p-values greater than 0.64. The weakness of the set of instruments is rejected with a p-value lower than 0.001. F-statistics, testing the hypothesis that the coefficient on the excluded in-struments are all zero in each first-stage estimate, are well above the threshold of 10 indicated by Staiger and Stock (1997) as the rule of thumb criterion of instrument weakness. Taken together with the non-rejection of the test of over-identification, this suggests that our set of instruments is reasonable. We also tested the robustness of our results by estimating the model with different sets of instruments. The results were very similar to the results described in this paper (see Supplementary data online).
The coefficient estimates of instruments show that dissemination of information about community activities and kinship groups are strongly associated with mother’s social capital. The magnitude effect of kinship groups is the largest, at 23%. Mothers living in communities with higher numbers of neighbourhood associations have more social capital than those living in less well-endowed neighbourhoods. Likewise, mothers’ social capital is positively associated with the number of social and informal financial institutions in their community. We expect the higher percentage of ethnic similarity to be related to mothers’ social capital, and the expectation is confirmed. Community social capital in the form of community activities provides more mothers’ social capital. The magnitude of this effect indicates that one standard deviation increase (measured at the community level) in the number of community activities is associated with an increase in mothers’ social capital by 2-3%.

### Table 5 Mothers’ social capital and child health, first stage regression.

<table>
<thead>
<tr>
<th></th>
<th>OLS</th>
<th>IV</th>
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<tbody>
<tr>
<td></td>
<td>Coef.</td>
<td>se</td>
</tr>
<tr>
<td><strong>Child characteristics:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(n = 4612)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>0.017***</td>
<td>0.005</td>
</tr>
<tr>
<td>A boy</td>
<td>-0.051**</td>
<td>0.023</td>
</tr>
<tr>
<td>Birth weight (kg)</td>
<td>0.036</td>
<td>0.035</td>
</tr>
<tr>
<td><strong>Mothers characteristics:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(n = 4612)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>0.007***</td>
<td>0.002</td>
</tr>
<tr>
<td>Completed primary education or less</td>
<td>-0.065**</td>
<td>0.025</td>
</tr>
<tr>
<td>Height (cm)</td>
<td>-0.002</td>
<td>0.002</td>
</tr>
<tr>
<td>Poor health</td>
<td>0.298</td>
<td>0.205</td>
</tr>
<tr>
<td>Household size</td>
<td>0.009</td>
<td>0.007</td>
</tr>
<tr>
<td>Kinship ties</td>
<td>-0.021</td>
<td>0.024</td>
</tr>
<tr>
<td>Household below median per capita expenditure</td>
<td>-0.120***</td>
<td>0.026</td>
</tr>
<tr>
<td><strong>Community characteristics:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(n = 309)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community social capital</td>
<td>0.022**</td>
<td>0.006</td>
</tr>
<tr>
<td>Log average community per capita expenditure</td>
<td>0.056</td>
<td>0.042</td>
</tr>
<tr>
<td>Log total community population</td>
<td>-0.056**</td>
<td>0.016</td>
</tr>
<tr>
<td>Received underdeveloped village funds</td>
<td>-0.027</td>
<td>0.031</td>
</tr>
<tr>
<td>Village head with graduate education or above</td>
<td>0.080**</td>
<td>0.026</td>
</tr>
<tr>
<td>Urban areas</td>
<td>0.011</td>
<td>0.030</td>
</tr>
<tr>
<td><strong>Instruments:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Program dissemination</td>
<td>0.193***</td>
<td>0.008</td>
</tr>
<tr>
<td>Number of neighbourhood association</td>
<td>0.004***</td>
<td>0.001</td>
</tr>
<tr>
<td>Ethnic similarity</td>
<td>0.003**</td>
<td>0.001</td>
</tr>
<tr>
<td>Number of saving and borrowing institutions</td>
<td>0.037**</td>
<td>0.010</td>
</tr>
<tr>
<td>Presence of kinship groups</td>
<td>0.253**</td>
<td>0.043</td>
</tr>
<tr>
<td>Constant</td>
<td>-1.114</td>
<td>0.806</td>
</tr>
<tr>
<td>Kleibergen–Paap LM stats (under id)</td>
<td>117.962</td>
<td></td>
</tr>
<tr>
<td>LM p value</td>
<td></td>
<td>0.000</td>
</tr>
<tr>
<td>Hansen’s J</td>
<td></td>
<td>2.526</td>
</tr>
<tr>
<td>J p value</td>
<td></td>
<td>0.64</td>
</tr>
<tr>
<td>Cragg–Donald Wald F stats (weak id)</td>
<td>144.388</td>
<td></td>
</tr>
</tbody>
</table>

*p < 0.10; **p < 0.05; ***p < 0.001. Source: IFLS 2007.
Mothers’ education and age as well as the age of their children are significantly associated with social capital. Mothers who have completed primary education or less have less social capital than those with a higher level of education. Mothers with older children are likely to have more social capital than those with younger children. They who have a boy are likely to have lower social capital than those who have a girl. However, there is no evidence that other characteristics (such as the mothers’ height, general health, and kinship ties) are associated with mother’s social capital.

Living in a household with below median per capita expenditure decreases mother’s social capital. Living in a denser population also decreases social capital. Mothers living in richer communities are likely to have more social capital than those living in poor communities. They who living in community which received community underdeveloped programme has lower social capital. However, the association between both variables and mothers’ social capital is not significant.

Discussion

The study aims to examine the association between mothers’ social capital and their children’s health in Indonesia. It improves a number of methodological points in earlier literature. Using instrumental variable estimates, this study mitigates reverse causality between mother’s social capital and her children’s health. Moreover, we examine not only individual social capital but also community social capital. By analysing both types of social capital we are able to examine their effect on child health from both the supply and the demand sides. Furthermore, it uses height-and weight-for-age to measure child health. This means we are able to examine the effect of mothers’ social capital not only on the long-term measure but also on the short-term measure of child health (Fogel, 1994; Foster, 1995).

The main results show that mother’s social capital is positively and significantly associated with children’s health. These results being true with least squares estimators as well as when relying on instrumental variable estimators. All instruments are highly correlated with mother’s social capital; tests of their strength and relevance also reveal their usefulness to mitigate bias estimate of the relationship between mother’s social capital and child health.

Community social capital in the form of active community activities also improves child health particularly for child weight-for-age. The null findings for child height but significant findings for child weight may signal the benefits of community social capital for buffering children from health shocks as child weight is widely thought to be a more responsive measure of child health to shock in the short-run (Foster, 1995). Community social capital matters in terms of buffering community members (including women and children) from health shocks such as those incurred by economic crisis and natural disaster (Putnam, 1995) (and the latter did occur in Indonesia during the period of the IFLS survey). The fact that a child living in a community with denser community activities is likely to have better health status may signal the benefit of these groups for buffering children well-being from such shocks.

The significant association of instruments explains channels for mother’s social capital improvement. These findings relate to prior explanations where social and financial associations have an important function to strengthen solidarity among community members (Beard, 2005; Grootaert, 1999). Within these associations, mothers get to health services as well as access knowledge and information, all of which provide benefits for their children. In addition, the significant relation between the dissemination of in-formation and mothers’ social capital signals those activities are vital for Indonesia, a country where access to information or community programmes is very limited due to geographic remoteness. Lack of access to information is also
widely documented as being one of the most important factors causing lower participation of women and men in community programmes in many developing countries (World Bank, 2004).

This study leaves a number of limitations needing to be addressed, some of which may be dealt with in future research. We are unable to control for all unobservable features of communities that might simultaneously generate relatively high levels of mothers’ social capital and better child health. We try to include a number of socio-demographic characteristics within a community that potentially affect child health. However, unobservable features (such as climate or language across communities) might drive both a women’s choice to get involved in community activities and also have an effect on her child’s health. Moreover, this study examines lack of specific measures of trust, social support, and what community activities mean to the women in the sample. The IFLS 2007 data is rich in many ways, but is not specifically geared towards measuring those features of social networks that matter for children well-being.

Despite these limitations, the findings have important implications, both for the literature and for the practices of development in developing countries. Firstly, recent works on public health and epidemiology in developed countries find that social capital pre-dominantly improves adult health and well-being (Farquhar, Yvonne, & Wiggins, 2005; Subramanian, Kim, & Kawachi, 2002). The empirical results of this study confirm the validity of the positive effect of social capital on child health formation in the context of a developing country, thus demonstrating that the potential benefits of social capital are not limited to developed countries. Secondly, the types of community activities examined in this study are found not only in Indonesia: similar activities are widespread in other developing countries. Thus, Narayan and Pritchett (1999) illustrate how such activities help to improve household welfare in rural Tanzania, while Grootaert and Bastelaar (2002) codify the important roles these types of activities hold in enhancing development across developing countries from Cambodia, India, Bangladesh, Madagascar, Kenya and South Africa. However, very few studies have examined the effect of community activities on child health. This study suggests that such activities are not only beneficial for household economy, but also for other aspects of citizens’ well-being. Thirdly, the fact that mother’s social capital largely benefits children’s health in developing countries suggests that enhancing this capital through enlarging community activities, specifically those that facilitate mother’s access to health information and programming, may provide a channel for reducing disparities in child health and well-being in those countries. Lastly, because child health status has been shown to be related with health and well-being in later life (Barker & Osmand, 1986), this type of social capital may provide another way to reduce inter-generational socio-economic inequality in health.

Appendix A. Supplementary data

Supplementary data related to this article can be found at http://dx.doi.org/10.1016/j.soscimed.2013.04.032.
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Policy Discussion II

1. **Social Protection Floors in South East Asia: Closing Protection Gaps for Children and Families**
   Rachael Chadwick (ILO, Indonesia)

2. **Child Poverty and Social Protection in the Philippines**
   Augusto Rodriguez (UNICEF Philippines)

3. **Malaysia’s Approach in Curbing Child Poverty and Increasing Social Protection**
   Chua Choon Hwa (Malaysia’s Ministry of Women, Family and Community Development, Malaysia)
I. Introduction

Between 2011 and 2013 the International Labour Organization (ILO), in collaboration with governments and several United Nations (UN) agencies working as part of the Social Protection Floor Initiative, conducted Social Protection assessment based national dialogue (ABND) exercises in Cambodia, Indonesia, Thailand and Viet Nam. The exercises were undertaken to take stock of existing social protection realities in order to understand what elements of national Social Protection Floors (SPFs) were in place, where ‘holes’ in national floors exist, and to propose recommendations for the further design and implementation of social protection provisions that would guarantee at least the SPF to the entire population.

This paper provides an overview of the ABND exercises and draws out the child-specific findings from each country study and the resulting recommendations for achieving income security for children, to provide a situational analysis of the SPF as it relates to children in the four countries. The paper also sets out the results of preliminary calculations of the cost of implementing proposed policy options, and draws upon the common SPF ‘gaps’ identified and recommendations made across the four country studies to discuss the utility of the SPF framework for achieving income security for children and their families in the ASEAN region.

While socio-political and economic contexts vary between and within Cambodia, Indonesia, Thailand and Viet Nam, ILO experts observed key parallels in the challenges to – and opportunities for – securing basic income for children. These findings not only have relevance for social protection and child-sensitive development agendas globally, but also illustrate how the SPF framework is a useful tool for policy-making, programme planning and analysis of poverty that incorporates the needs of vulnerable groups, including children.

