

Nepal

Report to the Government

Moving towards a Social Protection Floor in Nepal

**An ILO design and cost assessment
for five new social insurance schemes
for sickness, maternity, employment injury,
unemployment, and medical care**

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A one-week mission by Mr Yamabana and Mr Plamondon was carried out in Kathmandu in February 2015 to set the scope for the design of the contemplated social insurance schemes and to collect data. Mr Plamondon undertook a second mission to Kathmandu in August 2015 to discuss the preliminary results of the cost assessment of the schemes.

The actuarial team benefitted from the inputs of Mr Indu Prakash Shahi, Statistician, who conducted a survey of Nepalese employers concerning the profile of their employees and their compensation experience regarding the different contingencies to be covered by the contemplated schemes.

Sincere thanks are extended to the team of the ILO Country Office for Nepal, in particular Mr. Jose Assalino, Director, and Ms Nita Neupane, Programme Officer, who organized meetings with the different Nepalese stakeholders and efficiently managed the project.

Abbreviations and acronyms

CBS	Central Bureau of Statistics
EI	Employment Injury
EPF	Employees Provident Fund
GDP	Gross Domestic Product
ILO	International Labour Office/Organization
IMF	International Monetary Fund
LFS	Labour Force Survey
PAYG	Pay-as-you-go
SSF	Social Security Fund
TFR	Total fertility rate
UI	Unemployment Insurance

1. Introduction

Nepal is in the process of establishing a comprehensive national social security system based on social insurance principles. One important step to achieve this goal was the establishment of the Social Security Fund (SSF) in June 2011, however, the SSF has not yet started to provide benefits to the members.

Several studies have been carried out to devise a comprehensive social security policy and framework for Nepal. The following nine social insurance schemes, as stipulated by the ILO Social Security (Minimum Standards) Convention, 1952 (No. 102) are currently under consideration: medical care, sickness benefit, unemployment benefit, old-age benefit, employment injury benefit, family benefit, maternity benefit, invalidity benefit, and survivors' benefit. It is currently planned that these nine branches of social insurance will be implemented in a phased manner, starting with the schemes for unemployment benefits, maternity benefits, medical care, sickness cash benefits, and employment injury benefits.

1.1. The 1 per cent tax

According to the SSF Regulation, a 1 per cent income tax is currently levied on total taxable earnings (basic salary plus allowances) of employees of the “formal economy” which is defined in Nepal as being made up of enterprises of ten employees or more. As of the end of 2014, a total of 7 billion Nepalese Rupees (NPR) has been accumulated by the Central Treasury through that tax.

According to information obtained from the Nepalese Ministry of Finance, the 1 per cent income tax is not earmarked for social insurance schemes. As it has been collected in the global treasury basket, it is neither kept nor set aside for an eventual transfer to the SSF, but used for the financial needs of the government, especially the overall social protection needs of the whole population.

It is understood that the 1 per cent tax would represent seed money for the implementation of the different social insurance schemes to be introduced.

1.2. Legislative context

The Social Security Act and the amended Labour Law are currently under the legislative process, and both are supported by all ministries. In addition, labour unions and employers have agreed on the principles of the Social Security Act and the amended Labour Law.

The draft Social Security Act does not provide precise benefit design. It is only mentioned that, in principle, benefits will be in line with the aforementioned ILO Convention No. 102. The Act promotes an “integrated” social security.

Civil servants, military and police are covered under the Civil Service Act that provides benefits similar to those that are contemplated under the Social Security Act. In this report, it is assumed that, like other formal sector workers of Nepal, government employees will be covered by the new Social Security Act.

1.3. Scarcity of data

The cost assessment of the contemplated social security schemes is very difficult given the scarcity of data regarding the potential insured population, the wage levels, and the experience concerning the various contingencies faced by workers. In order to improve the data and information base, the ILO has mandated a statistician in-country to conduct a survey on the profile of employers and employees in the formal sector, and the experience regarding sickness days, employment injury accident rates, health care utilization rates, and cost, maternity incidence and duration of leave and layoffs. Summary results of the survey appear in Annex 1. However, given the small number of respondents, the difficulty to conduct the survey following the April 2015 earthquake in Nepal, and the low level of computerization of most Nepalese enterprises, the survey has limited utility in the context of the present cost assessment.

1.4. Structure of the report

Section 2 of the report presents a general demographic and macroeconomic framework for Nepal. Section 3 analyses the composition of the potential insured population and their salaries. Sections 4 to 8 propose design provisions for the various schemes and propose contribution rates for each scheme. Section 9 presents a summary of findings and recommendations for the implementation of the different schemes.

2. Projected demographic and macroeconomic environment of Nepal

Even if the present cost assessment does not represent a full actuarial valuation with long-term projections, it is necessary to ensure consistency of the various demographic and economic variables that will affect the cost of the different social security schemes. As the cost of social insurance schemes is closely linked to the size and age structure of the population of the country, employment levels, economic growth, and wage levels, a projection of Nepal's total population and economic activity is useful. Demographic projections provide estimates of the size and composition of the labour force while projections of the gross domestic product (GDP) and the growth of labour productivity affect the evolution of the number of workers and their earnings.

Demographic and macroeconomic variables were projected following an analysis of past trends and an estimate of plausible future experience.

2.1. Population projection

Nepal's last official population census took place in 2011 and the resident population was estimated at 26,494,504 persons.

Fertility

The total fertility rate (TFR) represents the average number of children each woman of childbearing age would have if she had all her children in a particular year. If there is no migration, a TFR of 2.1 is required for each generation to replace itself. Fertility in Nepal has significantly decreased over the last three decades, from 6.27 children per woman in 1981, to 5.16 in 1991 and 3.25 in 2001. The last census reveals a TFR of 2.52 children per woman in 2011. In line with *United Nations World Population Prospects: The 2012 Revision*, the TFR in Nepal is projected to gradually decrease from its current level to 1.8 in 2051. Sex ratio at birth is projected constant at 1.07.

Table 2.1. Projected fertility rates for Nepal, by age of the mother

Age	2011	2051
15-19	0.46260	0.23052
20-24	0.94010	0.64487
25-29	0.56505	0.50930
30-34	0.30710	0.29165
35-39	0.17141	0.10260
40-44	0.06609	0.02052
45-49	0.00764	0.00054
Total fertility rate	2.52000	1.80000

Mortality

Life expectancy and improvements in mortality are assumed to occur in accordance with UN estimates. Life expectancy at birth in 2011 is estimated at 67.1 years for males and 69.3 years for females. Mortality improvements are based on the UN medium variant. Under

this pattern of mortality improvement, it is projected that in 2051, life expectancy at birth will reach 75.8 years for males and 79.4 years for females.

Migration

Migration has been projected in line with *United Nations World Population Prospects: The 2012 Revision*. Projected net annual migration for every five years appear in Table 2.2.

Table 2.2. Projected net migration for Nepal

Period	Net migration per year
2011-2014	-80 000
2015-2019	-75 000
2020-2024	-70 000
2025-2029	-70 000
2030-2034	-70 000
2035-2039	-60 000
2040-2044	-60 000
2045-2049	-60 000
2050-2054	-54 000
2055-2059	-48 000

Projected population

Figure 2.1 presents the projected population of Nepal from 2011 to 2071 separated into three age categories: children (0-15), persons who can potentially contribute to the SSF (16-59), and persons aged 60 and over. The evolution of the relative size of each age group (notably the decrease of the population of children and the increase of the number of persons at pensionable age) illustrates the slow projected ageing of the population of Nepal.

Figure 2.1. Projected population of Nepal, by age groups (2011-2071)

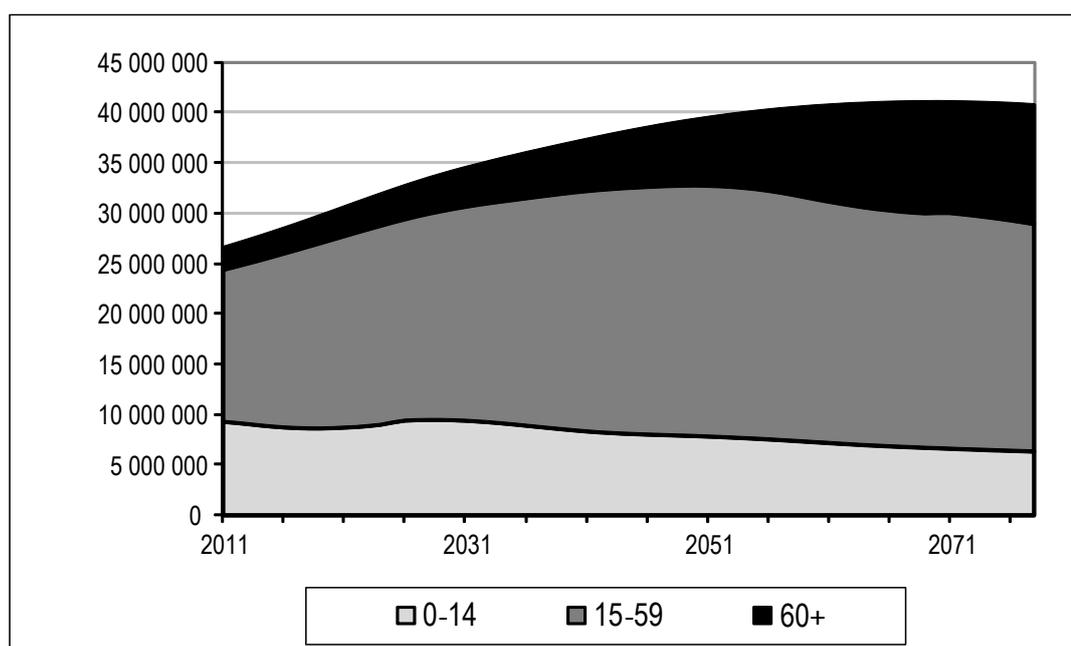


Table 2.3 below presents detailed population projections. It is observed that the total population of Nepal will increase by more than 50 per cent over the next 50 years, from 26,494,504 in 2011 to 40,609,338 in 2061. The number of persons aged 60 and over will grow from 2,154,410 in 2011 to 9,480,911 in 2061. The ratio of the number of working-age persons (15-59) to the number of persons aged 60 and over will fall from 7.0 to 2.5 over the next 50 years.

