

International Labour Organization



# SOCIAL PROTECTION FLOOR (SPF) COST CALCULATOR 2015

User Manual

## **Objective:**

The Social Protection Floor (SPF) Cost Calculator helps to

- Estimate the <u>costs involved in providing Social Protection Floor benefits</u> for the population of a specified country or set of countries
- Provide policy makers and the general public with <u>an initial assessment</u> of the affordability of basic social protection benefits
- Explore and compare different policy options towards a <u>gradual</u> <u>implementation of a Social Protection Floor</u> (based on ILO Recommendation No. 202)

The simple outlook makes this tool accessible to a wide range of users. Whereas comparable ILO costing tools, such as the Rapid Assessment Protocol (RAP), project the cost of social protection programmes for a longer period and assume gradual implementation, this tool focuses on cost of the full implementation of a guarantee under given conditions and without considering the existing provisions in the country and the initial institutional costs of installation.

Hence, this tool is useful to get an initial idea of the cost range of prospective social protection schemes, and does not aim to substitute more extensive and context-specific cost estimating models.

## **Inputs and Data Sources:**

The costing tool is based on most recent data provided by the

- Country specific statistics
- World Bank Development Indicators
- The UN World Population Prospects
- The IMF World Economic Outlook
- The ILO and other relevant data sources.

This data is then used directly, combined and/or adjusted to 2014 level to create a comprehensive list of variables necessary to conduct the SPF calculations.

The specific sources used for each indicator are listed in the model.

## How to use the SPF Cost Calculator:

A welcome page receives the user, the page gives access to different documents that introduces the user to the whole set of documents to help in the use of the tool and the understanding of the results. Clicking on the "**START**" button will take user to the first step of the estimation process.



Notice that there are certain buttons on each page of the calculator and their uses are described in the table below. Also note that, a selection of at least one option presents in each step is necessary to be made to progress to the next step. A non-selection will present an error message prompting user to make a selection.

Buttons	Use
Restart	Start the process all over again
Previous	Takes user back to the previous page
Continue	Takes user to the next step
Help (12)	Gives user further explanation

There are basically five (5) simple steps in the costing process.

#### Step 1: Choosing the relevant country/countries

There are four options for the choice of countries to include in the cost estimation. These options are:

- 1. Costing benefits for a set of countries
- 2. Costing benefit for country income group
- 3. Costing benefit for a region
- 4. Costing benefit for all countries



The <u>first option</u> opens a window with a list of 104 countries to choose from. Select the relevant countries and add them to the box on the right as the selected countries using the «Add button». In case of the wrong selection, use the «Remove button» to deselect.

Costing benefits for a set of countries	sh	?
Non selected countries	Selected countries	
Afghanistan Algeria Angola Argentina Armenia Azerbaijan Belize Benin Bhutan Bolivia, Plurinational State of Botswana Burkina Faso Burundi	Add > Remove	
Cambodia <u> </u>		International

The <u>second option</u> opens a window with three (3) categories of income groups. Choosing any one will provide estimate for all countries considered under the specified income group. The "Edit selection" tab allows users to add or remove certain countries to and from the predefined set of countries in the selected income groups.

Costing for a country income group Please select an income group for which you want to cost the benefits	?	
Low income		
Lower middle income		
Upper middle income		
	dit selection	
		International Labour
<ul> <li>✓ Restart</li> </ul>	🕻 Previous   Continue >	Organization

The <u>third option</u> provides users with six (6) geographical regions to consider for the estimation. Choosing any one will provide estimate for all countries considered under the specified geographical region The "Edit selection" tab allows users to change the selection by adding or removing countries.

Costing benefits for a region Please select the regions for which you want to cost the benefits	?	
East Asia and Pacific		
Europe and Central Asia		
Latin America and the Caribbean		
Middle East and North Africa		
Sub-Saharan Africa		
South Asia		<b>MION</b>
Edit	selection	International
ク Restart	🔇 Previous   Continue >	Labour Organization

The <u>last option</u> does not open up a new window, but rather considers all countries available in the database. As such the estimation will be presented for all the countries (104) already pre-set in the calculators' database.