By presenting the policy gaps and recommendations related to securing basic income security for children within the context of broader assessments of national SPFs, the paper highlights the symbiotic links between various aspects of social protection and the need for holistic programmatic and policy approaches sensitised to vulnerable groups. The costing scenarios

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1 The authors wish to acknowledge the authors of the SPF assessment reports upon which this paper is based, namely Michael Cichon, Florence Bonnet, Carlos Galian, Gintare Mazeikaite, Jean-Claude Hennicot, Wolfgang Scholz, Sinta Satriana, Dr Thaworn Sakunphanit, Orawan Prasitsiriphol, and the many others who contributed to the compilation and production of each respective report.
II. What is the SPF and what is its relevance to child poverty?

What are Social Protection Floors (SPFs)?

Social protection floors (SPFs) are nationally defined sets of rights and benefits that enable and empower all members of a society to access a minimum of goods and services at all times. By calling for both demand (transfers) and supply (services) side measures, the SPF adopts a holistic approach to social protection. The SPF calls for access to these minimum goods and services for all age groups, but with particular attention to marginalized and vulnerable groups (such as ethnic minorities and people with disabilities). Once an SPF has been established, countries may then choose to progressively extend higher levels of social protection to their populations.

The SPF comprises four basic guarantees:

1. All residents have access to a nationally defined set of essential health care services, including maternity care, that meet the criteria of availability, accessibility, acceptability, and quality;
2. All children enjoy basic income security at least at the level of the nationally defined poverty line, ensuring access to nutrition, education, care, and any other necessary goods and services;
3. All those in active age groups who are unable to earn sufficient income, in particular in case of sickness, unemployment, maternity, and disability, enjoy basic income security at least at the level of the nationally defined poverty line;
4. All residents in old age enjoy basic income security at least at the level of the nationally defined poverty line.

Defining the components of SPFs as ‘guarantees’ that are defined at the national level establishes a flexibility that makes achievement of the floor compatible with all possible national social protection systems. The four guarantees set minimum performance or outcome standards with respect to the access, scope and level of income security and health care, rather than prescribing a specific architecture of social protection programmes and benefits. While not all countries will be able to immediately put in place all components for the whole population, the SPF provides a framework for planning progressive implementation of social protection provisions that emphasises the linkages and symbiotic relationships between the different SPF guarantees.

The SPF also serves as a tool for the empowerment of vulnerable groups, including women and children, the disabled, the elderly, ethnic minorities, and people living with HIV. This is particularly relevant for children, who are often uniquely affected by the compounding risks and vulnerabilities associated with poverty. UNICEF argues, for example, that young children are — perhaps more than any other group — vulnerable to the risks posed by contaminated water, poor

presented as part of the assessment exercises additionally illustrate that completing the SPF for children is not financially prohibitive for governments and can be introduced gradually, as the necessary fiscal space becomes available. Furthermore, the ABND recommendations illustrate that much can be achieved through improved management of existing programmes in order to increase their reach and accessibility to beneficiaries. By drawing together data and analysis from the four ABND studies, the paper provides a foundation for comparison with and further discussion of global efforts to define and create national SPFs and, in doing so, ensure income security for children.
sanitation and inadequate hygiene\(^2\). The income security of households, often negatively impacted by external social and economic shocks, also has particular consequences for children’s ability to access education, adequate nutrition, and shelter. Children are also especially vulnerable to risks stemming from the prevalence of HIV and AIDS, such as mother-to-child transmission, being orphaned (death of the breadwinner) or being subject to caring duties that may take them out of school.

**SPFs and the international context**

The utility of the SPF approach in combating poverty has been increasingly recognized at the international level since the global financial crisis of 2007-2008\(^3\). In April 2009, the High Level Committee on Programmes of the UN Chief Executives Board adopted the One-UN Social Protection Floor Initiative (SPF-I) as one of several joint initiatives to combat and accelerate recovery from the global economic crisis. The ILO and the WHO assumed the role of lead agencies of the SPF-I\(^4\). The importance of defining and building national SPFs has also been highlighted by the Group of 20 Finance Ministers and Central Bank Governors (G-20)\(^5\), and incorporated as a central pillar of the post-2015 UN development agenda for inclusive development\(^6\).

Building on this foundation, the International Labour Conference (ILC) adopted Recommendation 202 concerning National Floors of Social Protection (Social Protection Floors Recommendation) at


its 101st session in 2012. Recommendation 202 reaffirms the role of social security as a human right and social and economic necessity, and provides guidance to Members in building SPFs within progressively comprehensive social security systems.

**SPFs in South East Asia**

While the Asia-Pacific region has made considerable economic progress in the last two decades and has lifted millions out of poverty, not all have benefitted from these gains. Millions of people are still poor, deprived of basic rights, and vulnerable to increased risks stemming from global economic crises and climate change. The threat that human development gains made in the past decade may fail to ‘stick’ and begin to reverse, has helped to place social protection high on the policy agenda in the region. At their 67th session in May 2011, member States of the UN Economic and Social Commission for Asia and the Pacific (ESCAP) passed a resolution on ‘Strengthening social protection systems in Asia and the Pacific’. At the 15th Asia and the Pacific Regional Meeting held in Kyoto, Japan 4-7 December 2011, governments, employers, and workers from the Asia and Pacific Region determined that ‘building effective social protection floors, in line with national circumstances’ was one of the key national policy priorities for the Asia and the Pacific Decent Work Decade.

**The SPF, poverty & child poverty**

In parallel with growing global recognition of the value of the SPF framework for achieving sustainable poverty reduction, calls for social protection that is child-sensitive have increased; that is, social protection interventions that specifically address the patterns of children’s poverty and vulnerability and that recognize the long-term developmental benefits of investing in children.

UNICEF’s strategic framework for social protection, for example, stresses that ‘social protection systems need to be responsive to the multiple and compounding vulnerabilities faced by children and their families’ and adopt an ‘intergenerational approach that recognizes the critical role of care-takers, and the importance of addressing their broader vulnerabilities’.

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The commonsense nature of sensitising social protection interventions to the needs of children is beyond the scope of this paper – but in short relates to the disproportionate effect crises and instability often have on those who are already vulnerable (particularly women and children); and the longer-term economic and development benefits of investing in social protection for children to create a healthy and productive future workforce, and to reduce intergenerational transmission of poverty\(^\text{12}\).

The SPF framework is relevant to arguments for child-sensitive social protection for several reasons: it adopts an intergenerational approach that highlights the interrelated dimensions of poverty; it acknowledges the importance of achieving income security for children as part of broader poverty-reduction goals; it additionally promotes broader social programmes that do not focus directly on children but allow families to reduce the financial burden of raising their children, as well as social insurance instruments (e.g. pensions) that may have positive flow-on effects for children; it encourages programmes to be defined within national contexts in response to countries’ varying experiences of vulnerability and deprivation; it acknowledges that access to and delivery of services (supply side issues) are just as important as programmatic and policy change in social protection interventions; and it mainstreams attention to vulnerable groups and groups with compounding vulnerabilities – such as HIV-positive pregnant women\(^\text{13}\).

The following section provides a brief overview of SPF assessment exercises undertaken by the ILO and its government and development partners in Cambodia, Indonesia, Thailand and Viet Nam and draws out the findings and policy recommendations related to achieving income security for children. These recommendations form part of consolidated packages proposed to close SPFs in each country, to ensure the best and most sustainable results for beneficiaries.

### III. Assessing Social Protection Floors in Cambodia, Indonesia, Thailand and Viet Nam

In recognition of the need to take stock of existing social protection realities in order to understand what elements of national SPFs are in place and where ‘holes’ in floors exist, the ILO collaborated with governments, social partners, civil society, academics and several UN agencies in the ASEAN region in 2010-2012 to conduct several social protection assessment exercises. A Social Protection and Performance Review (SPER) was undertaken in Cambodia\(^\text{14}\), supplemented by an ILO-EU financial assessment of the Cambodian government’s National Social Protection

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Strategy for the Poor and Vulnerable (NSPS)\textsuperscript{15}. In Indonesia\textsuperscript{16} and Thailand\textsuperscript{17}, a similar exercise was conducted in the framework of a Social Protection Assessment Based National Dialogue (ABND), and in Viet Nam, the ILO undertook an analysis of the government’s National Social Protection Strategy (2011-2020)\textsuperscript{18} in the context of SPF objectives.

The studies utilised similar methodology, with the common objective of assessing whether the SPF is a reality in the respective countries. Policy gaps and implementation issues were identified and recommendations made for further design and implementation of social protection provisions that would guarantee a SPF for the entire population. The studies also sought to estimate the projected financial commitment needed in each respective country to implement proposed policies for closing the SPF. As part of the social protection assessments, in each country the ILO Rapid Assessment Protocol (RAP) costing tool\textsuperscript{19} was also used to estimate the cost and affordability of implementing social protection recommendations.

**Cambodia**

The Cambodian population has experienced significant social, political and economic upheaval over the past three decades. This has involved transitioning from war to peace; from one party rule to multi-party politics; and from an isolated and planned economy to a free market model. Over the last decade Cambodia has sustained high economic growth, averaging eight per cent annual growth in GDP 2002-2010. This has resulted in better living standards and a declining poverty rate, falling from an estimated 34.7 per cent in 2004 to 15.1 in 2010\textsuperscript{20}.

However recent food and fuel price shocks, the global financial crisis and adverse weather conditions have slowed the economy and progress towards achieving the Millennium Development Goals (MDGs), and raised questions about the resilience and inclusiveness of Cambodia’s growth model. Income disparities are high and increasing between urban and rural areas. In spite of significant reduction in the incidence of poverty, one in six Cambodians continue


\textsuperscript{19} The RAP uses a simple methodology that builds on single age population projections, single age estimates of labour force participation rates; along with a relatively crude economic scenario determined by assumptions about overall GDP growth, productivity, inflation, wages, interest and poverty rates. The model uses these variables as drivers of expenditure and revenues starting from initial statistical values given for the last observation years. To access a presentation providing an outlining a step-by-step methodology for conducting a rapid assessment, see: ‘Tools and Data’ (undated), Social Protection Gateway website, available at: http://www.socialprotectionfloor-gateway.org/24.htm [accessed 23 July 2013]

\textsuperscript{20} Hennicot, J-C and Scholz, W. 2012, op. cit.
to live below the poverty line, and poverty remains concentrated in rural areas where approximately 80 per cent of the population lives. Rural poverty is further exacerbated by widespread landlessness, a legacy of the land distribution policies of the 1980s.\textsuperscript{21} Furthermore, a significant proportion of the population remains ‘nearly poor’, and are thus particularly vulnerable to social and economic shocks that can push them into poverty. UNICEF reports that 1.7 million children under 18 are reported to be living in poverty and 64 per cent of children experience two or more forms of deprivation from food, nutrition, health, water, sanitation, shelter, education, or information\textsuperscript{22}.

The right to social security and other social protection provisions is enshrined in the Cambodian constitution. Article 36 states that “Every Khmer citizen shall have the right to obtain social security and other social benefits as determined by law”. Article 72 stipulates, “The health of the people shall be guaranteed (...) poor citizens shall receive free medical consultation in public hospitals, infirmaries and maternities”\textsuperscript{23}. The principles of social protection have also been included in a number of key policy documents in post-conflict Cambodia\textsuperscript{24}. They have been reaffirmed most recently through the adoption of the Social Security Law in September 2002, the Master Plan for the Development of Social Health Insurance in 2003, the Rectangular Strategy for Growth, Employment, Equity and Efficiency in 2004, and the National Strategic Development Plan (NSDP) Update 2009-2013.