Table 2.3. Projected population of Nepal (2011-2061)

Year	Age				Ratio of persons aged 15-59 to persons aged 60+
	0-14	15-59	60+	Total	
2011	9 248 246	15 091 848	2 154 410	26 494 504	7.0
2021	8 669 274	19 021 091	2 816 709	30 507 075	6.8
2031	9 353 790	21 253 628	3 792 707	34 400 125	5.6
2041	8 297 672	23 867 417	5 033 773	37 198 862	4.7
2051	7 789 437	24 918 363	6 670 526	39 378 326	3.7
2061	7 144 662	23 983 766	9 480 911	40 609 338	2.5

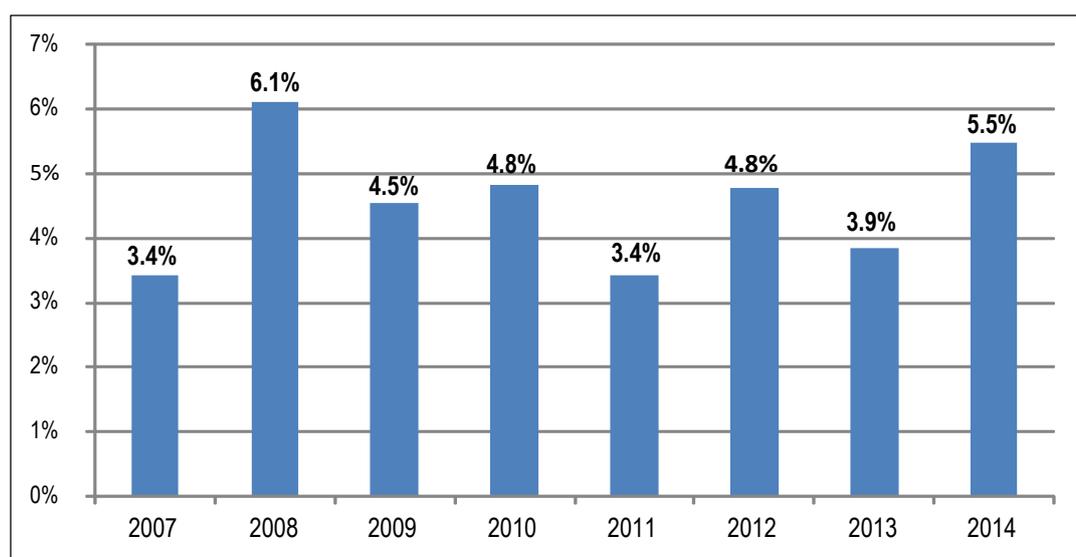
2.2. Macroeconomic framework

Economic growth

Agricultural production is playing a vital role in Nepal's economic growth, but this sector is greatly affected by climatic conditions. Real growth in Gross Domestic Product (GDP) has averaged 4.5 per cent from 2009 to 2014 (see figure 2.2).

While the growth in the service sector has been satisfactory, the growth of the industrial sector has been greatly influenced by the investment environment, labour problems, energy crisis and prolonged political transition.¹

Figure 2.2. Real GDP growth of Nepal (2007-2014)



Source: Central Bureau of Statistics, Nepal.

¹ Ministry of Finance (Nepal): *Economic Survey, Fiscal year 2013/2014*.

Agriculture, which accounts for nearly one-third of output, underpins overall GDP growth. Government policies encouraging banks to lend to the agricultural sector will support a strong performance in the sector. Industrial expansion will remain weak, clouded by continued political uncertainty. However, growth in the services sector will continue to outpace the headline rate of GDP growth. Not only will this reflect the role of tourism in the economy, but strong inflows of remittances from Nepalese workers overseas will also contribute to a solid expansion in private consumption spending, boosting retail trade. Efforts to improve the implementation of government spending will be made, and investment spending will accelerate as the political outlook improves.²

In line with forecasts by the International Monetary Fund (IMF), real GDP is projected to increase by 5.0 per cent in 2015, 5.0 per cent in 2016 and 4.5 per cent for 2017, 2018 and 2019. Real GDP growth should gradually decrease over the long term to levels around 1.0 per cent, driven downward by the slower increase of the labour force.

Productivity

Labour productivity is defined as the GDP per employed person. Data indicate that labour productivity growth has been around 2.0 per cent in recent years. On the basis of IMF forecasts, it is projected to be 2.3 per cent on average from 2015 to 2019. It is further expected to gradually decrease to 1.5 per cent per year in the long term (Table 2.4).

Table 2.4. Projected GDP growth, productivity and total employment (2015-2070) (in percentage)

Year	Real GDP growth	Increase in productivity per worker	Increase in number of workers
2015	5.0	2.4	2.6
2016	5.0	2.5	2.5
2017	4.5	2.1	2.3
2018	4.5	2.2	2.2
2019	4.5	2.3	2.1
2020	4.3	2.3	2.0
2030	3.5	2.0	1.4
2040	2.6	1.5	1.1
2050	2.0	1.5	0.5
2060	1.6	1.5	0.1
2070	0.9	1.5	-0.6

Labour force

The last Labour Force Survey (LFS) in Nepal dates back to 2008. At that time, labour force participation rates were 87.5 per cent for males and 80.1 per cent for females. There appears to be a wide difference, however, between rural and urban labour force participation. While the average rural labour force participation was 86.8 per cent, the urban labour force participation rate was far lower at 67.3 per cent.

The application of the age-specific labour force participation rates and unemployment rates of the 2008 LFS to the population of the 2011 census and the demographic projections

² Economist Intelligence Unit, *Country Report – Nepal, January 2015*.

of Section 2.1 leads to the projected labour market balance appearing in Table 2.5. It is projected that over the next 50 years, the labour force participation rate will remain high – around 93 per cent for males and 84 per cent for females – and that the total unemployment rate will continue to be just above 2.0 per cent.

Table 2.5. Projected labour market balance (2011-2061) (in thousands)

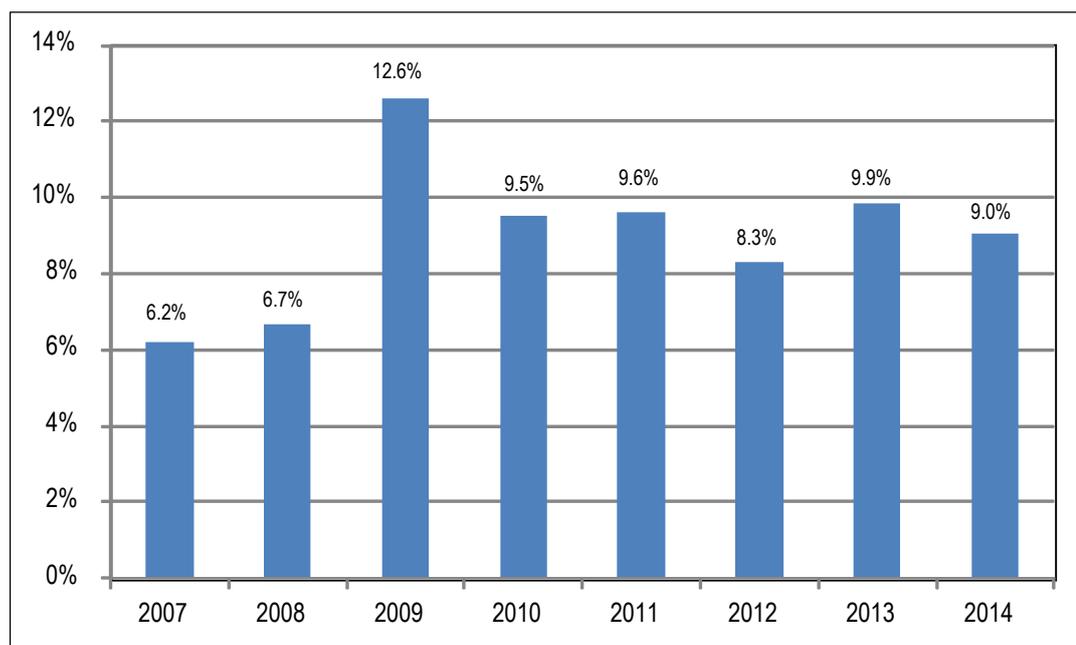
	2011	2021	2031	2041	2051	2061
Total population	26 495	30 507	34 400	37 199	39 378	40 609
Male	12 849	14 900	16 888	18 339	19 510	20 227
Female	13 645	15 607	17 512	18 860	19 868	20 382
Population 15-69	16 403	20 599	23 380	26 573	28 400	29 126
Male	7 716	9 849	11 299	13 047	14 209	14 873
Female	8 688	10 750	12 082	13 525	14 190	14 253
Labour force	14 061	17 714	20 361	23 123	24 719	25 205
Male	6 811	8 689	10 129	11 736	12 820	13 328
Female	7 250	9 025	10 232	11 387	11 899	11 877
Participation rate (in %)	85.7	86.0	87.1	87.0	87.0	86.5
Male	88.3	88.2	89.6	90.0	90.2	89.6
Female	83.5	84.0	84.7	84.2	83.9	83.3
Employed	13 727	17 291	19 907	22 626	24 215	24 709
Male	6 630	8 453	9 872	11 450	12 527	13 036
Female	7 097	8 838	10 035	11 176	11 688	11 674
Unemployed	335	422	454	497	504	496
Male	181	235	257	286	294	292
Female	154	187	197	211	210	204
Unemployment rate (in %)	2.4	2.4	2.2	2.1	2.0	2.0
Male	2.7	2.7	2.5	2.4	2.3	2.2
Female	2.1	2.1	1.9	1.9	1.8	1.7

Inflation

Over the period 2007 to 2014, the inflation rate averaged 9.0 per cent in Nepal (see Figure 2.3). The inflation rate is projected to become moderate, in line with declining Indian inflation, given that Nepal is dependent on India for a range of imports.

In line with IMF forecasts, it is assumed that inflation will gradually decline from 7.1 per cent in 2015 to 5.8 per cent in 2019. From 2020 onward, the inflation rate is projected to gradually decline to 3.0 per cent in 2040 and to stay at that level thereafter.

Figure 2.3. Inflation rates in Nepal (2007-2014)



Source: Central Bureau of Statistics, Nepal.

Wage increases

In future, the real wage increase is expected to be equal to the rate of growth of productivity per worker. Hence nominal wage increases are thought to be gradually decreasing from 9.6 per cent per year in 2015 to 4.5 per cent per year starting in 2040 (see Table 2.6), with a real wage increase (above inflation rates) of 1.5 per cent in the long term.

Table 2.6. Projected inflation rate and wage increase (in percentage)

Year	Inflation rate	Annual nominal increase of average wage
2015	7.1	9.6
2016	6.3	9.0
2017	6.1	8.3
2018	6.0	8.3
2019	5.8	8.3
2020	5.0	7.4
2030	4.0	6.1
2040	3.0	4.5
2050	3.0	4.5
2060	3.0	4.5

Interest rates

According to IMF, the effective interest rate is currently around 1.0 percent. Nepal Treasury bills and interbank rates are close to zero. Commercial banks' deposit and lending rates are 4.2 per cent and 10.8 per cent respectively:

After a tightening of banks' liquidity in late 2012-13, excess liquidity rose again in 2013-14, fueled by remittance inflows and accumulation of government balances in the financial system. This has again pushed interbank and t-bill interest rates to very low levels, and begun to affect retail interest rates.³

Table 2.7 next page presents a summary of the main projected demographic and economic variables resulting from the use of the above mentioned assumptions.

³ International Monetary Fund: *Nepal - Staff Report for the 2014 Article IV Consultation-Debt Sustainability Analysis* (17 June 2014).