#### Step 2: Choose benefits to be included

The tool can provide cost estimates for six social protection schemes: Child benefits, Orphan benefits, Old-age pensions, Public works programmes, Maternity benefits and Disability benefits. The user picks one or more benefit types.

Choice of the be	e <b>nefits to cost</b> efits you want to cost	?
□ Children	□ Public Works	
□ Orphans	□ Maternity	
∽ Restart	Previous   0	Continue > Labour Organization

#### Step 3: Specify the desired programme architecture

The user has the choice between different benefit designs in terms of

- Benefit level
- Further specifications

All the benefits have two things in common:

- 1. **Reference Value** for the calculation of the benefit and there are three (3) options to choose from:
  - -National poverty line
  - -National minimum wage
  - -Dollars Adjusted by Purchasing Power
- 2. Replacement Rate in respect to that value.

The replacement rate specifies which percentage of the poverty line or minimum wage, or how many PPP US\$/day should be granted.

For some programmes, the benefit design can be further specified.

- For children, the target group can be limited to poor children (measured either by the national or international poverty threshold of 2 PPP US\$/day) or to a certain number of children per household.
- Likewise, the target group for the old-age pension can be limited to the poor. In addition, the user can choose to exclude the share of the elderly population that is already covered by existing schemes.
- For the Public Works scheme, the duration of the employment guarantee can be specified:

	Children		
Type of prograr	n	?	The benefit considered consists of a Cash transfer (or its equiva-
● Universal	<ul> <li>○ Directed to the poor</li> <li>Poverty threshold</li> <li> <ul> <li>National Poverty Line</li> <li>○ 2 USD PPP per day</li> </ul> </li> </ul>	<ul> <li>Limited number of children per household</li> <li>No. of children covered</li> </ul>	lent) to families for each child under 15 (unless it is limited to a certain maximum number of children per household).
Benefit Level			The results are based on assumptions such as that the age of individuals and social status of families can be known.
ାMinimum Wage	% of poverty line or minimum wage		The administration costs are not included in any of the
○USD PPP per day	No. of USD PPP per day 2.5		alternatives.
ク Restart		A Previous   Continue >	International Labour Organization

	Public Works		
Benefit Level		?	
⊛Poverty Line ⊙Minimum Wage	% of poverty line 10 or minimum wage	0	The benefit consists of a cash transfer of given value to one (1) unemployed person of working age per each vulnerable
oUSD PPP/d	No. of USD PPP per day	5	household.
Benefit Duration			tions are the capacity to identify vulnerable households with an unemployed person of
Set a number of working days garanteed per year	100		No adminsitration costs are included.
n Restart		A Previous   Continue     A	International Labour Organization

#### Step 4: Saving the results file

The results are automatically set to be saved in the location of the Cost Calculator. However the user has the discretion of changing the location, by click on the "**Change Folder**" button.

If not otherwise indicated, the results file will be created under the name «**results***day\_month\_year\_hour\_minute*». The user can again make changes as desired.

The user indicates whether, next to the overview sheet, the results for each country should be included. This is done by ticking the "Include Country results" tab.

By clicking "Export results", a new *Excel*-workbook opens, containing the desired information and charts.

Regulta Filo		0	
		J	
C:\Users\awudu\Desktop	Change Folder	21	
File Name results24_07_2015_11_46 Include country results		8	
Export results			
	Previous   Continue	inue >	International Labour Organization

#### Step 5: Reading the results

The created workbook consists of:

(i) An abstract worksheet indicating the costs for each country, each benefit, in total for the different countries and on average for all countries:

For more than one country, a table comparing all benefits for all countries in your sample is created. Both the countries and the benefits and beneficiaries chosen are indicated. The table shows the cost of the benefits as a percentage of GDP for the given countries. In the bottom row, the weighted average for the countries is indicated, and the last column provides the total cost of all benefits combined for each country.

There may be some cells containing "n.a." values. This means that some data necessary to estimate the cost of that benefit for that country is missing. If one of the benefits could not be estimated, the cost for the complete set cannot be either, and another "n.a." will appear in the last column. In these cases, the country will be considered for the estimation of the average value in the bottom row only in those benefits where costs are estimated.