The Cambodian government has recognized, however, that the impact of existing social protection interventions is limited by lack of coordination between the various ministries and non-government organizations (NGOs) that implement them, each of which have their own social protection mandates and policy frameworks. For the most part, social assistance programmes have been ad hoc, geographically limited, under-funded and heavily reliant on non-sustainable donor funding for their continuation. As such, overall coverage of social protection has remained low, with efforts further hampered both by poor coordination among implementing actors and weak overall implementation capacity. Furthermore, existing social security schemes primarily cover only civil servants and private sector employees, leaving the majority of the population uncovered. At present only a minority of the population benefits from very basic, fragmented and often-inadequate social protection coverage.

To address the policy and implementation gaps identified, the Government embarked upon a mapping exercise between 2009 and 2010 to assess the nature and extent of existing social protection measures and to identify policy, institutional and capacity gaps. A National Social Protection Strategy for the Poor and Vulnerable (NSPS-PV) 2010-2011 was compiled on the basis

\textsuperscript{21} The Gini had declined to 0.36 by 2009, however (most recent available data). ‘GINI Index’ (undated), World Bank website, available at: http://data.worldbank.org/indicator/SI.POV.GINI


\textsuperscript{23} Relevant sections of the Constitution confirm the right of every Khmer citizen to social security (Article 36) and commit to establishing a social security system for workers and employees (Article 75). It also contains other social protection commitments such as to women (Article 46), children and mothers (Article 73), the disabled and war veterans (Article 74).

of the results of the mapping exercise. The main rationale of the NSPS-PV is to accelerate progress towards meeting the education, health and livelihood development outcomes enshrined in the Cambodia Millennium Development Goals.

The NSPS-PV focuses on social protection for the poor and vulnerable in the medium term. It also establishes a framework for sustainable and comprehensive social protection for all Cambodians in the long term, including contributory (for those with higher incomes) and non-contributory social security schemes. The NSPS-PV has five key objectives, two of which (bolded) refer specifically to children:

- The poor and vulnerable receive support to meet their basic needs, including food, sanitation, water and shelter, in times of emergency and crisis;
- Poor and vulnerable children and mothers benefit from social safety nets to reduce poverty and food insecurity and enhance the development of human capital by improving nutrition and maternal and child health, promoting education and eliminating child labour, especially its worst forms;
- The working-age poor and vulnerable benefit from work opportunities to secure income, food and livelihoods while contributing to the creation of sustainable physical and social infrastructure;
- The poor and vulnerable have effective access to affordable, quality health care and financial protection in case of illness;
- Special vulnerable groups, including orphans, the elderly, single women with children, people living with HIV and patients with tuberculosis and other chronic illnesses, receive income, in-kind and psycho-social support and adequate social care.

The ILO collaborated with the government of Cambodia to further elaborate national social protection provisions, framework and policy options on the basis of the NSPS-PV. In 2010-2011 the ILO, with funding support from the EU, carried out a Social Protection Expenditure and Performance Review (SPER). SPER is a diagnostic tool developed by the ILO to establish a comprehensive overview of a country’s social protection system.

The SPER exercise included a review of social health protection programmes, social assistance programmes funded by government budget, and donor-funded social protection programs – in addition to reviews of national social security funds for civil servants and veterans and vocational


26 The poor and vulnerable are defined as those living below the national poverty line, and those who cannot cope with shocks and/or have a high level of exposure to shocks, as well as children, girls and women of reproductive age, ethnic minorities, the elderly, people living with chronic illnesses, people living with HIV, and people living with a disability.


28 It comprises an assessment of the country’s demographic, economic and labour market context, and of the main social protection schemes in terms of coverage, expenditure and benefit levels. SPERs seek to assess system financing, identify coverage gaps, and to discuss policy options for consideration by national policy-makers. For further information about the SPER tool and methodology, see ILO 2012, Social Protection Expenditure and Performance Reviews (SPERs), 12 August, ILO website, available at: http://www.ilo.org/secsoc/areas-of-work/statistical-knowledge-base/WCMS_206081/lang--en/index.htm [accessed 19 July 2013]
training programmes. A number of existing programmes were identified that provide assistance to and protection for children, including: a child allowance for civil servants under the National Social Security Fund for Civil Servants (NSSFCS); maternity benefits for veterans; a nursing cash allowance for members of the National Social Security Fund for private sector employees (NSSF); maternity benefits under the planned social health insurance (SHI) scheme; health vouchers for reproductive services; provisions for orphaned, disabled, ‘delinquent’ and drug addicted children; programmes to prevent child labour; a scholarship programme for poor students, and a school feeding programme. Overall, the SPER found that national social protection expenditure consisted mostly of outlays for subsidized health services and social security benefits for civil servants, war veterans and their families. Other social protection measures, including social welfare and cash transfers to the poor and vulnerable, were minor in scope and primarily funded via official development assistance (ODA).

Recommendations stemming from the SPER exercise include improved quality of health care; implementation of social health insurance for formal-sector workers; expanded coverage of existing pension programmes; the introduction of cash transfers for pregnant women and mothers with young children; cash transfers for poor children; and introduction of a universal child benefit.

To supplement the SPER, the ILO additionally carried out a Financial Assessment of Cambodia’s NSPS-PV in 2011, in close collaboration with Council for Agricultural and Rural Development (CARD). The Assessment was conducted with the aim of supporting the national planning process through preliminary costing of alternative policy options for the five key objectives of the NSPS-PV. The cost estimates for the objective related to mothers and children (Objective No. 2) are set out below in Section IV and provide an indication of the affordability of implementing policies to secure income security and a SPF for children in Cambodia.

**Indonesia**

Prior to 1997, Indonesia was considered a high performing Asian economy, with an average GDP growth rate of 7.4 per cent per year; at this time social protection was not a government priority. The impact of the 1997 Asian financial crisis revealed the vulnerability of the Indonesian economy and population to external shocks. Unemployment, dramatic declines in real wages and other economic challenges pushed 25 per cent of the non-poor population into poverty. In response, the government launched its first nationwide social safety net programme in 1998, providing subsidized staple foods, basic education, basic health services, employment opportunities through public works projects, and revolving credit funds.

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29 For more detailed information on these programs, refer to the SPER report: Hennicot, J-C and Scholz, W. 2012, op. cit., pp. 61-97.
30 For more detail on the SPER recommendations, refer to the report: Ibid., pp. 101-103.
33 Satriana, S. and Schmitt, V. 2012, op. cit., p. 3
Indonesia recovered strongly from the 1997 crisis, with steady economic growth and a reduced poverty rate. Growth, however, has not been equitable; inequality as measured by the GINI coefficient increased from 0.31 in 1996 to 0.38 in 2011. UNICEF reports that broader economic growth and poverty reduction conceals geographical and socio-economic disparities that particularly affect children. While extreme poverty—defined as Purchasing Power Parity (PPP) of USD 1 per day or less—is relatively low in Indonesia, close to half (43.3 per cent) of the population is living on the brink of poverty, on USD 2 or less per day. In this context, the importance of a SPF becomes particularly critical.

Development challenges affecting children and youths also include high risk of preventable deaths during pregnancy and childbirth, an estimated 2.7 million involved in some form of child labour, and lack of employment or further education for youths aged 15-24.

In the last decade major milestones towards the development of a national SPF in Indonesia have included the amendment of the 1945 Constitution to include the extension of social security to the entire population, and the enactment of Law No. 40/2004 regarding the National Social Security System, Sistem Jaminan Sosial Nasional (SJSN) and Law No. 24/2011 on Social Security Providers, Badan Penyelenggara Jaminan Sosial (BPJS).

The existing social protection system in Indonesia primarily consists of social security schemes for public servants and private sector workers and a tax-financed social assistance system (public welfare) as part of a broader set of antipoverty programmes and government subsidies. Existing schemes tend to be fragmented and scattered under different ministries and leave the majority of informal sector workers uncovered.

In response to the range of scattered and uncoordinated schemes and as-yet unimplemented legislative developments on social security, the ILO conducted an ABND exercise in Indonesia.

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34 ‘GINI Index’ (undated), op. cit.
38 The law is designed to create a social security system covering all Indonesian workers and their dependents in both the formal and informal economies and mandates the extension of coverage to all residents in the areas of health, work injury, old age, and death of the breadwinner.
39 The law seeks to operationalize Law No. 40/2004 and mandates the transformation of four existing social security providers into two providers: BPJS Kesehatan (BPJS I - Health) and BPJS Ketenagakerjaan (BPJS II - Employment). Universal health insurance under BPJS I is scheduled to take effect in early 2014, while other schemes under BPJS II are anticipated to be rolled out from mid-2015.
40 Social welfare programmes provide access to education, health care, food security, social infrastructure, and employment opportunities. The government also provides universal subsidies for fuel and electricity and targeted subsidies such as rice for the poor and fertilizer, seeds, microcredit, soybeans and cooking oil for particular groups.
41 Informal workers are defined as own account workers, employees of non-registered businesses such as family businesses, unpaid family workers, and domestic workers.
42 The ABND methodology incorporates a range of approaches and tools: literature review of studies, reports, laws, regulations and statistical reports; technical consultations (face-to-face and through workshops) on existing
between May 2011 and November 2012. The exercise involved three main steps: (i) development of an assessment matrix listing and describing existing social security schemes, identifying policy gaps and implementation issues, and providing policy recommendations; (ii) costing of various recommended ‘scenarios’ using the ILO Rapid Assessment Protocol (RAP) tool; and (iii) finalisation and endorsement of the assessment, involving sharing results of the costing exercise and discussing next steps with relevant stakeholders.

The assessment matrix stage of the exercise identified a number of social protection programs targeting children in Indonesia including: grants to schools to fund education for poor students; provincial education programmes; a conditional cash transfer for children and pregnant mothers; a child labour reduction programme; conditional cash transfers for children with social problems; staple food programmes; a school feeding programme; and universal basic vaccinations for children under five.

On the basis of the schemes and coverage identified by the ABND exercise, a number of general policy gaps and implementation issues were highlighted that were relevant to all components of the SPF, namely: almost no protection for non-poor workers in the informal sector; high evasion in the formal sector; data limitations and targeting issues; coordination issues and overlap among programmes. In relation to income security for children, the main policy and implementation gaps identified included:

- Issues of limited coverage, both in terms of the number of recipients and geographical area;
- Need for data improvement and clear beneficiary targeting mechanisms;
- Need for better coordination between programmes to avoid overlaps and increase economies of scale; and
- Issues in programme management and disbursement of benefits (such as late disbursement of funds).

On the basis of the matrix of social protection programs and the implementation and coverage gaps identified, a number of policy recommendations were formulated to complete the SPF in Indonesia. Recommendations for ensuring income security for children include:

- Expand the conditional cash transfer programme (PKH) to more areas and more recipient households (at least to all very poor households);

schemes and their implementation; national dialogue on policy development priorities; capacity development through policy consultations and training workshops; establishment of a technical working group within the UN system; and establishment of a validation mechanism for the exercise at each stage of the assessment, particularly during the finalisation stage to ensure government endorsement of the report. For further information on ABND methodology, see: ILO 2013. Assessment Based National Dialogue, Global Extension of Social Security (GESS) website [Accessed 19 July 2013].

43 The ABND exercise involved a series of individual and public consultations at provincial and national level workshops to complete the assessment matrix in Ambon, Maluku; Kupang, Nusa Tenggara Timur; and Surabaya, East Java. Additionally, consultations with relevant government ministries and departments, social security schemes, anti-poverty programmes, and representatives from workers’ and employers’ organizations, were carried out.

44 For a full list of existing social protection programmes and policies in Indonesia, see the ABND report: Satriana, S. and Schmitt, V., 2012, op. cit., pp. 18-35.