Table 2.7 Summary of the main projected demographic and economic variables

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2030	2040	2050	2060
Population, in thousands	26 495	26 857	27 224	27 600	27 990	28 390	28 799	29 216	29 640	30 073	34 076	36 942	39 204	40 528
Population (15-69 years) (in thousands)	16 403	16 840	17 300	17 771	18 240	18 689	19 118	19 522	19 903	20 263	23 059	26 296	28 272	29 108
Labour force (15-69) (in thousands)	14 061	14 424	14 806	15 200	15 596	15 982	16 357	16 718	17 063	17 397	20 077	22 882	24 614	25 207
Labour force participation rate (in %)	85.7	85.7	85.6	85.5	85.5	85.5	85.6	85.6	85.7	85.9	87.1	87.0	87.1	86.6
Employed (in thousands)	13 727	14 080	14 452	14 835	15 220	15 597	15 962	16 315	16 653	16 980	19 627	22 389	24 109	24 710
Unemployed	335	344	355	365	376	385	394	403	410	417	450	493	504	497
Unemployment rate (in %)	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.2	2.2	2.0	2.0
Employment growth (in %)		2.6	2.6	2.6	2.6	2.5	2.3	2.2	2.1	2.0	1.4	1.1	0.5	0.1
Productivity growth (in %)	0.0	2.2	1.2	2.8	2.4	2.5	2.1	2.2	2.3	2.3	2.0	1.5	1.5	1.5
Real GDP growth (in %)	3.4	4.8	3.9	5.5	5.0	5.0	4.5	4.5	4.5	4.3	3.5	2.6	2.0	1.6
Inflation rate (in %)	9.6	8.3	9.9	9.0	7.1	6.3	6.1	6.0	5.8	5.0	4.0	3.0	3.0	3.0
Average nominal wage increase (in %)	15.0	24.1	6.4	11.4	10.5	9.1	8.5	8.5	8.4	7.6	6.1	4.6	4.6	4.6

3. Characteristics of the potential insured population

3.1 Number of workers

It is intended that all persons covered by the amended Labour Law should be covered by the new Social Security Act. While the current Labour Law applies only to enterprises of ten employees or more, considered as “formal” sector in Nepal, the amended Labour Law will apply to all enterprises with one or more employees. Although the new Social Security Act aims at extending coverage even to the “informal” sector, the implementation will have to be carried out in a phased manner.

The question of coverage of civil servants is still under discussion. According to the SSF, the new social insurance schemes should cover civil servants. There is no clear opinion at the Ministry of Finance as to whether the civil servants should be covered by the new SSF scheme or by a separate scheme. In this report, in line with the spirit of the draft Social Security Act, it is supposed that civil servants will be covered by the new social insurance schemes.

The population potentially covered by the new social insurance schemes has been estimated on the basis of the following information from different sources:

- The report on Social Security Concept, Schemes Design, Operations and Business Requirements of Social Security Fund Integrated Management Information System (SSFIMIS) for Implementation of Social Security Fund in Nepal (June 2013) estimates the total number of workers paying the 1 per cent tax for social security at 1,250,000 persons.
- The Labour Force Survey 2008 mentioned on page 15 of this report estimates that the employed population in the formal sector is made up of 76.3 per cent of males and 23.7 per cent of females.
- The membership of the Employees Provident Fund (EPF) is currently around 490,000 persons. They cover civil servants, the army and the police, employees in the education sector, and certain private corporations as well as private schools, universities, diplomatic missions, and nongovernmental organizations (NGOs). Membership is mandatory for the public sector and voluntary for the private sector.
- The Civil Service Pension Scheme covers 300,000 employees.

Table 3.1 shows a distribution of workers currently paying the 1 per cent tax, by employment category.

Table 3.1. Estimated number of formal sector workers paying the 1 per cent tax, by employment category

Employment category	Number of workers
Civil service	90 000
Army	95 000
Police and Armed Force Police	97 000
Teachers (primary and secondary)	90 000
Teachers (private)	110 000
Teachers (9-12)	36 523
Teachers (relief and temporary)	76 071
Cooperative	40 000
Tribhuvan University	15 000
Insurance companies	4 000
Public corporations	40 000
Private banks	40 000
Nepal Rastra Bank	1 500
Security (private)	160 000
Other	354 906
Total	1 250 000

Source: Report on Social Security Concept, Schemes Design, Operations and Business Requirements of Social Security Fund Integrated Management Information System (SSFIMIS) for Implementation of Social Security Fund in Nepal (June 2013).

3.2. Level of salaries

Table 3.2 presents a distribution by age and sex of the number of persons who could potentially be insured initially under the new social insurance system, with their assumed basic salaries. It contains information based on the data presented in Section 3.1, plus the following information:

- From the ILO Survey of employers in 2015, the average basic salaries in the public sector may be estimated at NPR 16,366 for males and NPR 15,442 for females. The sample of the private sector is significantly smaller, but the general level of basic salaries is not so different from the public sector.
- The ILO Survey of employers provides the age distribution of the persons employed by the respondents. A salary scale for each sex has been developed on the basis of this information.

Table 3.2. Number of potential insured persons and estimated average basic salaries, by age and gender (2015)

Age	Male		Female	
	Number	Monthly basic salary (NRs)	Number	Monthly basic salary (NRs)
15-19	157 041	14 847	43 758	14 630
20-24	132 426	15 115	41 418	14 765
25-29	109 469	15 827	39 717	14 899
30-34	102 431	16 274	36 170	15 144
35-39	93 440	16 626	31 793	15 743
40-44	90 483	16 968	28 473	15 934
45-49	78 499	17 313	23 184	16 127
50-54	66 453	17 659	18 438	16 320
55-59	53 247	18 001	14 089	16 511
60-64	40 389	18 351	10 948	16 708
65-69	29 871	18 597	8 262	16 829
Total	953 750	16 366	296 250	15 442

Source: ILO Survey of employers I in 2015, LFS 2008 and authors' calculations.

Basic versus total salary

It is assumed in this report that the benefit amount of the different social insurance schemes will be calculated on the basis of the basic salary. It is estimated that the basic salary represents approximately 60 per cent of the total remuneration in the private sector and 90 per cent in the public sector.¹

The level of benefits should be meaningful for beneficiaries and the establishment of the salary basis for the determination of benefits is therefore crucial. For practical reasons linked to the incapacity of the private sector to appropriately use the total salary as a basis for calculating social insurance contributions and benefits, it is considered in this report that the basic salary represents a more solid basis for this purpose. However, the ILO considers that social insurance benefits should be linked to the total remuneration of the workers in order to maintain the standard of living of beneficiaries when people face different contingencies. It is thus recommended to adopt regulations that allow moving from the basic salary to the total salary for the calculation of contributions and benefits as soon as the salary

¹ In Nepal (as in other countries of the South Asia region), it is usual that a worker's earnings include a number of allowances added to the basic salary. The most important of these allowances is the so-called "dearness allowance", which fulfils the role of cost-of-living adjustments seen in other countries, designed to maintain the real value of earnings in the face of price inflation. In fact, the mechanics of the dearness allowance probably may not be said to represent, in general, a very sophisticated means of dealing with this problem, but are understood in a consensual way by employers and workers as providing a practical approach. In practical terms, the dearness allowance generally represents a fairly steady proportion of the overall remuneration, at around one-third of the total of basic remuneration plus dearness allowance. Other elements are certainly comprised in an individual's remuneration package, reflecting in particular, seniority increases and a range of specific allowances, but do not in general change the picture of a system of remuneration dominated by the basic salary together with the dearness allowance.

structure of the Nepalese workforce will become more suitable for the determination of social insurance parameters on the basis of the total remuneration.

3.3. Density of contributions

No data is available on the density of contributions which is the proportion of the year during which social insurance contributions are paid by the average contributor. The following factors have been considered for estimating an appropriate density factor for persons to be insured under the contemplated social insurance schemes:

- According to the Nepal Labour Force Survey of 2008, the global unemployment rate is 2.1 per cent while the unemployment rate of urban workers is estimated at 7.5 per cent.
- It could be considered that the density of contributions of public sector and formal private sector workers is generally high since these workers benefit from greater job security and regularity.

On the basis of these considerations, it will be assumed in this report that for the cost assessment of the different schemes, the density of contributions is 90 per cent for persons initially covered by the social insurance schemes.

4. Sickness benefits

This section presents the possible design and cost assessment of sickness benefits adapted to the situation of Nepal.

4.1. Coverage

It is proposed that the scope of the scheme will extend, at the outset, to all formal economy workers in Nepal.

4.2. Eligibility conditions

Persons would be eligible for sickness benefits if they paid contributions for 12 months in the last 18 months.

4.3. Benefits

Sickness benefits should be designed to replace a portion of lost income for a limited period. In deciding on the benefit structure, consideration must be given to the benefit rate and to the wages to be used as the basis for calculating the benefit. While the level of benefits should be sufficient to allow the recipient to maintain a certain standard of living, it should not be excessive in order to maintain an incentive to return to work.

For the moment, contributions and benefits are expected to be calculated on the basic salary.

Benefit rate

The ILO Social Security (Minimum Standards) Convention, 1952 (No. 102) requires that sickness benefits, including any family allowances payable, shall not be less than 45 per cent of previous earnings, also including any family allowances, in the case of a standard beneficiary (a man with a wife and two children).

For the introduction of a sickness benefit scheme in Nepal, a benefit rate of 60 per cent is recommended. It would limit the initial cost of the scheme and would ensure that persons on sick leave keep an incentive to return to work as soon as possible.

Reference earnings

To ensure that the sickness benefit bears a close relationship to the claimant's earnings, insurable wages in a period just preceding sickness should be used as the basis for determining the weekly benefit amount. A 6-month period would be a reasonable period over which to average insurable wages in order to reflect the recent earnings level and, at the same time, to avoid penalizing workers with a few weeks of low wages immediately preceding sickness.

Minimum benefit

A minimum benefit could be introduced to cover cases where wages in the reference period are extremely low. The sickness benefit, in addition to replacing previous earnings,

should provide sufficient income to face basic expenses during sickness. The minimum amount of the monthly sickness benefit shall be 60 per cent of the minimum wage.

4.4. Duration of payment

Waiting period

A waiting period before benefits commence should also be included. This waiting period avoids having persons who are sick for very short periods and claiming for only a few days. Therefore, it serves mainly to reduce the cost of administration. ILO Convention No. 102 states that a waiting period of three days may be introduced. A waiting period of three days is thus recommended for Nepal.

For information, Nepal's current Labour Law stipulates that employers must compensate 12 days of sick leave. It is understood that these sick leaves may serve to fill up the waiting period.

Maximum duration

ILO Convention No. 102 states that the payment of sickness benefits may be limited to 26 weeks. The Convention also mentions that where the country has made a declaration according to Article 3 of the Convention ("economy and medical facilities insufficiently developed, claiming a temporary exception"), the duration of payment of sickness benefits may be limited to 13 weeks.

Given the state of development of the country, the low duration of sickness leave observed in the data obtained from the ILO Survey of employers, and the desire to keep costs at a reasonable level, a maximum duration of 13 weeks is recommended for sickness benefits.

4.5. Cost assessment

From the survey of employers, it is observed that the incidence of sickness is very low. This may be due to:

- the fact that most workers who fall sick tend to claim "casual leave" instead of "sick leave";
- the absence of adequate income protection, particularly in the private sector.

