



Unemployment and underemployment data

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Question

Identify the number (absolute and as a proportion of the working age population) of under and unemployed youth in DFID focus countries, disaggregated by gender and social/economic status and all countries in Sub Saharan Africa and South Asia and what are the projected changes in these demographics over the next 20 years?

What are the limitations to the reliability of these data, both generally and limitations with respect to any specific country data?

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The K4D helpdesk service provides brief summaries of current research, evidence, and lessons learned. Helpdesk reports are not rigorous or systematic reviews; they are intended to provide an introduction to the most important evidence related to a research question. They draw on a rapid desk-based review of published literature and consultation with subject specialists.

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1. Overview

Unemployment data

Survey data collated by the International Labour Organisation (ILO) were available for 12 of the DFID focus countries in Sub Saharan Africa and South Asia: Bangladesh, Ethiopia, India, Liberia, Malawi, Nepal, Rwanda, South Africa, South Sudan, Sudan, Tanzania, Uganda, and Zambia. The latest data for different countries came from different years between 2004 and 2014.

Countries with the highest unemployment rates (higher than 15 per cent) from survey data (tables 2 and 3, p4) are:

1. South Africa (50.1)
2. Sudan (24.4)
3. Nepal (23.8)
4. Liberia (19.6)
5. Tanzania (19.3)
6. South Sudan (18.5)
7. Zambia (18.2)

The six countries with the highest absolute numbers of unemployed youths (thousands) from survey data (tables 2 and 3) are:

1. India (12,133)
2. South Africa (5,155)
3. Bangladesh (3,197)
4. Tanzania (2,321)
5. Sudan (1,384)
6. Nepal (1,301)

Figure 1 (p5) highlights how, when comparing unemployment problems for different countries, looking only at rates may mask the size of the problem in a more populous country. Liberia for example has a relatively high unemployment rate but a small youth populations meaning that absolute numbers are relatively low (133,000). India, of course having a particularly large population, has a distinctly high number of unemployed youths (12.13 million) though the unemployment rate is relatively low.

Figure 2 (p6) shows the difference in male and female unemployment rates. The largest difference is seen in Bangladesh, Sudan, Liberia and South Africa where the female unemployment rate is notably higher than the male rate.

Data disaggregated by socio-economic group were not available, but data for differences between urban and rural rates were. Figure 3 (p7) presents the data that were available. Countries where the urban rate is markedly higher than the rural rate are: Ethiopia, Tanzania, Nepal, Liberia and Malawi. Countries where the rural rate is somewhat higher than the urban rate are: Bangladesh and Sudan.

ILO modelled estimates for 2014 give an indication of statistics for DFID focus countries where survey data were unavailable: Afghanistan, Kenya, Mozambique, Nigeria, Pakistan, Sierra Leone, Somalia, and Zimbabwe. It also gives more recent estimates for most of the countries where survey data was available and allows some comparison across countries. Labour force population data for 2014 were not readily available so employment rate data only are reported here. Figure 4 (p8) shows Mozambique is estimated to have a particularly high unemployment rate (40.7). Afghanistan and Kenya's estimates are also relatively high (20.8 and 17.4 respectively).

Underemployment data

Underemployment data were only available for Ethiopia, Bangladesh, India, Liberia, Malawi, Nepal, South Africa, Tanzania, and Uganda. Of these Ethiopia, Uganda and Tanzania have the highest rates (18.3, 13.1, and 10.3 respectively) (Table 7, p9). India, Ethiopia, and Tanzania have the highest absolute numbers of underemployed youth (8,603,000; 2,148,100; and 1,234,900 respectively). Ethiopia, Tanzania, India, Bangladesh and Liberia all have notably higher male underemployment rates than female. Rural unemployment rates are higher than urban rates in all countries where data were available except Liberia where the urban unemployment rate was slightly higher than the rural rate.

Projections

It was not possible to identify projections for all DFID focus countries within the scope of this report. Jobless growth is predicted to be a challenge in South Asia and an additional 2.1 million youth predicted by 2020 will aggravate youth unemployment (ILO, 2015). The ILO further predict that youth unemployment in South Asia will rise a small amount, from 9.9 per cent to 10.4 per cent in 2019. However, the lower range of this prediction would be a drop in the rate to 9.7 (upper range 11.1). Youth unemployment in Sub Saharan Africa is predicted to stay at the same rate into 2019, 11.8 (range 11.3-12.3).