45 For more detailed explanation of the policy gaps and implementation issues, see Ibid., pp. 35-41.

46 Program Kuuarga Harapan (PKH) primarily aims at improving maternal and neonatal health and children’s education among poor households. Priority is given to areas with high concentrations of very poor households,
• Supply side improvements, such as increasing availability and quality of health and education facilities;
• Merge the scholarship program with other relevant programmes;
• Explore and calculate the cost of a universal child benefit programme; and
• Improve targeting and management efficiency of Raskin programme (rice subsidies for the poor).

Other recommendations have direct bearing on social protection for children, such as:
• Extend coverage of social security schemes to informal economy workers – this would ensure income security of informal economy worker parents and thus of their children;
• Explore the possible introduction of maternity benefits for women in the informal economy;
• Improved database and targeting mechanisms;
• Design and pilot testing of a Single Window Service (SWS) for social protection programmes – this would address barriers of access to services, particularly among the informal sector;
• Universal health insurance to cover the treatment of some diseases currently excluded, including programmes to prevent mother-to-child transmission of serious diseases such as HIV and Syphilis.

The ABND exercise used the policy recommendations to propose a number of possible ‘scenarios’ for closing gaps in Indonesia’s SPF. The cost of implementing the scenarios was then calculated using the RAP costing tool. The results of the RAP calculations in relation to closing the SPF gap for children are set out below in Section IV.

Thailand

Thailand has experienced strong economic growth in recent years – on average 4.6 per cent GDP growth between 1999 and 2010 – and has succeeded in reducing the percentage of the population living below the poverty line from 25 per cent in 1994 to 7.8 per cent in 2010. However the benefits of growth have not been distributed equitably; Thailand’s GINI coefficient was 0.39 in 201047.

Child poverty in Thailand ranks the lowest of all the country case studies in this paper; a 2011 UNICEF study found that 16 per cent of children in Thailand experience ‘severe deprivation’ (compared with 90.1 per cent of children in Cambodia) and 2 per cent ‘multiple severe deprivation’ (63.5 per cent in Cambodia)48. The same study found, however, that ‘less severe

47 Schmitt, V., Sakunphanit, Dr. T. and Prasitsiriphol, O. 2013, op. cit.

but where health care and education facilities are available. Beneficiaries are households with children below 15 years of age (or children aged 15-18 who have not yet completed grade 9) and/or pregnant or lactating women. Households receive IDR 600,000-2,200,000 (around USD 60-220) per year depending on family structure and compliance. Conditions include: children are enrolled in school and attend at least 85% of school days; and pregnant and lactating mothers and infants 0-6 years regularly visit health facilities for check ups.
deprivation’ affected 50 per cent of Thai children. Primary challenges were access to water (affecting 30 per cent), shelter (affecting 24 per cent) and food (affecting 19 per cent). Child poverty also disproportionately affects ethnic minorities⁴⁹.

The right to social security for all is reflected in the Thai Constitution⁵⁰ and a range of national legislation⁵¹. In 2012 the Royal Thai Government (RTG) entered into a four-year partnership with the UN system within the UN Partnership Framework (UNPAF). The partnership seeks to enhance Thailand’s capacity to provide universal basic social protection and higher levels of social security benefits through contributory schemes, within a financially and institutionally sustainable framework.

In practice, the development of social protection in Thailand has been fragmented, focusing largely on civil servants and their dependents and workers from the formal sector. Recently, however, two major universal schemes have been introduced – the Universal Coverage Scheme (UCS)⁵² in 2001 and the Non-Contributory Allowance for Older People (known as the Universal 500 Baht scheme) in 2008⁵³. One of the major social protection challenges in Thailand is coverage for the informal economy workers who account for just over 60 per cent of the economically active population⁵⁴.

The ABND exercise in Thailand was carried out between June 2011 and October 2012 by the UN/RTG joint team on social protection, co-chaired by the ILO and the Ministry of Social Development and Human Security (MSDHS). The team engaged line ministries, UN agencies, social partners, civil society organizations, academia and other relevant stakeholders to assess the social protection situation in Thailand, identify policy gaps and implementation issues, and draw policy recommendations for the achievement of a comprehensive SPF in Thailand.

The ABND exercise, like that carried out in Indonesia, involved development of an assessment matrix to list and describe existing social security schemes, identify policy gaps and implementation issues, and provide policy recommendations; costing of selected recommendations using the RAP tool; and finalization and endorsement of the assessment.

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⁴⁹ Ibid., p. 20.

⁵⁰ Notably sections 44 (right to income security during employment and retirement); 49 (right to 12 years of education); 51 (right to public health care services); 52 (right to survival and development for children); 53 (right to income security for the elderly over 60 years of age with insufficient income); 54 (right to income security and appropriate services for people with disabilities); and 55 (right to income security for the homeless).

⁵¹ Including the Social Security Act, B.E. 2533 (1990), the National Health Security Act, B.E. 2545 (2002), the Quality of Life Promotion Act for Persons with Disabilities Act, B. E. 2550 (2007), the Old Age Act, B.E. 2546 (2003), the National Education Act, B.E. 2542 (1999), and the Strategic Plan on Social Welfare for Thai Society. The right to social security for all is also in line with Thailand’s Eleventh National Economic and Social Development Plan.

⁵² The UCS was introduced to provide universal health care coverage to those who remained uncovered by existing public health protection schemes.

⁵³ The Universal 500 Baht scheme was established to provide income security to the elderly over 60 years of age who do not receive any other public pension.

⁵⁴ 62.4 % in 2010: ILO/HISRO-RAP protocol (based on Labour Force Survey data, 2010). A voluntary, partly subsidized package provided under Section 40 of the Social Security Act has been extended to informal economy workers recently; however as of December 2011 only around 2.5 per cent of all informal economy workers had joined the scheme. The National Savings Fund Act, B.E. 2554 (2011) also provides a framework for a new old-age savings mechanism targeted at informal economy workers under which worker contributions would be matched by the Government; however implementation has been delayed.
The exercise identified three social protection schemes targeting children embedded in Thai legislation: the child support grant under the Social Security Act, B.E. 2533 (1990)\(^5\); the right to 15 years of free education guaranteed under the Thai Constitution, B.E. 2550 (2007)\(^6\), including 9 years of compulsory education between the ages of 6 and 15; and the right to education grants for children of civil servants under the Royal Decree on fringe benefits related to children’s education, B.E. 2523 (1980)\(^7\).

A number of social protection programmes targeting children with unclear legal basis were identified, including funds set up to provide scholarships, loans, or assistance in kind (e.g. school meals\(^8\), food distribution)\(^9\).

On the basis of the schemes and coverage identified by the ABND exercise, the following policy gaps and implementation issues were highlighted in relation to the SPF guarantee of income security for children:

- Unclear legal basis for many of the social protection programmes related to children;
- Many programmes do not target and/or cover those most in need;
- Educational outcomes; education is free but quality is an issue, particularly in remote and rural areas;
- Lack of information about existing programmes; and
- Lack of effective monitoring & evaluation.

The primary recommendation for ensuring income security for children stemming from the ABND exercise in Thailand was the introduction of a universal child support grant for children, with the twin aim of reducing child poverty and decreasing the risk of child labour.

Other recommendations were proposed in relation to increasing the availability and quality of services targeting children, such as introduction of an early childhood development service, including day care centres for pre-school children, and improving the quality of education.

Among the recommendations for achieving income security for the working age population, the establishment of a maternity allowance was proposed to provide income security for female informal sector workers immediately after delivery. Such an allowance would ensure that new mothers could maintain suitable standards of health and living conditions for themselves and

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55 Available to insured persons. The grant covers a maximum of two legitimate children until the age of 6 and is intended to cover living expenses, tuition fees, medical and other expenses. The child support grant covered 23.1 per cent of children aged 0-6 years in 2011 (projected data, Health Insurance Systems Research Office).

56 Initially the 2007 Constitution guaranteed the right to 12 years of free education; this was extended to 15 years in 2009 under the Act of Additional Budget Expenditure, B.E. 2552 (2009).


58 Free school meals are provided approximately 60 per cent of schools nationwide, funded by the Ministry of Education.

59 These ad hoc programmes include: grants for widows and children affected by conflict in the south of Thailand; grants for street children; child support grant for children of workers employed in state-owned enterprises; education grants for children of teachers in private schools; loans for students with low socio-economic backgrounds (Kor-Yor-Sor programme); scholarships for students whose parents are dedicated to social activities; scholarships for disadvantaged children, financed by the national lottery; distribution of bicycles to students living in remote areas; distribution of tablet PCs for primary school children (grade 1); and grants for children living with HIV or within families affected by HIV and AIDS, including orphans. See: Schmitt, V., Sakunphanit, Dr. T. and Prasitsiriphol, O. 2013, op. cit, pp. 30-33.
their child. Other recommendations for increasing the income security of the working age population and the elderly through the provision of additional or expanded social security packages would also have direct and/or indirect consequences for the wellbeing of children60.

To elaborate on the findings and recommendations of the ABND matrix, the RAP costing tool was used to calculate the cost of implementing some of the proposed policy options. The results of the RAP calculations are set out below in Section IV.

**Viet Nam**

Viet Nam shares many characteristics with the three other country case studies included in this paper. It has experienced significant economic growth in the past two decades; the poverty rate has declined (from over 66 percent to less than 15 per cent in the last 20 years)61; the benefits of growth have been distributed unevenly (the most recent GINI coefficient measure was 0.3663); and poverty and vulnerability to external and internal economic and social shocks remain key challenges.

Between 2000 and 2007, Viet Nam was the second fastest growing economy among East Asian countries, behind to China. However annual average GDP growth rates of 7.6 per cent slowed 2008-2009 with the global economic downturn63. The Government continues to face the simultaneous challenges of monetary and fiscal contraction, high inflation, persistent rural poverty (especially concentrated among ethnic minority groups), high levels of internal migration, increasing vulnerability to international economic shocks due to integration into the global economy, and natural disasters triggered by climate change64. Like Cambodia, Indonesia and Thailand, Viet Nam also has, a rural-urban divide in poverty levels and access to essential services and educational and training opportunities. High levels of informality in the labour market is an additional challenge to social protection interventions.

Viet Nam currently has a fairly extensive set of social protection programmes in place, such as a social insurance scheme that is mandatory for all workers and covers 18 per cent of the labour force; a health insurance system which is being extended to informal economy workers and the poor and vulnerable through a range of strategies; scattered social assistance programmes; and National Targeted Programmes (NTPs) that focus on specific vulnerable groups, areas and

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60 For a full list of the recommendations, see the report: Schmitt, V., Sakunphanit, Dr. T. and Prasitsiriphol, O. 2013, op. cit., pp. 25-51.


62 ‘Cambodia Data’ (undated), op. cit.

63 Though some recovery was evident from 2010.

sctors. Furthermore, the Ministry of Labour, Invalids and Social Affairs (MOLISA) has formulated a Social Protection Strategy (SPS) for the period 2011-2020 to further plan and develop the national social protection system.

In January 2011 the ILO embarked upon an ABND exercise to support the implementation of the social protection strategy in Viet Nam using the SPF approach and tools. As with the Thai and Indonesian ABND exercises, an assessment matrix was compiled to analyse the extent to which existing and planned social protection provisions match the benchmarks set by the four guarantees of the SPF and to support the identification of policy priorities to complete the floor.