The duration of sickness is also very low. According to the ILO Survey of employers, among sick leaves that have lasted more than three days, the number of sickness days exceeding three days is on average six days in the public sector and three days in the private sector.

Hence the survey data must be used with care and sufficient margins must be added to take into account the fact that the introduction of a sickness benefit scheme may induce a higher incidence of sick leave among workers.

Following a prudent approach and assuming: (1) an incidence rate of 10 per cent and (2) an average duration of ten days of benefits for all sickness spells lasting more than three days, a contribution rate of 0.4 per cent of insured earnings is recommended for the sickness scheme. Detailed cost assessment methodology and parameters are presented in Annex 2.

The most appropriate funding method for such a benefit is the pay-as-you-go method (PAYG). Under this approach, current scheme income should be just sufficient to meet current expenditure. The SSF should establish a Sickness Contingency Reserve to cover costs should expenditure temporarily exceed income. A reserve equal to six months of the scheme's expenditure would be sufficient to leave time for an adjustment of the contribution rate in case of unfavourable experience. Some variation of the reserve below or above that level may be tolerated before considering a modification of the contribution rate.

An actuary should review the contribution rate at three-year intervals so that rate revisions can be recommended to avoid either over-funding or depletion of reserves. Such scheduled actuarial reviews should not, however, preclude rate changes from taking place between reviews, should they become necessary.

5. Maternity benefits

This section presents the possible design and cost assessment of a maternity benefit scheme adapted to the situation of Nepal.

5.1. Coverage

It is proposed that the scope of the scheme will extend, at the outset, to all formal economy workers in Nepal.

5.2. Eligibility conditions

Persons would be eligible for maternity benefits if they paid contributions for 12 months in the last 18 months.

5.3. Benefits

5.3.1. Maternity allowance

The Maternity allowance should be designed to replace a portion of lost income for a limited period. In deciding on the benefit structure, consideration must be given to the benefit rate and to the wages to be used as the basis for calculating the benefit. For the moment, contributions and benefits are expected to be calculated on the basic salary.

Benefit rate

The ILO Social Security (Minimum Standards) Convention, 1952 (No. 102) requires that maternity benefit shall be not less than 45 per cent of previous earnings. On the other hand, ILO Convention No. 183 on Maternity Protection suggests a benefit rate of 66.67 per cent.

For the maternity allowance in Nepal, a benefit rate of 60 per cent is recommended, mainly to be in line with the benefit rate recommended for the other benefit branches of this report.

Reference earnings

To ensure that the maternity allowance bears a close relationship to the claimant's earnings, insurable wages in a period just preceding the maternity leave should be used as the basis for determining the monthly benefit amount. A 6-month period would be a reasonable period over which to average insurable wages in order to reflect the recent earnings level and, at the same time, to avoid penalizing workers with a few weeks of low wages immediately preceding the maternity leave.

Minimum benefit

A minimum benefit could be introduced to cover cases where wages in the reference period are extremely low. The maternity allowance, in addition to replacing previous earnings, should provide sufficient income to face basic expenses during the period of maternity leave. The minimum amount of the monthly maternity benefit would be 60 per cent of the minimum wage.

5.3.2. Maternity grant

A maternity grant would be paid for each birth, in addition to the maternity allowance, to women who satisfy the contribution requirement for the maternity allowance. It would be payable for each birth in case of multiple births. The amount would be NPR 10,000

5.4. Duration of payment

ILO Convention No. 102 (Social Security Minimum Standards) states that the duration of payment of the maternity allowance should be at least 12 weeks. ILO Convention No. 183 (Maternity Protection) suggests a duration of 14 weeks. It may also be mentioned that the draft Labour Law stipulates 14 weeks of paid maternity leave.

The recommended maximum duration of the maternity allowance is 14 weeks.

5.5. Cost assessment

The most appropriate funding method for such a benefit is PAYG. Under this approach, current scheme income should be just sufficient to meet current expenditure. The SSF should establish a Maternity Contingency Reserve to cover costs should expenditure temporarily exceed income. A reserve equal to six months of scheme's expenditure would be sufficient to leave time for an adjustment of the contribution rate in case of unfavourable experience. Some variation of the reserve below or above that level may be tolerated before considering a modification of the contribution rate.

On the basis of the UN fertility rates illustrated in Table 2.1 and the age distribution of women presented in Table 3.1, it is estimated that a contribution rate of 0.3 per cent of insured earnings would be appropriate for a Maternity allowance and 0.1 per cent of insurable earnings for the Maternity grant. Detailed cost assessment methodology and parameters are presented in Annex 2.

Such a relatively low contribution rate results partly from the fact that contributions for maternity benefits would be paid by male and female insured persons while benefits are received only by females insured. Furthermore, females represent a very small percentage of total insured persons, being estimated at 24 per cent of potential insured persons in Section 3.2.

An actuary should review the contribution rate at three-year intervals so that rate revisions can be recommended to avoid either over-funding or depletion of reserves. Such scheduled actuarial reviews should not, however, preclude rate changes from taking place between reviews, should they become necessary.

6. Employment injury benefits

This section presents the possible design and cost assessment of an employment injury (EI) benefit scheme adapted to the situation of Nepal.

6.1. Coverage and eligibility

It is proposed that the scope of the scheme will extend, at the outset, to all formal economy workers in Nepal, with the exception of self-employed persons who would not be covered. Workers are covered from the time they commence employment.

6.2. Definitions

Work accident refers to any event or series of events which results in an injury to a worker arising from, or in the course of, the worker's employment. In the absence of evidence to the contrary, an accident arising in the course of a worker's employment is deemed to have occurred in that employment. This includes accidents that occur during work commute resulting in "journey claims" after three years of the implementation of the EI scheme.

Occupational disease refers to a disease which is due to the nature of a worker's employment. Certain diseases which are recognized as occupational in nature will be identified in regulations to be promulgated.

Average monthly earnings of a worker are the sum of the worker's earnings over the six months immediately preceding the month of the injury divided by the number of these six months during which contributions were paid or payable. Earnings include only the basic salary.

Temporary incapacity refers to a condition resulting from a work injury which requires medical treatment and renders the worker temporarily incapable of doing the work.

Permanent disablement refers to disablement of a permanent nature which reduces the earnings' capacity of a worker in every employment which the worker was able to undertake at the time of the injury.

Permanent total disablement refers to the worker being permanently incapable of performing all work.

6.3. Benefits

For reference, ILO Convention No. 102 (Social Security Minimum Standards) stipulates that employment injury benefits for short- or long-term incapacity should represent 50 per cent of previous earnings for the injured person and, in case of death, 40 per cent for the survivors. On the other hand, the ILO Employment Injury Benefits Convention, 1964 (No. 121) proposes a replacement rate of 60 per cent for the injured person and, in case of death, 50 per cent for the survivors.

6.3.1. Temporary incapacity benefits

The proposed benefit in case of temporary incapacity is equal to 60 per cent of the injured worker's earnings at the time of accident. The benefit is payable from the second day

following the day of the injury until recovery, or until assessment of possible permanent disablement. The worker's employer is responsible for paying his/her wages for the day of the accident and the following day.

6.3.2. Permanent disablement benefits

Benefits in case of permanent disablement would depend on the percentage of disablement as follows:

- For permanent **total** disablement, the pension would be equal to 60 per cent of the worker's average monthly earnings over the three months preceding the accident. The pension would be payable for life from the date of permanent disablement subject to periodic verification of the continuance of permanent disablement through reassessment of the percentage of disability two years after onset and every five years thereafter until age 55.
- For permanent **partial** disablement, the pension would be equal to 60 per cent of the worker's average monthly earnings over the three months preceding the accident, multiplied by the percentage of disability. In cases where the percentage of disability is lower than 20 per cent, the disabled worker could opt for a lump sum equivalent to the value of the disablement pension (factors to be determined).

6.3.3. Benefits in case of death

Survivors' pensions would be payable in the event of the death of a worker due to an occupational injury or disease or the death of a disablement pensioner.¹

The maximum amount of all survivors' pensions payable in respect of the death of a worker due to a work injury is the permanent disablement pension for 100 per cent disablement, that is, 60 per cent of the worker's average monthly earnings that are adjusted for subsequent cost of living increments in the case of the death of a disablement pensioner.

The general principle would be to have two categories of dependents: Primary dependents (spouse and children) and, in the absence of the primary dependents, secondary dependents (all others) would be considered, with payments as follows:

- The spouse would receive 60 per cent of the maximum amount;
- Each child would receive 20 per cent (up to 40 per cent for all children). Pensions to children would terminate when the child reaches the age of 18, or gets married before that age, or until age 21 if attending school.
- In the absence of spouse and children, the total payable would be 70 per cent of the maximum amount, distributed to the secondary dependents according to a priority list,

¹ The draft Social Security Act mentions that the dependent family means the family of the employee or self-employed person living in, and within, the same family dwelling or family related to each other. It includes the following:

- (i) Husband or wife;
- (ii) Son, daughter in law or daughter;
- (iii) Father, mother, mother-in-law or other in laws;
- (iv) Grandson or granddaughter.

beginning with parents and followed by brothers, sisters and others. The parents would get 40 per cent and the others 30 per cent of the maximum amount.

In addition, a **funeral grant** would be paid to cover funeral and burial expenses. The amount of the funeral grant would be NPR 25,000.

6.3.4. Medical care

Hospital outpatient or inpatient care, medicines, artificial limbs, and rehabilitation are provided. Overseas medical care may be provided. For the purpose of this cost assessment, it is assumed that each case of overseas medical care is limited to a ceiling of NPR 50,000.

6.3.5. Occupational safety, and health and accident prevention measures

It is easily understandable that prevention is better than treatment and compensation. Minimizing employment injuries and occupational diseases through occupational safety and health measures is therefore a common objective by the government, employers, and workers. In this way, workers' compensation schemes can play a role in supporting and encouraging accident prevention. A decrease in work accidents will in turn reduce the scheme expense and entail improved productivity as a result of fewer work interruptions.

6.4. Financial system

A flat contribution rate for all employers is recommended initially. Industry-based contribution rates and a rating based on the experience of individual employers could eventually be introduced.

6.4.1. Methods of financing EI benefits

The principle of financing an employment injury scheme is to fund all benefits which are payable due to work accidents and occupational diseases that occur in a year through contributions made by employers in the year. Since contributions collected on an annual basis will cover all current and future costs related to claims occurring in the year, today's employers pay the full cost of today's claims.

There are two types of benefits which are payable under an EI scheme:

- *short-term benefits* which are normally payable for less than one year and that cover temporary incapacity, medical care and funeral grants);
- *long-term benefits* which may be payable for the lifetime of beneficiaries and that cover (permanent disablement and survivors' pensions.

In any given year, contributions must be sufficient to pay the short-term benefits and to set up a fund to pay the long-term benefits arising from claims in that year.