Broadly, there is more concern of absolute unemployment numbers rising in Sub Saharan Africa where the youth population is rising, than in South Asia which is seeing a general decline (UNECA, 2013). In Africa the youth population is predicted to double by 2045 (ADB, OECD, UNDP, UNECA; 2012). Between 2000 and 2008, Africa's working age population (15-64 years) grew from 443 million to 550 million; an increase of 25 per cent. In annual terms this is a growth of 13 million, or 2.7 per cent per year (ibid). The number of young people in South Asia however, is predicted to decline from 718 million in 2015 to 711 million in 2030, and 619 million in 2060 (UNECA, 2015).

Data quality

The ILO data quality framework states that their mandate is to report national statistics rather than to further process data (Cornu, 2004). However they do run a number of checks and consult with country offices when required. The data quality is then largely down to individual surveys. Information of the quality of data for particular countries was not found within the scope of this report.

Cornu (2004) also cautions against comparing country data against each other. This is particularly a problem in the case of this report where country data are for different years.

Some discrepancies can be seen by eye for example the data for South Africa report a higher rate for both rural (61.7) and urban unemployment (51.2) than the national unemployment rate (50.1).

The unemployment rate for Rwanda is extremely low, 0.7, which prompts questioning.

It is also worth noting that records of those employed says nothing about the quality of jobs which may be of concern (ILO, 2015).

2. Unemployment data from national surveys

Data from the International Labour Organisation (ILO) database were available for 12 of the DFID focus countries in South Asia and Sub-Saharan Africa. Table 1 shows the data sources for data that were available. Data disaggregated by socio-economic group were not available. The ILO does report data disaggregated by urban/rural which is displayed in table 5.

The ILO database is available from here: <http://www.ilo.org/ilostat/>

ILO definition: The unemployment rate is the number of persons who are unemployed as a per cent of the total number of employed and unemployed persons (i.e., the labour force).

Table 1: Data sources for latest available data from the ILO database

| Region | Country | Source | Year |
|---------------------------------|--------------|----------------------------------|------|
| SA (South Asia) | Bangladesh | School to work transition survey | 2013 |
| Sub-Saharan Africa (SSA) | Ethiopia | National Labour Force Survey | 2005 |
| SA | India | National Sample Survey | 2004 |
| SSA | Liberia | School to work transition survey | 2012 |
| SSA | Malawi | School to work transition survey | 2007 |
| SA | Nepal | School to work transition survey | 2013 |
| SSA | Rwanda | Child Labour Survey | 2008 |
| SSA | South Africa | Quarterly Labour Force Survey | 2015 |
| SSA | South Sudan | Population and Housing Census | 2008 |

| | | | |
|------------|----------|----------------------------------|------|
| SSA | Sudan | Population and Housing Census | 2008 |
| SSA | Tanzania | School to work transition survey | 2013 |
| SSA | Uganda | School to work transition survey | 2013 |
| SSA | Zambia | School to work transition survey | 2012 |

Unemployment data in tables 2 and 3 are presented in order from the highest absolute unemployment rate to the lowest.

Table 2: Unemployment data available for DFID focus countries in Sub-Saharan Africa

| Country | Year* | Unemployment rate (%) | Absolute unemployment rate (thousands) |
|---------------------|-------|-----------------------|--|
| South Africa | 2015 | 50.1 | 5,155 |
| Tanzania | 2013 | 19.3 | 2,321 |
| Sudan | 2008 | 24.4 | 1,384 |
| Zambia | 2012 | 18.2 | 545 |
| Ethiopia | 2005 | 3.6 | 422 |
| South Sudan | 2008 | 18.5 | 276 |
| Malawi | 2007 | 8.1 | 266 |
| Uganda | 2013 | 4.7 | 223 |
| Liberia | 2012 | 19.6 | 133 |
| Rwanda | 2008 | 0.7 | 9 |

Table 3: Unemployment data available for DFID focus countries in South Asia

| Country | Year* | Unemployment rate (%) | Absolute unemployment |
|-------------------|-------|-----------------------|-----------------------|
| India | 2004 | 6.7 | 12,133 |
| Bangladesh | 2013 | 13.3 | 3,197 |
| Nepal | 2013 | 23.8 | 1,301 |