The assessment matrix identified a number of benefit schemes delivering either in-cash or in-kind benefits, often not exclusively targeting children but rather broader ‘vulnerable groups’ such as orphans or the poor. Some of the benefits available to children under these programmes include:

- Free essential services such as water or electricity (limited to ethnic minorities);
- School fee exemptions and reductions for poor students. Over 10 per cent of children attending school benefit from such schemes;
- Loans for students living in poor households;
- Support for ethnic minority children for the purchase of food, textbooks and notebooks;
- Scholarships for poor university students equal to 80 per cent of the basic minimum wage; and
- State coverage of 100 per cent of health insurance premiums for all children under six years of age.

The assessment matrix identified three key deficiencies in existing social protection programmes targeting children: (i) low coverage due to narrow eligibility criteria; (ii) inadequate benefit levels that fail to ensure subsistence living standards (and thus sustainable poverty reduction); and (iii) some overlap among beneficiaries, policies and poverty reduction programme resources. Additionally, a number of implementation gaps were highlighted:

- Implementation of poverty reduction policies is incomplete, with benefits often not reaching the intended recipients – particularly the children of migrant workers;
- Lack of awareness/information about the policies and/or programmes among potential beneficiaries;

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65 These include health care fee exemptions, preferential credit policies, exemptions from education fees, vocational training programmes, and migration programmes to reallocate labour resources.

66 The SPS includes a plan to achieve universal health care coverage by 2014; to provide universal access to basic social services such as education, health care, housing, drinking water, electricity, information, sanitation and legal advice; and to provide a minimum income to those in need. At the time of writing however, the SPS had not yet been approved by the Prime Minister.

67 These include: regular social assistance schemes (received by all age groups, not just children). The number of beneficiaries increased from 416,000 to one million in 2008; children represent just over 5 per cent of total beneficiaries; targeted social assistance reached 61,000 orphaned children in 2006; National Targeted Programme for Poverty Reduction (NTP-PR) which aims to promote access to economic assets and services for the poor; Programmes, such as the P134 programme, targeted at poor and disadvantaged ethnic minority households working in agriculture and forestry and providing beneficiaries with land, housing and clean water; and geographically targeted anti-poverty programmes, such as the P135 programme, that seek to address the structural causes of poverty in remote regions.
• There is no unified registry of beneficiaries for social assistance;
• Monitoring and evaluation responsibilities are divided between different levels of MOLISA and Department of Labour, Invalids and Social Affairs (DOLISA) branches, with no standardised procedure at the national level; and
• Limited resources, distributed between too many programmes.

On the basis of these findings, three scenarios were proposed to close the SPF for children in Vietnam; one universal and two targeted. The proposed benefit packages include a child allowance, additional educational services for children in communities lacking schools or kindergarten, and meals and take-home rations for children attending school. The ABND exercise used the RAP costing tool to calculate the cost of the three policy options, the results of which are outlined below in Section IV.

IV. Estimating the cost of completing the SPF for children

Cambodia

The ILO undertook costing exercises for proposed policy options under the five key social protection objectives of the NSPS-PV. For objective No. 2 which relates to mothers and children, financial assessment of six policy options was carried out to calculate the estimated cost as a percentage of GDP, projected to 2020. The results of the calculations are set out in the table below:

<table>
<thead>
<tr>
<th>Proposed benefit</th>
<th>Estimated cost as % of GDP</th>
<th>Projected cost as % of GDP in 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) Cash transfers for pregnant women who are poor (KHR 75,000 / USD 19 per month for 6 months)</td>
<td>0.07 %</td>
<td>0.02 %</td>
</tr>
<tr>
<td>(ii) Universal cash transfer for all pregnant women (KHR 75,000 / USD 19 per month for 6 months)</td>
<td>0.30 %</td>
<td>0.15 %</td>
</tr>
<tr>
<td>(iii) Cash transfers for poor children aged &lt; 3 years (KHR 56,000 / USD 14 per month)</td>
<td>0.34 %</td>
<td>0.10 %</td>
</tr>
<tr>
<td>(iv) Universal cash transfer for all children aged &lt; 3 years (KHR 56,000 / USD 14 per month as long as qualifying)</td>
<td>1.3 %</td>
<td>0.7 %</td>
</tr>
<tr>
<td>(v) Cash transfers for poor children attending primary school aged 6-11 (KHR 56,000 / USD 14 per month as long as qualifying and attending school)</td>
<td>0.54 %</td>
<td>0.19 %</td>
</tr>
<tr>
<td>(vi) Universal cash transfer for all children attending primary school aged 6-11 (KHR 56,000 / USD 14 per month as long as qualifying and attending school)</td>
<td>2.2 %</td>
<td>1.4 %</td>
</tr>
</tbody>
</table>

68 For full explanation of the assumptions and figures used to make the RAP calculations, refer to the full report: Hennicot, J-C. 2012, op. cit.

69 The decline by 2020 was predicted due to projected decline in poverty and fertility rates and assumed expansion of GDP.
Indonesia

The Indonesian ABND exercise used the ILO RAP costing tool to calculate the projected costs of some of the policy options recommended based on the results of the SPF matrix. Costing was carried out for three ‘scenarios’ to address recommendations for ensuring income security for children. Results of the costing exercises are set out in the table below.

**Table 2. Cost of proposed child benefit schemes, Indonesia**

<table>
<thead>
<tr>
<th>Proposed benefit</th>
<th>Projected additional cost as % of GDP and government expenditure in 2020</th>
<th>Total cost as % of GDP and government expenditure in 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) Extension of the PKH programme to all poor households (rather than only very poor households)71</td>
<td>0.03 % of GDP and 0.20 % of government expenditure</td>
<td>0.05 per cent of GDP and 0.27 % of government expenditure</td>
</tr>
<tr>
<td>(ii) Scenario (i) plus an increased benefit package for children 13-15 years72</td>
<td>0.04 % of GDP and 0.22 % of government expenditure</td>
<td>0.05 % of GDP and 0.28 % of government expenditure</td>
</tr>
<tr>
<td>(iii) Establishment of a universal child allowance for children 0-15 years73 of IDR 400,000/USD 39 per person per year74,</td>
<td>n/a</td>
<td>0.18 % of GDP and 1.04 % of government expenditure</td>
</tr>
</tbody>
</table>

Calculations were also carried out for eight different scenarios for the achievement of universal essential health care, including scenario (viii) introduction of a universal package to reduce mother-to-child transmission of HIV and syphilis75. The cost of the package was calculated at 0.002 per cent of GDP and 0.014 per cent of government expenditure by 2020.

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70 For full explanation of the assumptions and figures used to inform the RAP calculations, see the report: Satriana, S. and Schmitt, V. 2012, op. cit., pp. 47 & 59-62.

71 The beneficiaries of PKH include children under five (25.5 % of total beneficiaries), children of primary school age (50.85 % of beneficiaries), children of junior secondary school age (18.64%) and pregnant or lactating mothers (1.69%). The calculations assumed that this composition, which is based on proportions of existing beneficiaries, would remain constant over time. Annual benefit package and administration costs proposed were as follows: children under 5: IDR 800,000/USD 78; primary school age: IDR 400,000/USD 39; junior secondary school age: IDR 800,000/USD 78; pregnant or lactating mothers: IDR 800,000/USD 78; fixed per household: IDR 200,000/USD 19; estimated admin costs: IDR 220,000/USD 21.

72 The benefit package and administrative costs are the same as for proposal (i) except for junior school children, who would receive a benefit package of IDR 1,200,000/USD 117 per year instead of IDR 800,000/USD 78. This age group was selected as in need of a higher benefit package due to it being particularly at risk of child labour. Higher benefits are designed to reduce the financial burden of a child attending school for families, and thus lessen the likelihood of early entry into the labour force.

73 Also for children aged 15-19 if they have not yet completed ninth grade.

74 Based on the current PKH benefit for primary school children.

75 The package would include one HIV Voluntary Counseling and Testing (VCT) appointment and one free syphilis test for all mothers who will deliver in a particular year. Those living with HIV would receive antiretroviral treatment (ART) prophylaxis to reduce mother-to-child transmission, and those with syphilis would receive antibiotic treatment.
Thailand

The social protection assessment exercise in Thailand also used the RAP costing tool to calculate projected costs of proposed policy options and additional social protection provisions for completing the national SPF. The main recommendation for children – implementation of a universal child support grant – was translated into six different scenarios, with costs calculated for each scenario\textsuperscript{76}. The results of the calculations for each scenario are set out in the table below.

<table>
<thead>
<tr>
<th>Proposed benefit</th>
<th>Projected additional cost as % of GDP and government revenues in 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) All children aged 0-3 (400 baht / USD 13 per month)</td>
<td>0.08 % of GDP and 0.39 % of government revenues</td>
</tr>
<tr>
<td>(ii) All children aged 0-6 (400 baht / USD 13 per month)</td>
<td>0.14 % of GDP and 0.69 % of government revenues</td>
</tr>
<tr>
<td>(iii) All children aged 0-12 (400 baht / USD 13 per month)</td>
<td>0.27 % of GDP and 1.31 % of government revenues</td>
</tr>
<tr>
<td>(iv) All children aged 0-6 (500 baht / USD 16 per month)</td>
<td>0.18 % of GDP and 0.86 % of government revenues</td>
</tr>
<tr>
<td>(v) All children aged 0-12 (500 baht / USD 16 per month)</td>
<td>0.34 % of GDP and 1.63 % of government revenues</td>
</tr>
<tr>
<td>(vi) Poor children aged 0-14 (400 baht / USD 13 per month)</td>
<td>0.04 % of GDP and 0.21 % of government revenues</td>
</tr>
</tbody>
</table>

Viet Nam

After completion of the rapid assessment matrix the ABND exercise in Viet Nam used the RAP costing tool to estimate the financial contribution required for three policy scenarios designed to achieve income security for children, the results of which are set out in the table below\textsuperscript{78}.

\textsuperscript{76} For full explanation of the assumptions and figures used to inform the RAP calculations, see the report: Schmitt, V., Sakunphanit, Dr. T. and Prasitsiriphol, O. 2013, op. cit., pp. 52 & 55-59

\textsuperscript{77} According to global standards, a child support grant should amount to USD 0.67 * 1.25 per day (or USD 25.125 per month, around 750 baht) to avoid extreme poverty, which is higher than the various scenarios proposed. A relatively low level of child support was decided upon in order to avoid creating disincentives for workers to contribute to the Social Security Office schemes.