Short-term benefits

For short-term benefits, the average incidence (frequency) and the average severity (duration) of temporary incapacity claims normally varies little from year to year. Most temporary incapacity benefit payments terminate within one year, either due to recovery or assessment of permanent disablement. The benefit is directly related to the injured worker's earnings, and the pay-as-you-go (PAYG) financial system is appropriate for financing

temporary incapacity benefits. Under the PAYG system, the contribution rate is set at a level which will produce sufficient funds to pay the temporary incapacity benefits arising from work injuries in the year.

The PAYG financial system is also used to finance estimated costs of medical care, funeral grants, and lump sum permanent disablement payments arising from injuries in a year.

While the average incidence rate of work injuries or deaths normally varies little from year to year, deviations from the average incidence rate occur. In a relatively small scheme, such as the EI scheme in Nepal, these deviations can have significant financial implications. In order to avoid the financial impact of unusual and unexpected occurrences such as excessive incidence rate of injuries and/or deaths, a contingency reserve should be set up in order to pay benefits in the event of adverse experience and thereby maintain the stability of the contribution rates to the scheme. The recommended level of contingency reserve is at least two years' expected expenditure on benefit payments.

Investment of funds in the contingency reserve should be made so that they are available for paying short-term benefits and can be readily liquidated to meet unexpected excess expenditure.

Long-term benefits

In order to pay disablement and survivors' pensions, the amounts of these pensions are capitalized and the current value of the pensions is paid from contributions in the year the injury or death gave rise to the pension. This financial system is referred to as "terminal funding" or "assessment of constituent capitals".

An EI long-term benefits account should be set up into which capital values of permanent disablement and survivors' pensions are transferred, investment income is credited, and from which pension benefits are paid. On the occasion of each triennial actuarial valuation, pensions being paid from the account should be valued, and the required amount in the account should be adjusted by considering appropriate mortality and interest assumptions.

6.5. Cost assessment

In order to set contribution rates for industry classes, it is necessary to estimate the incidence and severity of work injuries and occupational diseases in Nepal. With any new EI scheme, there is virtually no national experience on which to base the rates, nonetheless, the existence of the work injury social insurance scheme will result in reporting of occupational injuries which were previously unreported or uncompensated.

Assumptions are mainly based on international experience, with some consideration of national data obtained from the survey, and therefore subject to significant uncertainty. These cost estimates are conservative given the uncertainty of future incidence rate of work injuries and the lack of experience data. The contribution rate should be revised a few years after implementation of the system as actual experience emerges.

The cost of the different EI benefits has been determined as follows (Table 6.1):

- For temporary disability, an average incidence rate of 2.0 per cent has been used. The average number of benefit days has been assumed equal to 60, in line with international experience. The average annual cost of temporary disabilities is estimated at 0.22 per cent of insurable earnings.

- For permanent disability, incidence rates also reflect international experience. The incidence of permanent disability has been established at 0.05 per cent for total disability and 0.02 per cent for partial disability. It is assumed that the current value of a unit of annual pension is equal to 21. The average annual cost of permanent disabilities is estimated at 0.70 per cent of insurable earnings for total disability and 0.11 per cent of insurable earnings for partial disability.
- The incidence of EI deaths has been established at 0.006 per cent. It is assumed that the probability of having a spouse is 80 per cent and that each person dying after a work injury has 1.8 children. It is also assumed that the value of a unit of annual pension is equal to 19 for a spouse and 9 for a child. The average annual cost of death cases is estimated at 0.05 per cent of insurable earnings.
- The cost of medical care and rehabilitation is set equal to 50 per cent of the cost of temporary disability benefits and is thus estimated at 0.11 per cent of insurable earnings.
- The cost of administering the EI scheme is estimated at 0.18 per cent of insurable earnings.

Detailed cost assessment methodology and parameters are presented in Annex 2.

Table 6.1. Composition of the EI annual cost rate (in percentage)

Temporary disability benefits	0.22
Permanent disability benefits	0.81
Survivors' benefits	0.05
Health care and rehabilitation services	0.11
Administration	0.18
Total	1.37

As mentioned previously, a contingency reserve of at least two years expected annual benefit payments arising from claims in a year should gradually be built up. No specific charge is made to set up this reserve. It is expected that a surplus will result from the initial years of operation of the proposed EI scheme and this surplus should be allocated to constitute the reserve. In EI schemes, contributions are paid solely by employers.

7. Unemployment insurance

It is envisaged to replace the present gratuity benefits (lump sum amount at employment termination) stipulated in the Labour Law and introduce an unemployment insurance scheme.

It appears that major causes of unemployment in Nepal are: (1) retrenchments in certain economic sectors; (2) layoffs in the tourism sector, and (3) seasonal employment in the tourism industry, for example, recreational trekking, and in the sugar and tea plantations.

7.1. Objectives

Unemployment insurance schemes have both primary and secondary objectives.

¹

The primary objectives involve assisting individual workers during periods of involuntary unemployment while the secondary objectives stress the promotion of economic efficiency and stability.

Primary objectives of unemployment insurance schemes are to:

- provide cash payments during involuntary unemployment;
- maintain, to a substantial degree, the unemployed worker's standard of living;
- provide time to find employment consistent with skills and experience;
- help unemployed workers find jobs.

Secondary objectives are to:

- stabilize the economy during recessions by enabling unemployed workers to maintain their personal income and consumption spending;
- promote better utilization of labour by encouraging unemployed workers to find appropriate jobs and, where necessary, helping them to improve their job skills;
- help employers maintain a skilled work force as skilled workers are not forced to seek other jobs, and are thus free to return when they are called back.

7.2. Administration of Unemployment Insurance

7.2.1. Administrative functions

Unemployment insurance is probably the most difficult of all social insurance benefits to administer, in view of the need to prevent the simultaneous receipt of unemployment benefits and earnings from work. Benefit claims must be carefully checked and efforts of

¹ G.E. Rejda: *Social Insurance and Economic Security*, 5th edition (Prentice Hall, USA).

jobseekers to find employment closely monitored, requiring a well-staffed employment service.

The six main administrative tasks involved in running an unemployment insurance benefit are:

- (1) registering workers and employers;
- (2) collecting contributions;
- (3) recording contributions and insured earnings;
- (4) registering benefit claimants as unemployed and receiving their benefit claims;
- (5) checking that claimants are involuntarily unemployed, available for work and actively seeking employment, and monitoring that this continues to be the case as long as benefit is payable;
- (6) processing benefit claims, checking fulfilment of contribution condition, calculating and paying benefit.

The first three tasks are unlikely to involve much additional work for a social insurance institution which is already administering other branches of social insurance, provided that the coverage of the unemployment insurance benefit and the definition of insurable earnings are identical to that of the existing schemes. The social insurance institution will normally have efficient contribution collections and claims processing systems. The social insurance institution will also be in the position to check if the claimant for unemployment benefits is also claiming sickness, maternity, or employment injury benefits for the same period.

For the verification of unemployment and continued eligibility for a benefit, a combined mechanism involving the social insurance institution and a separate independent employment service should be used. While SSF inspectors may play a limited role, a separate employment service will be best suited to check the eligibility requirements related to the capacity and availability for work as well as assist in the search for suitable re-employment. These include checking that unemployment was in fact involuntary, and that unemployment continues with the claimant being available for work and seeking employment. Together with the typical SSF functions, these make the administration of an unemployment benefit more complex and difficult than other regular tasks performed for other social insurance benefits. Proper planning leading to the selection of the employment agency and a clear description of their mandate are therefore required.

The first part of Task 4 (*Registering benefit claimants as unemployed*) involves extra work. In all countries, it is found that unemployed workers who are not able to obtain cash benefits often do not take the trouble to register as unemployed. Non-registration tends to be highest in countries whose employment service is not thought to provide very effective assistance to jobseekers in finding new employment and where employment service offices are not easily accessible. The second part of Task 4 (*Receiving benefit claims*) will also involve extra work, especially as most unemployed workers will be claiming benefits for the first time. Even with very simple and well-designed claim forms, many claimants are likely to require some staff assistance in completing them.

Task 5 (*Checking that claimants are involuntarily unemployed, available for work and actively seeking employment*) is undoubtedly the most complex and difficult aspect of administering an unemployment insurance benefit. A certain number of workers might engage in defrauding the scheme by claiming benefits and at the same time receiving earnings from work. Some others may, without any dishonest intent, simply fail to make

much effort to find employment. Even if these form a small percentage of cases, they are not easily monitored so long as they are receiving benefits. When interviewing claimants, staff will inquire how they lost their job, try to find other suitable jobs for them, and inquire about the steps the workers themselves have taken and are taking to find other employment. Another closely related task has to be performed by social insurance inspectors whose duties must include surprise visits to workplaces to check that all workers are duly insured and that no worker is claiming unemployment benefit at the same time as working.

The first part of Task 6 (*Processing benefit claims*) will entail additional work and will require ready access to the individual contribution records of the workers concerned. Information technology allows this work to be performed quickly and efficiently and is in the interest of both the unemployed worker and the social insurance institution. However, this presupposes that the database containing the individual records includes all the information required to check that the qualifying period has been completed and to calculate the benefit that is due.

The second part of Task 6 (*Checking the fulfillment of contribution conditions and calculating benefits*) requires data on recent earnings and UI contributions paid. Contribution records are never fully up-to-date. Employers have a certain period of time in which to pay contributions (following the end of the month concerned) and in practice, many pay late. In addition, it takes time to enter all the data into the individual contribution records. Two options can be envisaged to address this issue:

Option 1: A Termination Certificate could be filled by the employer, providing the amounts of earnings and UI contributions paid during the two months preceding unemployment.

Option 2: The application of the eligibility test based on the number of paid contributions over the last 12 months and the calculation of benefits could be performed for the period ending two full months preceding the starting date of unemployment. The records of the SSF thus have more chance to be up-to-date and this would avoid the need for employers to fill a Termination Certificate. In some cases, however, the use of the most recent information, for example, up to the month just preceding unemployment could be to the worker's advantage, helping them to meet the eligibility conditions or generating a higher level of benefit. In those cases, the unemployed worker should have the opportunity to ask for the use of the last two months' information for eligibility and benefit determination, and the employer should be contacted to complete the information.

Tasks such as 1 to 3 can be performed only by the SSF, while others such as tasks 4 and 5 can be performed only by the employment service. There is therefore an obvious need for close co-ordination between these two agencies. Ideally, before the employment service embarks on the time-consuming task 5 (*Checking that claimants are involuntarily unemployed, available for work and actively seeking employment*), it would be useful to check whether or not the claimant fulfils the contribution conditions for receiving unemployment benefits. This would be feasible only if individual staff members in the employment service could consult the social insurance institution's database.

7.2.2. Job placement

An essential role for the agency certifying that claimants are eligible for an unemployment benefit is the matching of vacant positions with suitably skilled workers. Such a service could assist employers in rapidly finding the persons with the right skills and in reducing the time for which employees with special skills may be without work. To achieve these objectives, the following steps should be followed for each unemployment benefit claim:

- enable the initial claim for unemployment benefits and initial registration as a job seeker to be made simultaneously;
- ensure that the active job search commences as soon as possible after loss of job;
- regularly test that active job search efforts are being maintained by the UI recipient.