*Latest that data were available

Figure 1: Unemployment in DFID focus countries

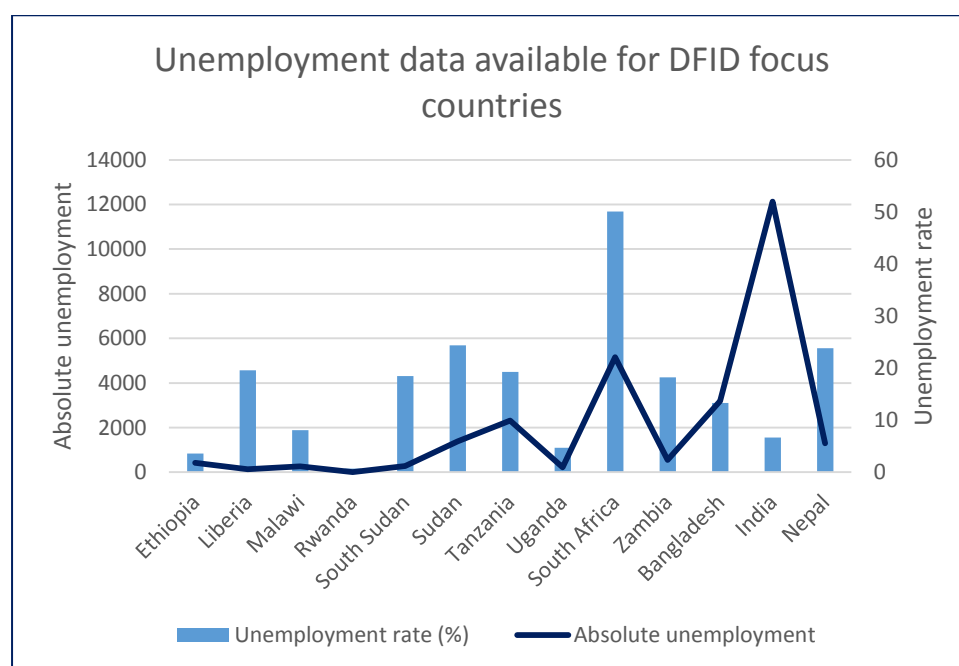


Table 4: Unemployment data available for DFID focus countries in Sub-Saharan Africa and South Asia, disaggregated by gender

| Country | Year | Unemployment rate (%), male | Unemployment rate (%), female |
|-----------------|------|-----------------------------|-------------------------------|
| Ethiopia | 2005 | 2.6 | 4.6 |
| Liberia | 2012 | 16.2 | 22.8 |

| | | | |
|---------------------|------|------|------|
| Malawi | 2007 | 6.4 | 10 |
| Rwanda | 2008 | 0.9 | 0.6 |
| South Africa | 2015 | 46.3 | 54.9 |
| South Sudan | 2008 | 19.6 | 17.5 |
| Sudan | 2008 | 21 | 32.2 |
| Tanzania | 2013 | 18.1 | 20.9 |
| Uganda | 2013 | 4.3 | 5 |
| Zambia | 2012 | 18 | 18.5 |
| Bangladesh | 2013 | 8.7 | 26.2 |
| India | 2004 | 6.8 | 6.6 |
| Nepal | 2013 | 22.5 | 25.4 |