\textsuperscript{78} For full explanation of the assumptions and figures used to inform the RAP calculations, see the report: Cichon, M.; Bonnet, F.; Schmitt, V.; Galian, C.; Mazeikaite, G. 2012, op. cit., pp. 17, 19, 21-34 & 56-69.
Table 4. Cost of proposed child benefit schemes, Viet Nam

<table>
<thead>
<tr>
<th>Proposed benefit</th>
<th>Estimated cost as % of GDP/government expenditure</th>
<th>Estimated cost as % of GDP/government expenditure in 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) Package including: universal child benefit for children aged 0-1579; additional education services for communities lacking schools/ kindergartens80; and one meal + take-home ration for all children in school aged 5-1581</td>
<td>1.12 % of GDP or 3.52 % of government expenditure</td>
<td>4.31 % of GDP or 13.96 % of government expenditure</td>
</tr>
<tr>
<td>(ii) Targeted child benefit for all poor children aged 0-15 years (conditions identical to option (i))</td>
<td>0.24 % of GDP or 0.75 % of government expenditure</td>
<td>0.70 % of GDP or 2.38 % of government expenditure</td>
</tr>
<tr>
<td>(iii) Targeted child benefit for poor children limited to a maximum of two children per household82 (conditions identical to option (i)).</td>
<td>0.13 % of GDP or 0.40 % of government expenditure</td>
<td>0.39 % of GDP or 1.25 % of government expenditure</td>
</tr>
</tbody>
</table>

V. Discussion: Policy implications & the way forward

Gaps in SPFp: shared challenges

Using the SPF matrix to stock take existing social protection policies and programmes in Cambodia, Indonesia, Thailand and Viet Nam highlighted a number of common areas where national SPFp were revealed to have ‘holes’ – both generally and in terms of ensuring income security for children. Some of the key findings common to all the country studies included:

- Fragmented, ad-hoc and/or overlapping programmes;
- Lack of coordination between social protection interventions – including within and between government departments and non-government development partners – resulting in uneven coverage, duplication of efforts, lack of sustainability and reduced overall impact;
- Low coverage (geographically and in terms of number of recipients)
- Inconsistent eligibility and targeting criteria stemming from limited outreach capacity and data deficiencies;
- Limited monitoring and evaluation of existing programmes, making assessment of programme effectiveness difficult;
- Lack of awareness or knowledge of entitlements to existing programmes among beneficiaries;
- Issues in programme management and disbursement of benefits; and

79 The allowance would be set between 30 and 50 per cent of the minimum wage (depending on the age group) as an incentive against child labour

80 Additional education services would consist of one additional teacher per 20 children plus non-staff costs

81 Meals and take-home rations would be set at 50 per cent of the poverty line per child.

82 Limiting the benefits of the targeted scheme to a maximum of two children per household would be less costly and possibly more favourable in that it prevents perverse incentives for families to have more children. This scenario presents the strongest implementation challenge however, as it would require strong registration and administration processes; further, it raises questions of inequity, as poverty rates tend to be considerably higher among large families.
- Lack of protection for workers in the informal sector, resulting in financial insecurity for families and children.

Highlighting the social protection gaps in each country, and those shared across country case studies, establishes a basis for future programme planning on social protection initiatives. While approaches will inevitably differ between countries due to varied social, economic, cultural and environmental imperatives, as well as in the stage of development of existing social protection schemes, the SPF matrix illustrates the appropriateness of a life-cycle approach to reducing poverty, requiring coordination and coherence between various social protection programmes to address the specific vulnerabilities of children and their families (as well as the underemployed, working poor, elderly and people with disabilities). The SPF framework highlights the multidimensional, interrelated causes of child poverty and thus encourages an approach that concurrently (though gradually) pursues a social protection system that links complementary development objectives (educational, nutritional and health, for example) with aligned programmes (such as income transfers to families with children)\(^\text{83}\).

The ILO’s social protection assessment studies in the Cambodia, Indonesia, Thailand and Viet Nam also highlight that effective social protection programmes are dependent upon the existence, functioning and accessibility of the social services (health, education, child care, etc.) required to deliver the benefits of social security and social assistance schemes. A universal child allowance conditional upon school attendance, for example, may fail to assist those most in need if schools are not accessible and/or available in areas where poor families live. This is another area in which the SPF approach can assist with the development of national social protection frameworks, by defining rights, proposing programme interventions and supply side improvements that together will promote income security and guarantee full development of children’s potential. The proposed scenarios for a child benefit in Viet Nam, for example, consist of packages including not just a cash transfer (addressing child and family income security) but also school meals and take home rations (addressing nutrition, reducing the burden on breadwinners and contributing to sustainable human capital development) and additional educational services in remote areas (addressing supply of and access to education). This approach acknowledges that free access to social services - such as education - may not be sufficient to guarantee development outcomes – like increased school enrolment and reduced drop-out rates. Services often need to be linked to complementary benefits – such as transfers in cash and in kind such as school feeding programmes and take home rations or scholarships for the poor – to ensure that all children, particularly the most vulnerable, can effectively access education and dedicate sufficient time and energy to study.

**Closing national SPFs for children: shared recommendations**

It is noteworthy that in each of the studies presented above, introduction of a universal child allowance (or child support grant) was included as a policy proposal for closing the SPF for children. While in each country alternative forms of conditional cash transfers for children were proposed and costs calculated according to domestic socio-economic realities – for example targeting only poor children, or only children within particular age brackets, rather than a truly ‘universal’ transfer –neither targeted nor universal child benefits were found to be prohibitively expensive. In Cambodia, a universal allowance of KHR 56,000/USD 14 per month for primary school children aged 6-11 was estimated to cost 1.4 per cent of GDP by 2020; in Indonesia a universal allowance of IDR 400,000/USD 39 per year was estimated to cost 0.18 per cent of GDP and 1.04 per cent of government expenditures by 2020. In Thailand the cost estimates for the six

\(^{83}\) ILO 2011b, op. cit., pp. 91-3.
child allowance scenarios ranged from 0.04 per cent of GDP and 0.21 per cent of government revenues (for a 400 baht/USD 13 per month grant to poor children aged 0-14), to 0.34 per cent of GDP and 1.63 per cent of government revenues by 2020 (for a 500 baht/USD 16 per month universal allowance for children aged 0-12 years). And finally in Viet Nam where costs were highest, a universal benefit package for children (including a cash transfer, meals/take home rations and improved educational services) aged 0-15 – set at 25 per cent of the minimum wage for those aged 0-5; 30 per cent for those aged 6-10 and 50 per cent for those aged 11-1584 – was calculated to cost an estimated 1 4.31 per cent of GDP or 13.96 per cent of government expenditures by 2020.

Though universal schemes cost more than those targeted at certain segments of a population, they are easier to administer, removing the need for complicated and disaggregated data collection of verifiable income-based criteria, in order to accurately identify and reach target beneficiaries. For this reason they may be more appropriate in country contexts where data collection and information management systems are less developed or sophisticated. In Thailand, for example, a national identification system for all residents has already been established, which would enable comparatively rapid (approximately three years) introduction of a universal child support grant achievable. Indonesia, on the other hand, is only in the early stages of developing such a system, so introducing a universal grant, or expanded PKH programme as proposed by the ABND, would be more challenging from an information management standpoint.

It is important to highlight that in each of the ILO social protection studies referred to in this paper, cost estimates for child allowances are presented in the context of consolidated packages designed to complete the SPF in each country – that is, proposed child benefits would ideally be introduced alongside measures addressing the other three components of the SPF: access to essential health services for all; income security for the working-age population; and income security for the elderly. Different social protection schemes will invariably positively impact one another if administered in coordinated and complementary ways – for example cash transfers or food subsidies for families implemented in tandem with child allowances will increase the likelihood of children attending school, reduce the prospect of early entry into the labour force, and boost the overall income security and/or nutrition levels of family units.

Where to from here?

Leaving aside the more complex, micro-level and nationally specific policy implications of using the SPF framework to pursue income security for children, overarching lessons can be drawn from the ILO social protection studies undertaken in Cambodia, Indonesia, Thailand and Viet Nam:

- While the development of a national SPF requires the existence or development of adequate fiscal space and strong government commitment to ensure fiscal sustainability, cost projections carried out as part of the SPF country studies confirm that gradual introduction of measures to close SPF gaps for children (such as universal or targeted child benefits ) – whether alone or as part of consolidated SPF packages – is not prohibitively expensive85.

84 Costs were calculated as a percentage of the minimum wage and projected, taking into account wage growth and inflation, up to 2020. The 2010 benefit amounts were: VND 182,500/USD 9 for 0-5 years; VND 219,000/USD 10 for 6-10 years; and VND 365 000/USD 17 for 11-15 years. By 2020 the benefit amounts were projected to amount to: VND 640,799/USD 30 for 0-5 years; VND 768,959/USD 36 for 6-10 years; and VND 1,281,599/USD 60 for 11-15 years. See Ibid, p. 56.

85 For an overview of a range of studies undertaken on the affordability of SPFs, even for low income countries, see Ibid., pp.42-7 and ILO 2010, pp. 22-27.
• Financial modeling of the implementation of cash transfers for children in Viet Nam were found to have a significant impact on overall poverty reduction, not just for children.86;

• The common implementation gaps of existing programmes highlighted in the country studies – notably issues of programme overlap, lack of coordination, poor data management and inadequate monitoring and evaluation – were true of most social protection programmes, but also specifically for programmes targeting poor children. The importance of programme coordination and accurate targeting based on strong data collection and management is particularly evident when examining complementary programmes such as scholarships for poor students, school feeding programmes, cash transfers for poor children, and programmes combatting child labour. The SPF matrices reveal how better management of and development of better information systems for existing programmes – not just introduction of new schemes – can assist to close social protection gaps for children.

• The risk that child income security will be impacted upon by compounding vulnerabilities stemming from shocks to the income security of their family units, and the implications this has for their nutrition, safety, health, ability to attend school, and future human capital development, demonstrate that the intergenerational, holistic SPF framework is a relevant approach to addressing child poverty as well as poverty more broadly.

The endorsement of all four ILO social protection studies by the respective national governments is a promising sign that the necessary commitment for expansion of social protection systems, and of the fiscal space required, already exists. The ILO is continuing to work with national, provincial and district governments in each country to further promote the SPF through a range of technical assistance and cooperation activities. One relevant example is the piloting of a coordination mechanism called the Single Window Service (SWS) in Indonesia or Social Service Delivery Mechanism (SSDM) in Cambodia.87 SWS/SSDM consist of ‘one-stop-shop’ offices at subnational level that deliver social protection programs and employment services, using an integrated database. In Cambodia, the pilot SSDM will seek to coordinate school feeding and scholarship programmes with assistance to vulnerable groups, public works, and conditional cash transfer and health schemes.88 This integrated approach is a tool for integrating the SPF, and will facilitate access for families and children – who often lack access to information and services – to existing social protection schemes.

VI. Conclusion

The results set out above from the ILO social protection studies completed in Cambodia, Indonesia, Thailand and Viet Nam have three primary implications for discussions of and efforts to address child poverty in South East Asia and beyond. Firstly, the SPF framework ensures an approach to social protection that is both holistic and child-sensitive; secondly, the financial commitment needed to close the gaps in national SPFs – including gaps in achieving income

86 This kind of modeling was not carried out in the other country studies so comparisons cannot be drawn. See the Poverty Impact Analysis section of Cichon, M.; Bonnet, F.; Schmitt, V.; Galian, C.; Mazeikaite, G. 2012, op. cit., pp. 35-41.


security for children – is not prohibitive, and is achievable for developing and middle-income countries with adequate budgetary and taxation management; and finally, the SPF approach takes into account the variability of socio-economic contexts within and between countries, and thus the unique vulnerabilities impacting upon income security for children. By providing a set of guarantees that individual governments can use to define their own SPFs, the framework can be employed to set minimum standards for child income security, which can then be used as benchmarks to progressively introduce higher and more comprehensive levels of social protection as the necessary fiscal space becomes available. This can serve as a strong foundation for a broader social protection plan for children (and for all residents) that is achievable and sustainable in the long term.