Determination of entitlement to cash benefits from the initial claim to cessation will be undertaken through the partnership between the SSF and the employment service on the basis that the SSF applies the insurance rules and the employment service is responsible for the labour market conditions. The SSF will pay the weekly benefit at each stage only when the employment service forwards information obtained through regular contact with the claimant.

It may be worth noting that the following employment and skills development programmes presently exist in Nepal.

Programmes	Objectives
Poverty Alleviation Programme	Poor people provided with employment opportunities
Technical and Vocational Education Training (TVET)	Skills training for poor and disabled people
Assisted Migration	Subsidized loans for economic migrants
Technical Education for Dalits and Poor Girls	Skills-oriented training
Child Labour Elimination and Child Labour Reform Programme	Child rights protection

Source: National Steering Committee on Social Protection, *National Framework for Social Protection (Draft)*.

In addition, a pilot program is currently implemented in 14 centres in Nepal, which may be considered as the first phase of creation of a national employment service.

7.3. Design of the scheme

This section presents the possible design of an unemployment insurance benefit adapted to the situation of Nepal.

In designing an unemployment insurance benefit, the following issues have to be considered:

- Who will be covered?
- What will be the eligibility requirements for benefit?

-
- What level of benefit will be paid?
 - How long will it be paid?

7.3.1. Coverage

It is proposed that the scope of the scheme will extend, at the outset, to all formal sector workers in Nepal. However, some groups of workers could be excluded for various reasons:

Public sector employees

The members of the protection services (army, police, and armed police) and those employed under conditions covered by the Civil Service Act already enjoy redundancy provisions under their terms of service.

Permanent government employees are normally at very low risk of being involuntarily unemployed. However, it may be considered that 25,000 public employees under employment contract without job security as well as 35,000 persons working in public enterprises which may undergo a privatization process, for example, telecommunication companies and banks could be more vulnerable to unemployment.

The decision as to whether UI coverage should be provided to permanent government employees should be based on considerations of whether or not there is true need for insurance from job loss as well as on solidarity with all other workers in the country. Providing coverage for other workers would bring two key advantages: It would enhance the solidarity among formal sector workers where all contribute and all can benefit, and secondly, the inclusion of a substantial part of the workforce would broaden the collection base of the scheme and, since claims incidence from the government sector is likely to be lower than for other groups, their inclusion would result in a lower contribution rate being required from all contributors.

In today's economic environment, where increasing productivity and improving efficiency are paramount, civil servants, as a group, may not be as secure in their employment as they care to believe. Therefore, there is a risk of a permanent civil servant being involuntarily unemployed, albeit smaller than that of the private sector, and thus coverage under an unemployment insurance benefit would meet conditions for insurability. It is recommended to include all civil servants in the covered population.

Self-employed persons

Unemployment insurance benefit usually covers only those who are in regular paid employment, that is, those at risk of becoming involuntarily unemployed. Self-employed persons are generally not covered because they have complete control over whether they work or not and thus they could easily abuse the scheme. It is recommended to exclude self-employed persons from coverage, however, an objective of the draft Social Security Act is to extend coverage to the informal sector so it may not be desirable to exclude them from the start. If it is desired to include them in the coverage of the unemployment insurance scheme, then very specific and stringent eligibility provisions should be introduced for this group. Another option could be to limit the coverage of self-employed persons to the category of employers (sole proprietors) for whom compliance with the law and eligibility for benefits would be easier to control because they are considered more likely to be operating formally and are relatively easy to identify.

Seasonal workers

A certain number of workers commence work on the understanding that the job will cease or be interrupted for several weeks or months due to seasonal factors such as tourism or agriculture. The temptation would be strong to exclude them from benefit entitlement under the UI scheme. Adequately defining eligibility of a seasonal worker for contribution payment and benefit entitlement purposes may be difficult given that some workers may combine seasonal and non-seasonal work during the year. In other cases, a job intended to be regular may turn out to become seasonal, or vice versa, for economic or business reasons.

Instead of systematically excluding seasonal workers from UI coverage, it is proposed to envisage addressing this issue by:

- requiring a longer period of contribution payment for eligibility to benefits;
- averaging earnings used in the determination of the benefit amount over a longer period; and
- paying benefits for a duration proportional to the period of contribution payment.

7.3.2. Eligibility conditions

Unemployment benefits are usually subject to the condition that the claimant is:

- involuntarily out of work;
- registered as unemployed with the employment service;
- capable of working; and
- available for and actually seeking employment.

Eligibility for benefit also depends on having been part of insured employment for a certain qualifying period. The payment of unemployment benefits is thus dependent on the existence of a sufficient individual record of contributions. ILO Convention No. 102 does not give any specific indications regarding the length of the qualifying period, mentioning only such qualifying period as may be considered necessary to preclude abuse.

It is recommended to require that contributions have been paid for at least 12 months out of the 18 months preceding the date of commencement of unemployment.

Provisions are also usually made for requiring a minimum time period between two successive periods of unemployment benefits as two periods of unemployment separated by only a few weeks may be considered as the same claim and thus limit the total duration of payment. It is recommended that this period be fixed at six months.

7.3.3. Level of benefits

Unemployment benefits should be designed to replace a portion of lost income for a limited period. In deciding on the benefit structure, consideration must be given to the benefit rate and to the wages to be used as the basis for calculating the benefit. While the level of benefits should be sufficient to allow the recipient to maintain a certain standard of living, it should not be excessive in order to maintain an incentive to seek new employment.

For the purpose of the cost assessment, it is assumed that both benefits paid from, and contributions to, the UI scheme will be calculated on the basic salary.

Benefit rate

The ILO Social Security (Minimum Standards) Convention, 1952 (No. 102) requires that unemployment benefits, including any family allowances payable, shall be not less than 45 per cent of previous earnings, also including any family allowances, in the case of a standard beneficiary (a man with a wife and two children). It further requires that any maximum limit on insured earnings should be fixed sufficiently high to ensure that the minimum of 45 per cent is attained for all workers with previous earnings equal to or less than those of a skilled male manual worker. The ILO Employment Promotion and Protection against Unemployment Convention, 1988 (No. 168) is slightly more demanding as it places the corresponding minimum at 50 per cent of previous earnings.

At present, contributions and benefits are expected to be calculated on the basic salary.

For the introduction of an unemployment insurance benefit in Nepal, a benefit rate of 50 per cent is recommended initially. It would limit the initial cost of the scheme and would ensure that unemployed persons keep an incentive to find new employment as soon as possible.

Reference earnings

To ensure that the unemployment benefit bears a close relationship to the claimant's earnings, insurable wages in a period just preceding unemployment should be used as the basis for determining the weekly benefit amount. Six months would be a reasonable period over which to average insurable wages in order to reflect the recent earnings level and, at the same time, to avoid penalizing workers with a few weeks of low wages immediately preceding unemployment.

Minimum benefit

A minimum benefit could be introduced to cover cases where wages in the reference period are extremely low. The unemployment benefit, in addition to replacing previous earnings, should provide sufficient income to handle basic expenses during the period of job-seeking or re-training. The minimum amount of the monthly unemployment benefit shall be 60 per cent of the minimum wage.

7.3.4. Duration of payment

Waiting period

A waiting period before benefits commence should be included. This waiting period avoids having persons who are unemployed for very short periods claiming for only a few days between jobs and serves mainly to reduce the cost of administration. There is no single, established preferred length of the waiting period. It must be mentioned that Article 18 of ILO Convention 168 precludes a waiting period longer than ten days. A waiting period of one week is recommended for Nepal.

Maximum duration

The maximum number of weeks for which benefits could be paid could either be a single fixed period for all claimants or vary depending on the number of contributions made since the last claim for unemployment benefit. Even with the latter option, however, a maximum period should be in place. The maximum length of the benefit period affects both the costs of the scheme and the claimant's motivation to find new employment.

ILO Convention No. 102 states that the payment of unemployment benefit may be limited to 13 weeks within a period of 12 months. In ILO Convention No. 168, the corresponding period is 26 weeks.

It is common practice to tie personal benefit entitlements to certain periods of contribution payments. This is what is recommended for Nepal. Under the proposed rule, unemployment insurance benefits will be paid for a maximum period varying between three and nine months, credited at the rate of half month for every full month served by the worker in insurable employment.

If a benefit entitlement is fully exhausted, then a new timeframe starts and only periods worked after the last spell of unemployment would count towards benefit calculation. Because the duration of benefits is linked to the period of contribution during the previous year, the proposed rule would limit the cost related to seasonal unemployment.

7.4. Cost assessment

The most appropriate funding method for Unemployment Insurance is PAYG. Under this approach, current scheme income should be just sufficient to meet current expenditure. On the other hand, a UI benefit should be financed in such a way as to contribute to a counter-cyclical stabilization of the economy. Its revenue income should remain as stable as possible over time and, in particular, its contribution rate should not be increased with the onset of a recession as this would only make the recession worse.

This implies the need for some form of dedicated reserve that can be used during periods of recession. In that regard, the SSF should establish an unemployment contingency reserve. Such a reserve should be set aside to cover costs if expenditures temporarily exceed revenues. A reserve established initially that is equivalent to two years of scheme's expenditures would normally be sufficient to leave time for an adjustment of the contribution rate in case of unfavourable experience. Some variation of the reserve below or above that level may be tolerated before considering a modification of the contribution rate. The level of the contingency reserve recommended for the unemployment scheme is higher than the reserve proposed for other short-term benefits given the lack of data on the unemployment experience of the persons who will be covered by the new scheme, and also given the high uncertainty on the future evolution of unemployment in Nepal especially during the early stage of implementation of the unemployment insurance scheme).

According to the Nepal Labour Force Survey of 2008 (LFS), the global unemployment rate is 2.1 per cent in Nepal, but the unemployment rate of urban workers is 7.5 per cent. In addition, the LFS provides information on the duration of unemployment (see Table 7.1).

Table 7.1. Distribution of unemployed males by duration of unemployment

Duration of unemployment	Distribution of unemployed (in %)	Average assumed number of months of benefits
Less than 1 month	5	1.0
1 to 3 months	10	2.0
3 to 6 months	12	5.0
6 months to 1 year	21	6.0
1 to 2 years	22	7.0
More than 2 years	30	8.0
Total	100	6.1

Source: Nepal Labour Force Survey 2008.

On the basis of these data, and assuming an average number of months of benefits in Table 7.1, an initial contribution rate of **2.4 per cent of insurable earnings** is recommended for UI benefits, including the cost of administration of this benefit. The rate, however, does not include the public expenditures related to active labour market policy measures such as job matching and vocational training which should be gradually implemented. Detailed cost assessment methodology and parameters are presented in Annex 2.

Given the cyclical nature and volatility that is involved with unemployment benefits, frequent rate revisions may be necessary. Therefore, continued monitoring of experience and informed short-term projections of expenditure are required. At a minimum, an actuary should review the contribution rate at three-year intervals so that rate revisions can be recommended to avoid either over-funding or depletion of reserves. Such scheduled actuarial reviews should not, however, preclude rate changes from taking place between reviews, should they become necessary.