Figure 2: Unemployment rate, male/female

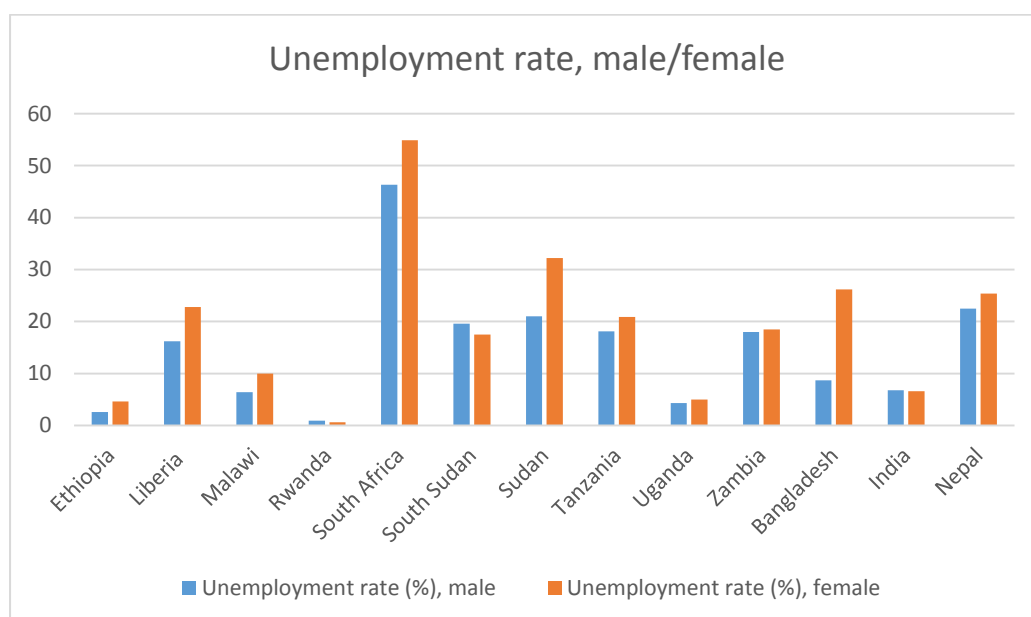
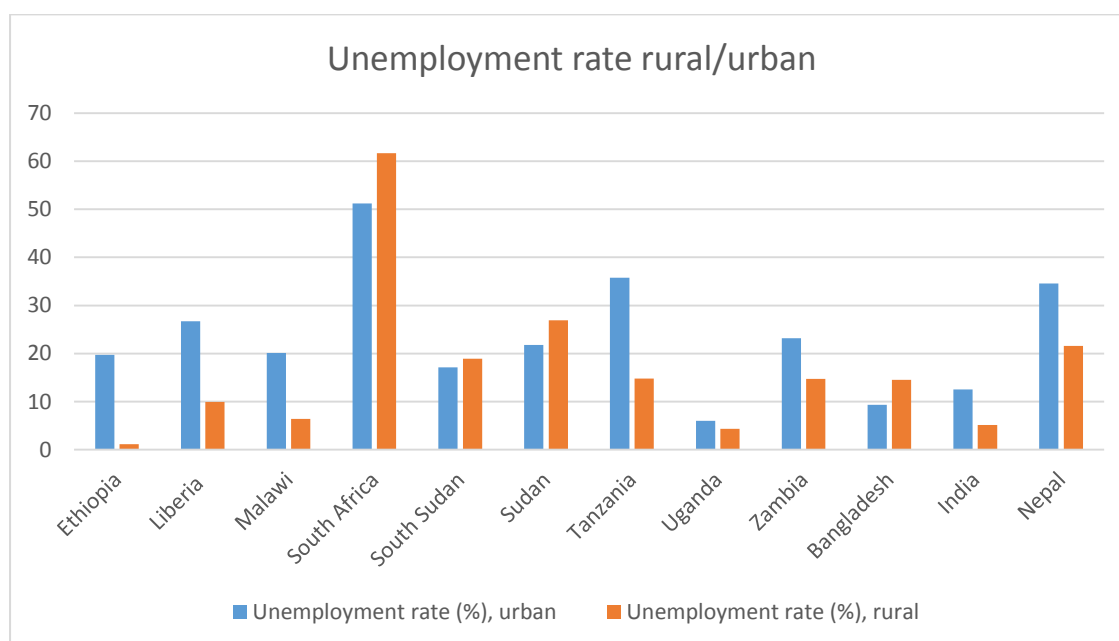


Table 5: Unemployment data available for DFID focus countries in Sub-Saharan Africa and South Asia, disaggregated by urban/rural

| Country | Year | Unemployment rate (%), urban | Unemployment rate (%), rural |
|---------------------|------|---------------------------------|---------------------------------|
| Ethiopia | 2005 | 19.7 | 1.1 |
| Liberia | 2012 | 26.7 | 9.9* |
| Malawi | 2007 | 20.1 | 6.4 |
| South Africa | 2015 | 51.2 | 61.7 |
| South Sudan | 2008 | 17.1 | 18.9 |
| Sudan | 2008 | 21.8 | 26.9 |
| Tanzania | 2013 | 35.8 | 14.8 |
| Uganda | 2013 | 6* | 4.3 |
| Zambia | 2012 | 23.2 | 14.7 |
| Bangladesh | 2013 | 9.3 | 14.5 |
| India | 2004 | 12.5 | 5.1 |
| Nepal | 2013 | 34.6 | 21.6 |

*Noted by ILO as unreliable data

Figure 3: Unemployment rate rural/urban



3. Unemployment data from ILO models

ILO modelled data were sourced from here:

<http://databank.worldbank.org/data/reports.aspx?source=2&series=SL.UEM.1524.ZS&country=A FG#>

The ILO trends unit uses their Trends Labour Market Model to produce these data. Multivariate regression techniques impute missing values at the country level.