	Cost of a universal			Cost of an unemployment			
	child (less than 15		Cost of a universal	support of 100% of minimum	Cost of a benefit of	Cost of a benefit during	
	years old) benefit of	Cost of a benefit of	pension for persons 65	salary to one person per	100% of the poverty line	4 months of 100% of the	
	100% of the poverty	100% of poverty line to	and over of 100% of the	vulnerable household during	to all persons with	poverty line to all	
	line as % of GDP	all orphans	poverty line as % of GDP	100 days	severe disabilities	mothers with newborns	Total
ARMENIA	5.1%	0.0%	2.6%	0.8%	0.6%	0.1%	9.2%
BHUTAN	3.5%	0.0%	0.6%	0.2%	0.3%	0.1%	4.7%
BOLIVIA, PLURINATIONAL STATE OF	13.9%	0.0%	2.0%	2.6%	0.7%	0.3%	19.7%
CAMEROON	21.0%	0.1%	1.6%	0.7%	0.9%	0.5%	24.9%
CAPE VERDE	5.0%	0.0%	0.9%	n.a.	0.4%	0.1%	n.a.
CONGO	7.7%	0.0%	0.6%	2.0%	0.4%	0.2%	11.0%
CÔTE D'IVOIRE	14.9%	0.1%	1.2%	2.4%	0.7%	0.4%	19.6%
EGYPT	5.2%	0.0%	1.0%	1.1%	0.4%	0.1%	7.8%
EL SALVADOR	4.5%	0.0%	1.1%	n.a.	0.3%	0.1%	n.a.
GEORGIA	4.0%	0.0%	3.2%	0.6%	0.5%	0.1%	8.4%
GHANA	6.2%	0.0%	0.6%	0.7%	0.3%	0.2%	7.9%
GUATEMALA	22.3%	0.0%	2.6%	n.a.	0.9%	0.5%	n.a.
GUYANA	1.8%	0.0%	0.2%	n.a.	0.1%	0.0%	n.a.
HONDURAS	21.9%	0.0%	2.8%	n.a.	1.2%	0.5%	n.a.
INDIA	4.0%	0.0%	0.7%	4.6%	0.3%	0.1%	9.8%
INDONESIA	2.3%	0.0%	0.4%	n.a.	0.2%	0.1%	n.a.
KYRGYZSTAN	7.2%	0.0%	1.0%	0.2%	0.5%	0.2%	9.1%
LAO PEOPLE'S DEMOCRATIC REPUBLIC	5.9%	0.0%	0.6%	n.a.	0.3%	0.1%	n.a.
LESOTHO	9.1%	0.1%	1.1%	n.a.	0.6%	0.2%	n.a.
MAURITANIA	19.3%	0.0%	1.5%	1.7%	1.0%	0.5%	24.1%
MONGOLIA	3.3%	0.0%	0.5%	n.a.	0.2%	0.1%	n.a.
MOROCCO	1.9%	0.0%	0.3%	0.6%	0.2%	0.0%	3.0%
NICARAGUA	15.3%	0.0%	2.2%	n.a.	0.9%	0.3%	n.a.
NIGERIA	10.3%	0.0%	0.6%	2.2%	0.4%	0.3%	13.9%
PAKISTAN	19.8%	0.0%	2.6%	n.a.	1.2%	0.5%	n.a.
PARAGUAY	23.1%	0.0%	4.0%	n.a.	1.4%	0.5%	n.a.
PHILIPPINES	4.7%	0.0%	0.6%	2.8%	0.3%	0.1%	8.5%
SENEGAL	30.5%	0.0%	2.1%	1.3%	1.2%	0.8%	35.9%
SRI LANKA	2.3%	0.0%	0.8%	n.a.	0.2%	0.1%	n.a.
SUDAN	n.a.	n.a.	n.a.	1.0%	n.a.	n.a.	n.a.
SWAZILAND	9.2%	0.1%	0.9%	n.a.	0.6%	0.2%	n.a.
TIMOR-LESTE	4.7%	0.0%	0.3%	n.a.	0.2%	0.1%	n.a.
UZBEKISTAN	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
VIET NAM	3.1%	0.0%	0.9%	0.9%	0.3%	0.1%	5.3%
YEMEN	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
ZAMBIA	10.9%	0.1%	0.6%	3.3%	0.4%	0.3%	15.5%
Average	6.0%	0.0%	0.9%	3.3%	0.4%	0.1%	10.7%