8. Medical care

This section presents the possible design and cost assessment of a scheme providing for the reimbursement of medical expenses, adapted to the situation of Nepal.

8.1. Eligibility

It is recommended that a person would be eligible if contributions have been paid for at least 12 months. Coverage would also include the medical care received by the spouse and the children of the insured.

8.2. Covered medical expenses

The draft Social Security Act mentions that the law would cover doctor's consultations, transportation costs, medicine costs, attendant cost, health check-up cost, and private medical facility.

It is recommended that the scheme provide reimbursement of medical expenses up to a fixed maximum amount. In setting the maximum amount, the following may be considered:

- Presently in Nepal, some employers add an allowance to the basic salary to cover medical expenses. For example, Nepal Telecommunication adds the equivalent of four months of salary per year as an allowance for medical expenses; at Nepal Bank, employees get 1.5 month of salary as an allowance for medical expenses.
- Non-official data reveal that the amount of covered medical expenses ranges generally from NPR 20,000 to NPR 25,000 on average per year.

It is suggested to establish a maximum reimbursement of NPR 25,000 per year and a co-insurance – a percentage of medical expenses supported by the insured – of 20 per cent.

8.3. Cost assessment

According to the *Nepal National Health Accounts*, health expenditures per capita were NPR 1,910 per year in 2008 and 2009. These national accounts also show that the total of: (1) curative care services; (2) medical goods dispensed to outpatients; and (3) ancillary health care services represent 59.4 per cent of the total health expenditure. More recent data from WHO¹ reveal that total expenditure on health per capita increased to NPR 4,000 in 2013.

Based on this information and assuming an average of three persons per household, a scheme providing the reimbursement of 100 per cent of medical expenses would cost 4.5 per cent of insured earnings. With the introduction of a co-insurance of 20 per cent, the contribution rate would decrease to **3.6 per cent of insured earnings**. Detailed cost assessment methodology and parameters are presented in Annex 2.

¹ See: <http://apps.who.int/countries/npl/en/>

9. Summary of costs and implementation strategy

Table 9.1 presents a summary of the cost of the five contemplated social insurance schemes and shows that the estimated total contribution rate would amount to 8.2 per cent of insured earnings.

Table 9.1. Contribution rates for the proposed social insurance schemes

Scheme	Contribution rate (as % of insured earnings)
Sickness	0.4
Maternity	0.4
Employment injury	1.4
Unemployment	2.4
Medical care	3.6
Total	8.2

The 1 per cent income tax is clearly insufficient for financing the five schemes that are being contemplated, even if it is presently applied on the total remuneration (basic salary plus allowances), while the new social insurance contributions are intended to be applied, at least initially, on the basic salary.

9.1. Contribution room

Employers have mentioned that they would be ready to contribute 20 per cent of the payroll for the different compensations. They claim that they are currently paying 10 per cent to the Provident Fund and 8.33 per cent for the Gratuity, which would leave 1.67 per cent for social insurance benefits. On the other hand, workers' representatives suggest that the employees continue to pay 10 per cent for the Provident fund and their 1 per cent for social insurance. Contributions for both parties would thus be as follows:

- Employers (20 per cent)
 - Provident fund: 10.00 per cent
 - Gratuity: 8.33 per cent
 - Social insurance: 1.67 per cent

- Employees (11 per cent)
 - Provident fund: 10 per cent
 - Social insurance: 1 per cent

This would leave only 2.67 per cent, as the sum of 1.67 per cent by employers and 1 per cent from employees, for financing the five social insurance schemes that are being contemplated: sickness, maternity, unemployment and employment injury benefits, and medical care.

However, additional considerations concerning the financing of the Gratuity could modify the picture. Currently, the Gratuity is typically paid directly by employers on a

PAYG basis. Only a few employers of big enterprises pre-fund the benefit to obtain tax relief, but it appears that pre-funding of the Gratuity is not common. The cost of the Gratuity at 8.33 per cent of payroll assumes that at termination of employment, employees receive a benefit equal to one month of salary for each year worked at that. In reality, the benefit is less generous in most cases:

- up to 7 years of employment, 15 days salary per working year;
- from 8 to 14 years, 20 days per working year; and
- from 15 years onwards, 30 days per working year.

The cost of 8.33 per cent (or 1/12) of the salary that is generally reported thus represents an overestimate when considering the number of days under 30 that are paid to employees with less than 15 working years. If, for example, the real cost of the Gratuity for the employers would be half of the 8.33 per cent rate, this would leave an additional 4.17 per cent of salary to finance the social insurance schemes.

9.2. Priorities for a gradual implementation

The new social insurance system will have to be implemented in stages. For the employers, unemployment insurance appears to be the priority because of the compromise between labour flexibility (stipulated in the new Labour Law) and unemployment protection (stipulated in the new Social Security Act). On the other hand, workers tend to prefer that priority be given to employment injury benefits that would give them an immediate sense of social insurance coverage. Finally, both groups agree that maternity benefits are desirable in the first phase of implementation because it has a visible impact, is simple to administer, and low-cost.

It is thus recommended to implement maternity benefits and unemployment insurance in a first stage. The total contribution rate would be 2.8 per cent of insured earnings (respectively 0.4 per cent for maternity benefits and 2.4 per cent for the unemployment insurance). The coverage could then be extended gradually to employment injury benefits, sickness benefits, and finally to the reimbursement of medical care.

Table 9.2 presents a summary of the provisions and costs of the different schemes analysed in this report.

Table 9.2. Summary of recommended provisions and contribution rates for the different social insurance schemes

	Sickness	Maternity	Employment injury	Unemployment	Medical care
Eligibility	Contributions paid for at least 12 months during the 18 months preceding sickness	Contributions paid for at least 12 months during the 18 months preceding the maternity leave No limit on the number of birth covered	At least one month of contribution Accident or occupational disease occurring in the course of employment. Commuting accidents will be covered three years after the implementation of the scheme.	Contributions paid for at least 12 months during the 18 months preceding unemployment Person available for work and searching employment (registered with Employment Service)	Contributions paid for at least 12 months The insured and family members (spouse and children) are covered
Benefit level	60% of average basic salary during the 6 months preceding sickness	Maternity allowance: 60% of average basic salary during the 6 months preceding the maternity leave Maternity grant: NPR 10,000 per birth	Temporary disability: 60% of salary at time of accident Permanent disability: 60% per cent of average salary in the three months previous to the accident Permanent partial disability: 60% per cent of average salary in the three months previous to the accident, multiplied by the percentage of disability. If percentage of disablement is lower than 20%, may opt for a lump sum. Survivors' pensions: Spouse: 60% of the maximum amount (which is 60% of average salary) Child: 20% of the maximum amount If no spouse and children, parents receive 40% and others 30% of the maximum amount Funeral grant: NPR 25,000 Medical expenses: reimbursement of all necessary services, including emergency care, hospitalization, medical treatment, physiotherapy, prostheses and drugs	50% average basic salary during the 6 months preceding unemployment	Reimbursement of medical expenses up to NPR 25,000 per year, with a co-insurance of 20%. Medical expenses recognized include: doctor's consultations transportation medicines attendant cost health check-up private medical facilities

	Sickness	Maternity	Employment injury	Unemployment	Medical care
Waiting period	3 days No waiting period if the same sickness reappears within one month	No waiting period	2 days (including the day of the accident). The employer pays the salary during that period.	One week	No waiting period
Maximum duration of benefits	13 weeks	14 weeks	Temporary disability is payable until recovery, assessment of permanent disability or death. Permanent disability pension is payable for life. Reassessment of the percentage of disability 2 years after onset and every 5 years thereafter until age 55. Survivors' pensions: Spouse: for life. Children: until age 18 (or age 21 if attending school). Disabled children and parents: for life	0.5 month for every full month of contribution (minimum 3 months and maximum 9 months)	
Exclusions	Sickness resulting from work injury	When the confinement does not result in the birth of a living child, the Maternity benefit is paid only if the pregnancy lasted at least 26 weeks	Self-inflicted injuries, accidents resulting from intoxication, injuries resulting from violence or fighting within the premises		Medical expenses resulting from work injury
Contribution rate	0.4%	0.4%	1.4%	2.4%	3.6%

Annex 1. Results of the survey of Nepalese employers

This annex presents summary data from a survey of Nepalese employers on the age and salary of their employees and on the experience regarding different contingencies of sickness, maternity, employment injury and unemployment). Most data concern the public sector since the response rate in the private sector has been very low. Three organizations of the public sector and eight employers of the private sector have provided data.

A1.1. Profile of employees

Table A1.1. Profile of employees, by age, gender, and level of basic salary (public sector)

Age	Males		Females	
	Number of full-time employees	Basic salary (NPR)	Number of full-time employees	Basic salary (NPR)
15-19	253	13 209	32	13 218
20-24	10 048	13 516	1 661	13 410
25-29	20 952	14 446	3 104	14 037
30-34	26 621	15 365	3 277	15 221
35-39	20 934	17 536	3 005	16 316
40-44	15 204	18 036	2 880	16 536
45-49	16 667	18 266	2 569	16 540
50-54	16 045	17 263	1 729	15 693
55-59	8 636	16 410	891	14 890
60 and over	10	21 450	–	–
Total	135 370	16 366	19 148	15 442

Table A1.2. Profile of employees, by age, gender, and level of basic salary (private sector)

Age	Males		Females	
	Number of full-time employees	Basic salary (NPR)	Number of full-time employees	Basic salary (NPR)
15-19	–	–	–	–
20-24	9	16 234	–	–
25-29	304	19 146	93	17 821
30-34	761	17 834	140	16 397
35-39	1 201	15 725	150	15 289
40-44	1 302	16 140	197	15 365
45-49	1 406	16 759	284	17 494
50-54	1 113	18 313	250	17 973
55-59	456	20 299	116	18 520
60 and over	–	–	–	–
Total	6 552	17 192	1 230	16 978

A1.2. Sickness

Table A1.3. Sickness experience, by age and gender (public sector)

Age	Males			Females		
	Total number of days of sick leave	For sick leaves lasting more than 3 days		Total number of days of sick leave	For sick leaves lasting more than 3 days	
		Number of sickness spells	Total number of days of sick leave		Number of sickness spells	Total number of days of sick leave
15-19	30	1	5	5	1	7
20-24	1 206	14	81	234	4	16
25-29	2 514	29	156	438	7	42
30-34	3 195	36	234	462	7	55
35-39	3 349	38	254	569	10	62
40-44	2 433	31	225	545	10	70
45-49	2 667	34	253	487	9	65
50-54	3 209	41	284	434	8	53
55-59	1 727	22	145	224	4	36
60 and over	2	1	4	–	–	–
Total	20 332	247	1 641	3 398	60	406

Table A1.4. Sickness experience, by age and gender (private sector)