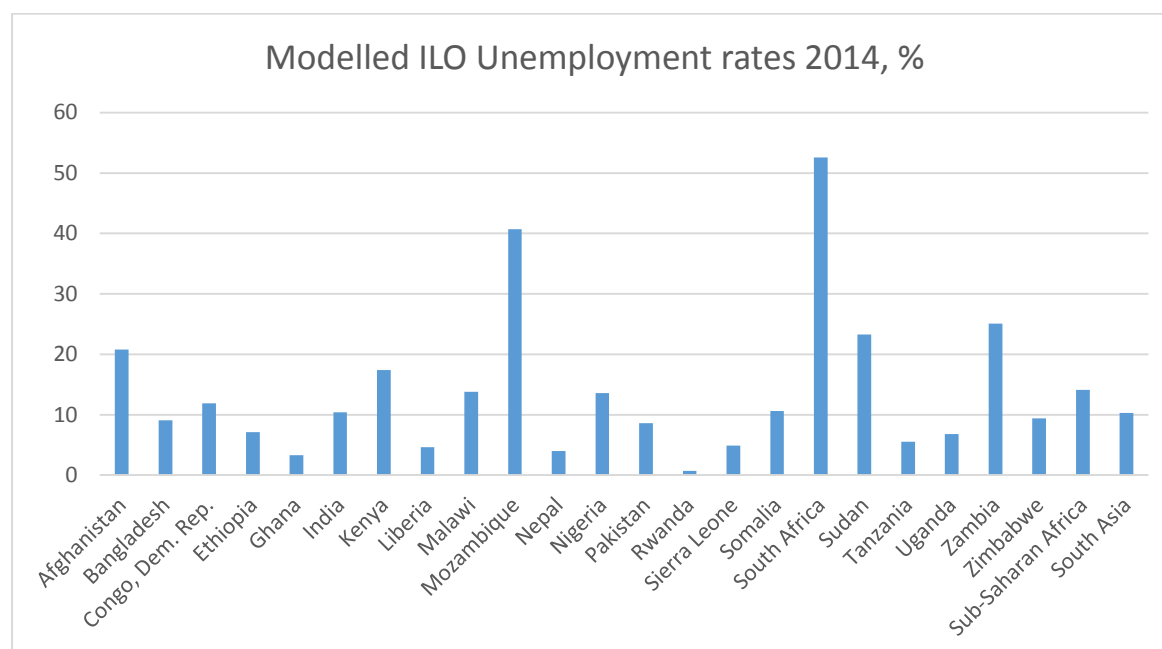
More information is available here: http://www.ilo.org/wcmsp5/groups/public/---ed_emp/---emp_elm/---trends/documents/publication/wcms_120382.pdf

Table 6: Modelled ILO estimated unemployment rates for 2014

| Country | Unemployment rate, % |
|---------------------|----------------------|
| South Africa | 52.6 |
| Mozambique | 40.7 |
| Zambia | 25.1 |
| Sudan | 23.3 |

| | |
|---------------------------|------|
| Afghanistan | 20.8 |
| Kenya | 17.4 |
| Malawi | 13.8 |
| Nigeria | 13.6 |
| Congo, Dem. Rep. | 11.9 |
| Somalia | 10.6 |
| India | 10.4 |
| Zimbabwe | 9.4 |
| Bangladesh | 9.1 |
| Pakistan | 8.6 |
| Ethiopia | 7.1 |
| Uganda | 6.8 |
| Tanzania | 5.5 |
| Sierra Leone | 4.9 |
| Liberia | 4.6 |
| Nepal | 4 |
| Ghana | 3.3 |
| Rwanda | 0.7 |
| Sub-Saharan Africa | 14.1 |

Figure 4: Modelled ILO Unemployment rates 2014, %



4. Underemployment data from national surveys

These data are sourced from the ILO database as in section 2. See table 1 for sources.