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Notulensi Policy Discussion II
Rabu, 11 September 2013

Moderator : Niloufar (UNICEF)
Discussant : Vivi Yulaswati (Bappenas)
Rapporteur : Ramon (UNICEF)

Presenter 1:
Name : Rachael Chadwick (ILO Indonesia)
Title : Social Protection Floors in SEA: Closing Protection Gaps for Children and Families

Highlights of Conclusions and Recommendations:
- Parallel in the gaps that are identified across countries studied: coverage, limited monitoring evaluation, issues of program management, lack of protection for informal sector workers
- Recommendations vary across countries, according to stages of development with respect to social protection system
- For Indonesia: improving supply side health services, as it already has legal framework and UHC will start next year
- Social protection floor model highlights the need for supply side improvement
- ILO is continuing to work with provincial government, and preparing the Assessment Based National Dialogue
- Appropriate attention should be given to specific risks faced by children

Presenter 2:
Name : Augusto Rodriguez (UNICEF Philippines)
Title : Child Poverty and Social Protection in the Philippines

Highlights of Conclusions and Recommendations:
- 0.1% of children are suffering from all 3 types of severe deprivations (shelter, water, toilet)
- 2.33% of children are suffering from two severe, overlapping deprivations
- In 2007 Philippines conducted CCT
- To expand the coverage of MCCT which focuses on families with special protection needs, homeless and street families, and extended age coverage
Presenter 3:
Name: Chua Choon Hwa (Ministry of Women, Family, and Community Development, Malaysia)
Title: Malaysia's Approach in Curbing Child Poverty and Increasing Social Protection

Highlights of Conclusions and Recommendations:
- Issues of children are always cross-cutting across ministries and organizations
- Most of the time governments have overlapping target group across entities, that's why child data mapping is needed
- Child data mapping is used as a guide for future policy planning
- Malaysia will never be a welfare state, the aim is to encourage target group to participate and to put their own efforts in the programs (productive welfare).

Discussant's comments:
Name: Vivi Yulaswati (BAPPENAS)

Highlights of Conclusions and Recommendations:
- Social protection floor is like a buzzword. It would be a basis for comprehensive framework for social protection. To implement SPF, it relies on political will and commitment for a durable and comprehensive social protection
- Social protection encompasses many dimensions and aspects. Social protection initiative takes a process even though SPF has been established
- There’s a shift of paradigm with respect to social protection. Social protection is a continuing needs. There is a need to evolve as poverty condition is dynamic. Modifying social protection to meet dynamic needs of the poor is also the key to effective and efficient social protection
- Communication is also the key. Lots of issues behind institution and accountability. There is overlapping and unclear division of labor among ministries
- Having the complexity of the problem, family and community play important roles too. The challenge is how to anchor all programs to meet households’ and families’ needs
- Linking social protection with other elements of poverty reduction strategies is another issue
- Importance to improve coordination among countries.

Questions and Answers:
Questions
- Dr. Katja:
  1. Where do we stand in terms of implementation of the floor?
  2. The conditionality of CCT is interesting about universal pre-school coverage & parents taking courses - how do you see that in terms of putting more burden to get cash actually transferred?
3. Poverty line is national or World Bank’s?

- Ahmad (AusAID):
  1. Poverty rate in Philippines has decreased, but it is contradictive that child poverty over the same period has increased, why is that?
  2. Poverty of total population decreased, but in Mindanao poverty increased by more than 100%, why is that?
  3. Children deprivation from sanitation has also increased while on shelter and water decreased, why?

**Answers**

- Rachael: It's different in each country, but in Indonesia the report has been endorsed. Indonesia calls it single window service. Indonesia has been working with SJSN and Ministry of Manpower to draft regulations. Recommendation for Indonesia is to include HIV treatment in UHC next year.

- Augusto: (Katja) there's a lot of advocacy in getting the CCT. If you want program to be successful, normally you limit the conditionality. But many entities push conditionality. Attendance of parents is checked as a compliance. (Ahmad) 1) in a family, when you count the children then the number becomes higher, 2) Mindanao is a conflicted area, it has been the trend since ages, 3) family with new houses but it is possible they don't have toilets. It is really an advocacy issue, even though it is not prevalent and very region-specific issue.

- Chua: (Katja): Malaysia has an extensive social welfare system in place. But there are duplications from some ministries, and sometimes can be “poisoning” because beneficiaries become too dependent. We need to empower the family itself so that parents could take care of children. Productive welfare is a long term plan in the future. Direct cash transfers will be gradually reduced.

**FINAL CONCLUSIONS & RECOMMENDATIONS:**

- We have to tackle the remaining gaps and challenges to ensure child protection and vulnerability

- This conference is a good opportunity to learn from each other.
Hari ini telah dilaksanakan 5 diskusi parallel. Hasil diskusi tersebut adalah:

1. **Tema 1: Dimensi-dimensi Kemiskinan Anak (Dimensions of Child Poverty) – Candi Singosari**
   
   Rekomendasi yang dihasilkan:
   
   1. Untuk mengatasi kemiskinan anak diperlukan investasi jangka panjang dan pendekatan multisektoral. Tantangan utamanya tidak hanya pada cara untuk menemukan solusi teknis yang paling tepat, tetapi juga bagaimana cara untuk meningkatkan komitmen politik.
   2. Berkaitan dengan permasalahan terkait dengan nutrisi, diperlukan dukungan penelitian mengenai: (i) dampak ekonomi berbagai dimensi kemiskinan non-ekonomi, seperti malnutrisi, untuk menjadi alat advokasi yang efektif untuk meningkatkan sumberdaya untuk program-program yang spesifik; dan (ii) konteks sosio-kultural, seperti modal social dan jaringan kelembagaan masyarakat, yang menjadi penyebab langsung dan tidak langsung kemiskinan dan persoalan nutrisi.
   3. Upaya untuk mengatasi masalah nutrisi (over atau under-nutrition) harus mencakup keluarga yang miskin dan yang tidak miskin.

2. **Tema 1: Dimensi-dimensi Kemiskinan Anak (Dimensions of Child Poverty) – Candi Pawon-1**
   
   Rekomendasi yang dihasilkan:
   
   1. Kajian-kajian yang dipaparkan memperlihatkan berbagai faktor yang berkorelasi dengan kemiskinan anak, yaitu penghasilan keluarga, kondisi pelayanan publik (pendidikan dan kesehatan) yang sulit diakses, tidak dimilikinya akta kelahiran.
   2. Secara statistik diperlihatkan bahwa pendekatan pengukuran kemiskinan anak dengan pendekatan moneter saja tidak mencukupi, sehingga perlu dilengkapi dengan pengukuran dimensi-dimensi non-moneter.

3. **Tema 2: Child-Sensitive Social Protection and Poverty Reduction - Candi Pawon 2**
   
   Rekomendasi yang dihasilkan:
   
   1. Untuk mengatasi berbagai permasalahan anak - seperti anak jalanan, pekerja anak, eksploitasi anak – diperlukan upaya pencegahan dan penanganan secara terpadu.
   2. Keluarga dan komunitas merupakan basis perlindungan anak terpenting, sehingga program perlindungan sosial dari pemerintah perlu diarahkan untuk mengubah perilaku anak, keluarga dan komunitas.
   3. Jika anak dan keluarga miskin dihubungkan dan memiliki akses ke lembaga keuangan, mereka akan bisa memanfaatkan dengan baik.
4. **Tema 3: Inclusive Social Protection - Candi Kalasan 1**

Rekomendasi yang dihasilkan:

1. Perlindungan sosial untuk anak-anak perlu diarahkan juga untuk mengatasi permasalahan terkait dengan migrasi, anak jalanan dan pekerja anak.
2. Untuk mengatasi persoalan pekerja anak, diperlukan kebijakan untuk meningkatkan daya beli dan pemahaman para pengambil kebijakan mengenai adanya trade off antara anak yang bekerja dengan partisipasi sekolah.
3. Diperlukan penguatan ketersediaan data mengeani migrasi musiman di dalam negeri sehingga kebijakan perlindungan sosial dapat disesuaikan dengan persoalan spesifik daerah, khususnya untuk anak-anak usia 15-17 tahun.

5. **Tema 5: Enabling Environment for Social Protection - Candi Kalasan 2**

Rekomendasi yang dihasilkan:

1. Untuk menurunkan angka kematian ibu dan angka kematian anak, diperlukan upaya untuk memperbaiki dari sisi supply (pelayanan) dan sisi demand dan dilakukan secara terpadu oleh berbagai sektor.
2. Dari sisi supply diperlukan komitmen pemerintah daerah dan DPRD, serta perbaikan mekanisme akuntabilitas di tingkat kabupaten.
3. Dari sisi demand diperlukan upaya peningkatan pengetahuan dan kemampuan ibu terkait dengan kesehatan dan tumbuh kembang anak, serta pemanfaatan modal sosial untuk keluar dari kemiskinan.
CONCLUSION

- Child poverty, vulnerability, and deprivation are among the greatest challenges we are facing now all over the world. This is true from both developmental perspective as well as from human perspective.
- A child’s experience of poverty is very different from that of an adult. Children who are considered vulnerable include orphans, street children, child workers, disabled children, and children from excluded families or communities. Hence, it is no wonder that poor and vulnerable children are more likely to have worse adult outcomes than non poor children.
- Child poverty and vulnerability are also closely link to the dynamics of poverty. Households move into and out of poverty due to various risks faced by people across their lifecycles, and this impacts on children.
- There is a recognition that the nature of child poverty is multidimensional. Therefore, to understand child poverty, it is important to look at deprivations beyond monetary poverty.
- This implies that there is a need to assess children by the extent of deprivation they suffer from. This is the only way to develop a flexible system that is capable of meeting individual and group specific needs.
- However, profiling multiple child deprivations without considering household consumption levels may miss important associations that is crucial to understanding child poverty. Therefore, an integrated approach does not have to abandon the monetary poverty approach, as it provides a less arbitrary definition of near poverty, a better understanding of the role of deprivations, and an improved assessment of poverty risk.
- To achieve equal opportunity for children, providing universal access to education, health, and protection for children is imperative. In this aspect, governments’ roles to provide public services are crucial.
- The choice between providing targeted program or universal services is the other face of the same coin with a political economy choice between having a low taxes or a high taxes economic system.
- Given the multidimensional nature of child poverty, policies and programs for child poverty reduction must go beyond sectoral approaches and promote an integrated strategic vision.
- Child-sensitive budgeting, monitoring, and analysis can be used to promote child equity. Nevertheless, the main component of social security for children is social transfer in the form of child benefit.
- Social protection policies and programs are powerful instruments for investing in the future, while at the same time reducing poverty, vulnerability and deprivation among children and their families today. This is because social protection has prevention, protection, promotion, and transformation roles.
- Child protection is different from social protection. Hence, the policy areas of child protection and social protection have largely developed separately. However, it is increasingly recognised that this dichotomy compromises the effectiveness of the response to the needs of vulnerable children. Therefore, opportunities for synergies and linkages are plentiful, and should be taken advantage of to their full potential.
• Indeed, greater synergies between social protection and child protection are necessary and feasible, but it firstly requires more critical thinking about the impact of social protection on child protection and translation of such thinking in design of social protection programmes, and secondly it also requires innovative solutions for the provision of a comprehensive response for children.

• An example of this is to integrate social protection policies for children in poverty with authentic engagement for non-poor children and adolescents to move beyond the dialectic of benefactor-beneficiary.

• In addition, it is also very important to link social protection with broader development.

• In the context of Indonesia, there are indications that the overall poverty reduction strategy and the different social assistance programs currently being implemented lack the ability to address specific risks experienced by children living in poverty as well as to address vulnerabilities that would otherwise enable children to escape poverty in the future.

• Despite national laws and policies guaranteeing specific services and interventions, a large number of children is still deprived of access to birth registration, basic education, nutritional, and health services.

• They are also still prone to a number of vulnerabilities such as falling to early marriage and unfavorable child labor.

• Therefore, policies that are needed should be able to address children vulnerability as well as gender-based and regional disparity by distributing services not only on ratio-based but also by taking into account need projections.

• The policy agenda should adopt a comprehensive approach to reduce poverty that recognizes and addresses potential shocks faced by children, and that strengthens the capacity of family and community to protect and care for their wellbeing.

• This also includes support for poor families to participate in broader social networks to obtain better social supports in implementing better parenting and childcare practices.