Age	Males			Females		
	Total number of days of sick leave	For sick leaves lasting more than 3 days		Total number of days of sick leave	For sick leaves lasting more than 3 days	
		Number of sickness spells	Total number of days of sick leave		Number of sickness spells	Total number of days of sick leave
15-19	–	–	–	–	–	–
20-24	1	–	–	–	–	–
25-29	24	4	15	7	1	5
30-34	61	12	43	11	2	8
35-39	96	23	80	13	3	10
40-44	104	25	89	16	3	12
45-49	112	27	97	23	4	13
50-54	89	18	60	20	2	9
55-59	36	7	23	9	2	7
60 and over	–	–	–	–	–	–
Total	523	116	407	99	17	64

A1.3. Maternity

Table A1.5. Maternity experience, by age and gender (public sector)

Age	Number of maternity leaves	Total number of days of maternity leave
15-19	1	45
20-24	217	9 765
25-29	273	12 285
30-34	162	7 290
35-39	75	3 375
40-44	28	1 260
45-49	8	360
50-54	–	–
55-59	–	–
60 and over	–	–
Total	764	34 380

Table A1.6. Maternity experience, by age and gender (private sector)

Age	Number of maternity leaves	Total number of days of maternity leave
15-19	–	–
20-24	–	–
25-29	8	405
30-34	7	315
35-39	5	255
40-44	2	105
45-49	1	45
50-54	–	–
55-59	–	–
60 and over	–	–
Total	23	1 125

A1.4. Employment injury

Table A1.7. Employment injury experience, by age and gender (public sector)

Age	Males				Females			
	Number of work injuries	Total number of days of absence due to work injuries	Number of permanent disabilities due to work injury	Number of deaths resulting from accidents at work	Number of work injuries	Total number of days of absence due to work injuries	Number of permanent disabilities due to work injury	Number of deaths resulting from accidents at work
15-19	3	25	1	–	–	–	–	–
20-24	39	245	3	2	–	–	–	–
25-29	91	541	2	1	–	–	–	–
30-34	125	723	–	1	–	–	–	–
35-39	65	400	6	–	–	–	–	–
40-44	67	267	4	3	–	–	–	–
45-49	52	456	6	–	–	–	–	–
50-54	45	301	4	–	–	–	–	–
55-59	22	156	2	–	–	–	–	–
60 and over	–	–	–	–	–	–	–	–
Total	509	3114	28	7	–	–	–	–

Table A1.8. Employment injury experience, by age and gender (private sector)

Age	Males				Females			
	Number of work injuries	Total number of days of absence due to work injuries	Number of permanent disabilities due to work injury	Number of deaths resulting from accidents at work	Number of work injuries	Total number of days of absence due to work injuries	Number of permanent disabilities due to work injury	Number of deaths resulting from accidents at work
15-19	–	–	–	–	–	–	–	–
20-24	–	–	–	–	–	–	–	–
25-29	4	40	1	–	1	–	1	–
30-34	1	–	–	1	–	–	–	–
35-39	3	75	–	1	2	34	–	–
40-44	2	23	–	–	–	–	–	–
45-49	2	–	1	1	–	–	–	–
50-54	1	62	–	–	–	–	–	–
55-59	2	46	–	–	–	–	–	–
60 and over	–	–	–	–	–	–	–	–
Total	15	246	2	3	3	34	1	–

A1.5. Layoffs

Table A1.9. Layoffs, by age and gender in fiscal year 2070-2071 (public sector)

Age	Number of layoffs
15-19	–
20-24	–
25-29	5
30-34	7
35-39	2
40-44	1
45-49	–
50-54	–
55-59	–
60 and over	–
Total	15

Table A1.10. Layoffs, by age and gender in fiscal year 2070-2071 (private sector)

Age	Number of layoffs
15-19	–
20-24	–
25-29	2
30-34	1
35-39	1
40-44	–
45-49	–
50-54	–
55-59	–
60 and over	–
Total	4

Annex 2. Bases for cost calculations

This annex presents the parameters and detailed calculations that led to the cost estimates presented in this report for the different social insurance schemes.

A2.1. Sickness benefits

Number of insured persons	1 250 000
Average wage	16 147
Density of contributions	90%
Replacement rate	60%
Duration of payment beyond the 3-day waiting period	10 days
Incidence rate of sickness	10%
Cost of administration (as percentage of benefit expenditures)	25%
Annual benefit expenditures (as percentage of covered salaries)	0.28%
Administrative cost (as percentage of covered salaries)	0.10%
Total cost (as percentage of insured earnings)	0.38%

A2.2. Maternity benefits

Maternity allowance

Number of insured persons	1 250 000
Average wage	16 147
Density of contributions	90%
Replacement rate	60%
Duration of payment	3.23 months
Cost of administration (as percentage of benefit expenditures)	25%
Annual benefit expenditures (see Table A2.1)	566 054 006
Administrative cost (as percentage of covered salaries)	0.06%
Total cost (as percentage of insured earnings)	0.32%

Maternity grant

Number of insured persons	1 250 000
Average wage	16 147
Density of contributions	90%
Number of births per year	20 000
Amount of benefit per birth	10 000
Total cost (as percentage of insured earnings)	0.09%

Table A2.1. Determination of annual expenditures of maternity allowance

Age	Population of women (2014)	Fertility rate (2014)	Number of beneficiaries	Monthly benefit	Total expenditures
15	8 793	0.0000	–	8 746	–
16	8 889	0.0403	358	8 762	10 138 395
17	8 823	0.0965	851	8 778	24 141 962
18	8 715	0.1382	1 204	8 794	34 207 972
19	8 538	0.1669	1 425	8 810	40 541 558
20	8 383	0.1841	1 543	8 827	43 989 378
21	8 316	0.1913	1 591	8 843	45 445 944
22	8 306	0.1902	1 580	8 859	45 201 600
23	8 249	0.1822	1 503	8 875	43 080 218
24	8 164	0.1688	1 378	8 891	39 584 303
25	8 084	0.1501	1 214	8 908	34 922 375
26	8 013	0.1262	1 011	8 924	29 140 602
27	7 943	0.1060	842	8 940	24 303 479
28	7 871	0.0940	740	8 956	21 413 979
29	7 806	0.0875	683	8 972	19 782 940
30	7 689	0.0785	604	8 989	17 531 838
31	7 494	0.0687	515	9 005	14 967 948
32	7 248	0.0601	436	9 033	12 716 287
33	7 002	0.0532	373	9 056	10 898 968
34	6 737	0.0475	320	9 377	9 696 633
35	6 527	0.0423	276	9 400	8 390 364
36	6 412	0.0378	243	9 423	7 383 075
37	6 356	0.0333	212	9 446	6 466 861
38	6 284	0.0285	179	9 470	5 477 668
39	6 214	0.0236	146	9 493	4 491 738
40	6 103	0.0193	118	9 516	3 612 792
41	5 923	0.0154	91	9 539	2 816 713
42	5 699	0.0120	68	9 562	2 108 310
43	5 482	0.0089	49	9 585	1 512 186
44	5 266	0.0062	33	9 609	1 019 807
45	5 050	0.0040	20	9 632	626 431
46	4 841	0.0022	10	9 655	327 009
47	4 638	0.0008	4	9 678	114 673
48	4 432	0.0000	–	9 701	–
49	4 223	0.0000	–	9 724	–
Total	–	2.4600	19 620	–	566 054 006

A2.3. Employment injury benefits

Number of insured persons	1 250 000
Average monthly salary	16 147
Density of contributions	0.90
Temporary disability	
Incidence rate	0.02
Average monthly salary	16 147
Average number of days paid	60
Expected cost (million)	484.4
Cost as percentage of insurable earnings	0.22%
Permanent total disability	
Incidence rate	0.0005
Average monthly salary	16 147
Average present value per unit of annual pension	21 *
Expected cost (million)	1,525.9
Cost as percentage of insurable earnings	0.70%
Permanent partial disability	
Incidence rate	0.0002
Average monthly salary	16 147
Average present value per unit of annual pension	21 *
Average degree of disability	40%
Expected cost (million)	244.14
Cost as percentage of insurable earnings	0.11%
Survivors	
Incidence rate	0.00006
Average monthly salary	16 147
Probability of having a spouse	80%
Average present value per unit of annual pension (spouse)	19 *
Average number of children per deceased	1.8
Average present value per unit of annual pension (orphan)	9 *
Expected cost (million)	107.8
Cost as percentage of insurable earnings	0.05%
Funeral grant	
Funeral grant	25 000
Expected cost (million)	1.88
Cost per 100 insurable earnings	0.00%
Health care and rehabilitation	
Multiple of temporary disability benefits cost	0.50
Cost as percentage of insurable earnings	0.11%
Total benefit expenditures as percentage of insurable earnings	1.20%
Administrative expenditures	
Percentage of benefit expenditures	15%
Cost as percentage of insurable earnings	0.18%
Total cost	1.37%

* Note that the annuity factors are determined on the basis of the mortality rates used for the general demographic framework (Section 2) with an interest rate of 3.5%, and are as follows:

- For the disabled worker, it is assumed that the accident occurs at age 40. Mortality rates are multiplied by a factor of 2.0 at age 20 gradually decreasing to a factor of 1.0 at ages 60 and above. Annuity factors consider the continuation of 60 per cent of the pension to the spouse in case of death of the disabled person.
- For the surviving spouse, the factors are for pure life annuities with an average age of 40 at inception and mortality rates are not adjusted.
- For children, an average age of 10 at inception is assumed.

A2.4. Unemployment insurance

Number of insured persons	1 250 000
Average wage	16 147
Density of contributions	90%
Replacement rate	60%
Average duration of payment (see Table A2.2)	6.1 months
Average unemployment rate of urban workers	7.5%
Cost of administration (as percentage of benefit expenditures)	20%
Annual benefit expenditures (as percentage of covered salaries)	2.0%
Administrative cost (as percentage of covered salaries)	0.4%
Total cost (as percentage of insured earnings)	2.4%

Table A2.2. Distribution of urban unemployed males by duration of unemployment

Duration of unemployment	Distribution of unemployed (in %)	Average assumed number of months of benefits
Less than 1 month	5	1.0
1 to 3 months	10	2.0
3 to 6 months	12	5.0
6 months to 1 year	21	6.0
1 to 2 years	22	7.0
More than 2 years	30	8.0
Total or average	100	6.1

Source: Nepal Labour Force Survey 2008.

A2.5. Medical care

Number of insured persons	1 250 000
Average wage	16 147
Density of contributions	90%
Total health expenditures per capita	4 000
Proportion of total health expenditure on: (1) curative care services, (2) medical goods dispensed to outpatients and (3) ancillary health care services	59.4%
Average number of persons per household	3
Average medical expenses reimbursed per insured per year	7 128
Co-insurance	20%
Cost of administration (as percentage of benefit expenditures)	10%
Total medical expenses reimbursed and administration (no co-insurance)	9 801 000 000
Total medical expenses reimbursed and administration (with co-insurance of 20%)	7 840 800 000
Total cost as percentage of insured earnings (no co-insurance)	4.5%
Total cost as percentage of insured earnings (with co-insurance of 20%)	3.6%

Will there be a conclusion following the last data above? It might be useful to end with a summary of recommendations that have made in some sections and/or a summary of next steps. It seems to end abruptly but the decision might depend, in part, on intended usage and target audience.