(ii) Individual charts comparing the country results for each benefit:









(iii) A chart displaying the cost of the complete benefit package together for all countries with the whole set of information:



(iv) The individual country worksheets indicating the relevant input variables used, as well as the calculated cost of the schemes. All benefits modelled are described and their individual and summed cost as a percentage of GDP. The results appear in a table and are additionally plotted in a graph, which orders the benefits from highest to lowest cost.

Country	Armenia	Country	Cape Verde	Country	Kyrgyzstan	Country	Kyrgyzstan
Original Data		Original Data		Original Data		Original Data	
Total Population	2,983,990	Total Population	503,637	Total Population	5,625,015	Total Population	5,625,015
GDP per Capita in LCU	1,579,610.5	GDP per Capita in LCU	346,727.9	GDP per Capita in LCU	68,491.0	GDP per Capita in LCU	68,491.0
National Poverty Line in LCU	396,337.2	National Poverty Line in LCU	60,314.5	National Poverty Line in LCU	16,205.1	National Poverty Line in LCU	16,205.1
Minimum Wage	540,000.0	Minimum Wage	n.a.	Minimum Wage	7,200.0	Minimum Wage	7,200.0
% of Children in the Population	20.2%	% of Children in the Population	28.8%	% of Children in the Population	30.6%	% of Children in the Population	30.6%
% of Orphans among children	0.0%	% of Orphans among children	0.0%	% of Orphans among children	0.0%	% of Orphans among children	0.0%
% of older persons in the Population	10.4%	% of older persons in the Population	5.2%	% of older persons in the Population	4.1%	% of older persons in the Population	4.1%
Average household size	3.8	Average household size	4.7	Average household size	5.1	Average household size	5.1
Disability rate	3.37%	Disability rate	3.16%	Disability rate	3.00%	Disability rate	3.00%
Total Fertility Rate	1.7	Total Fertility Rate	2.6	Total Fertility Rate	2.8	Total Fertility Rate	2.8
% of fertile age women	25.6%	% of fertile age women	26.1%	% of fertile age women	26.8%	% of fertile age women	26.8%
15 years old) benefit of 100% of	5.07%	15 years old) benefit of 100% of	5.02%	15 years old) benefit of 100% of	7.23%	Cost of benefit as % of GDP 15 years old) benefit of 100% of	7.23%
15 years old) benefit of 100% of	5.07%	15 years old) benefit of 100% of	5.02%	15 years old) henefit of 100% of	7 23%	15 years ald) henefit of 100% of	7 329/
poverty line to all orphans ans	0.00%	poverty line to all orphans ans	0.00%	poverty line to all orphans ans	0.01%	poverty line to all orphans	0.01%
persons 65 and over of 100% of the	2.60%	persons 65 and over of 100% of the	0.91%	persons 65 and over of 100% of the	0.98%	persons 65 and over of 100% of the	0.98%
of 100% of minimum salary to one mplo	0.79%	of 100% of minimum salary to one mplo	n.a.	of 100% of minimum salary to one mplo	0.22%	of 100% of minimum salary to one mplo	0.22%
poverty line to all persons with	0.59%	poverty line to all persons with	0.36%	poverty line to all persons with	0.46%	poverty line to all persons with	0.46%
of 100% of the poverty line to all emit	0.11%	of 100% of the poverty line to all emit	0.12%	of 100% of the poverty line to all emit	0.18%	of 100% of the poverty line to all	0.18%
Total Cost	9.16%	Total Cost	6.41%	Total Cost	9.07%	Total Cost	9.07%
Cost of the benefits for Armenia as a	% of GDP	Cost of the benefits for Cape Verde as a cost of the benefits for Cape Verde a	a % of GDP	Cost of the benefits for Kyrgyzstan as 20% 22% 20% 20% 20% 20%	a % of GDP	Cost of the benefits for Kyrgyzstan as	a % of GDP