• There are also low-hanging-fruit policies that Indonesia can implement with immediate impact on improved welfare of poor children. Some examples of these are providing free birth certificates automatically for any newborn baby, promotion of exclusive breastfeeding by professional health workers, operational fund assistance for pre-schools and early childhood education facilities, fostering an environment that supports healthy eating and lifestyle, revitalization of food and nutrition surveillance system, developing drop in centers for street children, and many more.
CLOSING REMARKS
by Marc Lucet (Deputy Representative, UNICEF Indonesia)

Greetings:

Ibu Deputy Minister for Human Resources and Culture, Ibu Nina Sardjunani;
Pak Director of SMERU, Pak Dr Asep Suryahadi;
Representatives from UN agencies representatives, donor agencies, embassies and NGOs;
Representatives from research institutes and universities;
All speakers and participants of this conference;
Ladies and gentlemen,

First of all let me congratulate you for completing the two days conference on Child Poverty and Social Protection with success and insightful discussions. SELAMAT!

This conference has yet been another forum of exchange between knowledge producers, such as academicians and researchers, and knowledge users, namely policymakers and practitioners. This time around we have set our minds on the issue of child-sensitive social protection with a common interest to reduce poverty among children, the most vulnerable group in society.

We hope such collaboration between policy makers in the government, development partners like us UNICEF, as well as research institution like SMERU can continue effectively contribute to informing a policymaking process that it guided by sound evidence and data.

From Ibu Nina’s words in the opening, we heard that social protection for children was seldom mentioned in the greater dialogue of poverty reduction. We are confident this is now changing and that child poverty is part of the policy analysis. I am very happy that we had both BAPPENAS and TNP2K both voicing their ideas on how poverty reduction and social protection systems could be improved to address children’s vulnerabilities. This reflects government’s commitment to include child poverty in its priority agenda. Although children are everyone’s concern, the impact of macro level policies on children is sometimes overlooked.

In the last two days, we have shared thoughts, ideas, innovations and lessons learned from various regions on a range of issues concerning children and poverty. We have challenged each other on how we could better address child poverty in our own capacities, whether as researchers, practitioners or policymakers. We have collectively agreed on recommendations to take our work forward. Congratulations to all of us on this achievement!

I would like to briefly highlight some of the themes that have emerged during the conference:

I. Transformative social protection – We need to go beyond addressing the just the symptoms of poverty, but the underlying causes, structural, socioeconomic factors that are causing deprivations (both monetary and non-monetary deprivations) among children.

II. Exclusion and inclusion, universality vs. targeting – Some vulnerable groups are being completely missed by the social protection system. We need to build community-based mechanisms that take into consideration household and community dynamics, as well as sociocultural context, in targeting social protection interventions. At the same time there are deprivations also experienced by the non-poor.
III. **Life-cycle approach** – We need to build a social protection system that can identify and address the different vulnerabilities experienced by children throughout the life cycle.

IV. **Context, context, context** – It is so important that we understand the context in which poor children live, the context in which some children become marginalized, the context in which families and communities can respond to their needs in a timely and effective manner. Much more qualitative research must be done to understand these dynamics.

V. **Integration & coordination** – between CP and SP, between sectors (health, education, social welfare), integrated services (one-stop services), between protection and promotion

VI. **Political economy** – Building child-sensitive social protection systems entails trade-offs. We need to make hard decisions on how to spend public funds/taxes e.g. between universality vs. targeted approaches, between investing in building systems over the long-term or immediate social assistance? We must recognize that the answers to these tough questions require not just a mathematical equation or an econometric analysis, but there are political economy factors that influence these decisions.

This is only a start and I hope that the discussions and reflections you have had during these two days have sparked new ideas for your work. For our government counterparts, I am hopeful that this conference is timely for you as you prepare for the new Five Year Development Plan of Indonesia, the RPJMN, as well as other policies at national as well as subnational level.

For other NGOs and practitioners in development sector who are concerned with children issues, I hope that you also have had a positive learning experience during this conference. This certainly helped us as UNICEF to refocus our support to social protection for children. I am confident that our colleagues who joined us from other country offices and from HQs also can bring home enrich ideas they can share with others.

UNICEF in Indonesia is committed as a partner to the Government in building a child-sensitive social protection system. The discussion and deliberations these past two days have spurred a process of learning, reflection and rethinking for me and my UNICEF colleagues on how we could be more effective in doing so. We have identified gaps and hope to improve our work on:

a. **Improving our understanding on vulnerable and at-risk children.** Who are they and, more importantly, why they are marginalized? This can be done through improving our data systems and research agenda, especially focusing on qualitative research to assess social, structural, institutional factors affecting the exclusion of some children.

b. **Analyzing the impact of social protection system and interventions on children** in order to identify the gaps and improve the design for better impact on children. This also entails assessing on the ground how national social protection policies are translated at the local level, how they’re implemented and are impacting on children and their families. This is important feedback to give to the policymakers at national level. Knowledge management and strengthening the interface between academia and government both nationally and internationally are key for facilitating inputs to policy decisionmaking.

c. **Strengthening the participation of communities, families and children** in the design, implementation and evaluation of social protection measures. This is to answer the ultimate question of whether our efforts are effectively addressing the problems that children face. This is a way for us to answer the call to action from Prof Irwanto to put a face on child poverty.
Last but not least, for the academia and researchers, I am optimistic that the conference could enrich and stimulate more research in the respective areas. In the area of research, we always need a well-defined purpose, rigorous design, monitoring, safe-guards and quality control, and of course, relevance and recommendations for policies.

Let me thank all organizing committee who have put all of their time, thoughts and energy into this conference since the end of last year. Thank you very much for Bappenas for the leadership in preparing the conference since the very beginning. I also would like to thank SMERU for their effective cooperation and all their staff’s dedication in making this conference possible. I thank my fellow UNICEF colleagues for their contribution and hard work. All of you have made this conference happen as smoothly as possible, benefitting all those who have attended.

Finally, I of course would like to thank all presenters and participants who have travelled from Jakarta, Yogyakarta, Surabaya, Lampung, Aceh, Papua, Malaysia, Thailand, Vietnam, Myanmar, Cambodia, Lao PDR, the Philippines, India, Tanzania, Georgia, the Netherlands, UK, Switzerland and many other parts of the world. I do hope you go back to your countries with new and innovative ideas for your work and for children in your parts of the world. I wish you have a safe trip home.

Sincere thanks to all of you for the attention, time, ideas, and energy that you have given during this conference.

Terima kasih banyak atas perhatian, waktu, pikiran dan tenaga yang sudah diberikan dalam dua hari ini.

Mohon maaf jika ada hal-hal yang kurang berkenan.

Jalan-jalan ke Pasar Baru
Mampir sejenak di dokter gigi
Sampai jumpa di lain waktu
Semoga kita bersua lagi

Selamat sore.
REPUBLIK INDONESIA
KEMENTERIAN PERENCANAAN PEMBANGUNAN NASIONAL
BADAN PERENCANAAN PEMBANGUNAN NASIONAL

Sambutan Penutupan Deputi Bidang Sumberdaya Manusia dan Kebudayaan pada
“Konferensi Kemiskinan Anak dan Perlindungan Sosial”
(Conference on Child Poverty and Social Protection)
Kerjasama Pemerintah RI – UNICEF - SMERU
Jakarta, 10-11 September 2013

Yth. Deputy Representative UNICEF di Indonesia
Yth. Direktur SMERU
Yth. Para Perwakilan Mitra Pembangunan
Yth. Bapak/Ibu/Saudara Para Pejabat dari Kementerian dan Lembaga
Yth. Para Nara Sumber, Pembahas, dan Moderator serta
Para undangan dan hadirin yang berbahagia

Assalamu’alaikum Warahmatullahi Wabarakatuh
Selamat Sore dan Salam Sejahtera untuk kita semua


2. Konferensi ini merupakan pertemuan yang sangat strategis karena merupakan forum yang mempertemukan para peneliti dengan para perumus kebijakan dan pelaksana berbagai program perlindungan dan peningkatan kesejahteraan anak Indonesia, untuk mendiskusikan isu-isu kemiskinan anak dan perlindungan sosial yang dilaksanakan dalam upaya memenuhi hak-hak anak.

3. Beberapa rekomendasi penting dalam pertemuan ini antara lain:
   - Framework system perlindungan sosial dan penurunan kemiskinan yang pro/ramah anak perlu : memperhatikan aspek kemiskinan anak yang bersifat multidimesi (tidak hanya dilihat dari ukuran ekonomi, namun juga konsumsi kalori, aspek psikologi, sosial, dll); pendekatan multisektoral, kultural dan holistik; memperhatikan kondisi lokal/daerah; diperlukan monitoring dan evaluasi yang sistematis, serta koordinasi lintas sektor yang terpadu.
• Bagaimana agar kebijakan/program-program terkait anak, yang ada atau yang akan disusun, efektif untuk meningkatkan akses dan kualitas layanan bagi anak-anak dari kelompok tertentu, seperti anak berkebutuhan khusus, anak dengan disabilitas, serta anak di daerah tetinggal, terpencil, dan perbatasan.

• Indonesia perlu mempertimbangkan perubahan paradigm terkait perlindungan social dari poor targeted menjadi universal targeted agar dapat menurunkan tingkat kemiskinan dan kualitas hidup penduduk, termasuk anak, dengan lebih efektif.


5. Oleh sebab itu, kita masih mempunyai pekerjaan rumah dalam menindaklanjuti konferensi ini, antara lain:

• Masukan-masukan tersebut perlu dipilah-pilah, mana yang merupakan masukan untuk RPJMN/RPJMD yang akan datang, Strategi kebijakan bagi K/L/SKPD, serta kebijakan operasional di tingkat layanan. Hal ini karena level dari masukan yang kita terima tidak sama.

• Terkait hubungan program-program perlindungan sosial dan penurunan kemiskinan dengan pemenuhan hak dan perlindungan anak:
  ➢ Merumuskan definisi dan menyusun kerangka konsep terkait sistem perlindungan sosial dan pengentasan kemiskinan yang pro/ramah terhadap anak.
  ➢ Merumuskan kebijakan, kegiatan, dan indikator capaiannya terkait pemenuhan dan perlindungan hak anak yang diusulkan untuk dicakup dalam program-program perlindungan sosial dan penurunan kemiskinan.
  ➢ Menetapkan target anak yang akan dicakup oleh program-program perlindungan sosial dan penurunan kemiskinan. Misalnya, anak dari keluarga miskin, anak dengan disabilitas, anak berkebutuhan khusus, anak di daerah terpencil, tertinggal, dan perbatasan.
  ➢ Merumuskan mekanisme (alat) untuk memonitor dan mengevaluasi efektivitas sistem perlindungan sosial dan penurunan kemiskinan dalam meningkatkan kualitas tumbuh-kembang anak dan melindungi anak dari berbagai tindak kekerasan.

• Menyusun Policy Brief berbagai topik-topik utama untuk dapat diadopsi baik oleh Kementerian/Lembaga maupun Pemerintah Daerah.

7. Terima kasih juga kami sampaikan kepada para nara sumber dan peserta yang masih setia aktif berpartisipasi sampai akhir acara ini. Semoga apa yang telah didiskusikan selama dua hari ini bermanfaat untuk pelaksanaan tugas masing-masing, terutama untuk meningkatkan kesejahteraan anak Indonesia.

8. Dengan demikian, kami menyatakan bahwa konferensi ini secara resmi ditutup.

Terima kasih.
Wassalamu’alaikum Warahmatullahi Wabarakatuh.

Jakarta, 11 September 2013
Deputi Bidang Sumber Daya Manusia Bappenas

Dra. Nina Sardjunani, MA