Definition: Persons in **time-related underemployment** comprise all persons in employment, who satisfy the following three criteria during the reference period: a) are willing to work additional hours; b) are available to work additional hours i.e., are ready, within a specified subsequent period, to work additional hours, given opportunities for additional work; and c) worked less than a threshold relating to working time i.e., persons whose hours actually worked in all jobs during the reference period were below a threshold, to be chosen according to national circumstances. Data are provided by age and geographical coverage, which entails a disaggregation by rural and urban areas.

Table 7: Underemployment data available for DFID focus countries in Sub-Saharan Africa and South Asia

| Country | Year* | Underemployment rate (%) | Absolute underemployment (thousands) |
|---------------------|-------|--------------------------|--------------------------------------|
| Ethiopia | 2005 | 18.3 | 2148.1 |
| Uganda | 2013 | 13.1 | 621.3 |
| Tanzania | 2013 | 10.3 | 1234.9 |
| Malawi | 2007 | 7.8 | 254.6 |
| Liberia | 2012 | 6.6 | 44.7 |
| Nepal | 2013 | 5.8 | 314.4 |
| India | 2004 | 4.8 | 8603 |
| South Africa | 2013 | 4.7 | 64 |
| Bangladesh | 2013 | 2.9 | 684 |

Figure 5: Underemployment data available for DFID focus countries

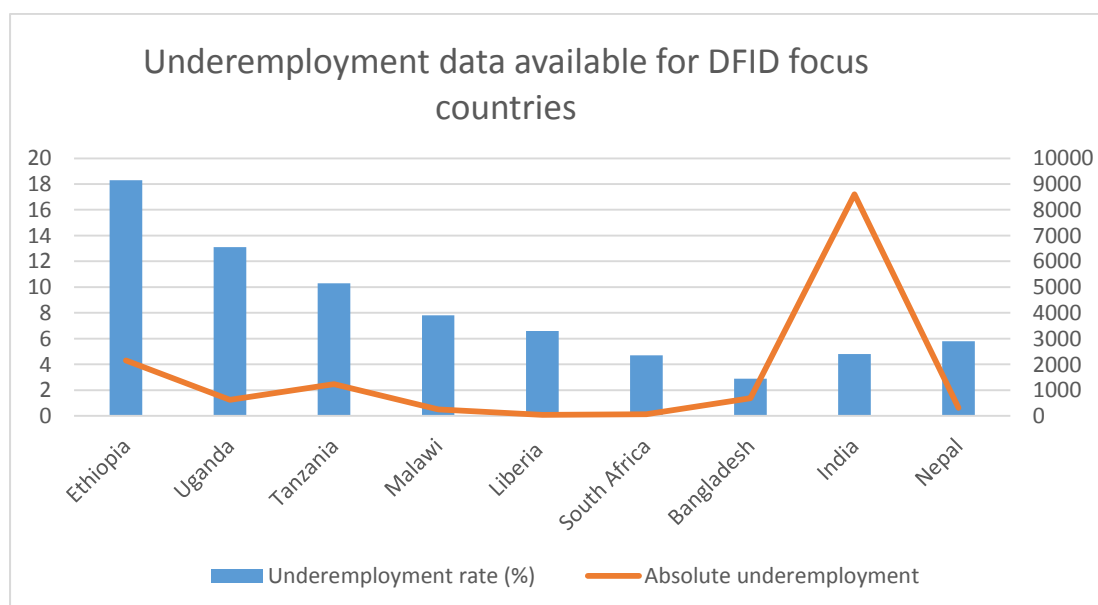


Table 8: Underemployment data available for DFID focus countries in Sub-Saharan Africa and South Asia, disaggregated by gender

| Country | Year | Underemployment rate (%), male | Underemployment rate (%), female |
|---------------------|------|--------------------------------|----------------------------------|
| Ethiopia | 2005 | 21.2 | 15.8 |
| Liberia | 2012 | 8.3 | 5.0 |
| Malawi | 2007 | 7.8 | 7.8 |
| Tanzania | 2013 | 12.5 | 7.8 |
| Uganda | 2013 | 12.9 | 13.2 |
| South Africa | 2015 | 4.2 | 5.4 |
| Bangladesh | 2013 | 4.47 | 1.14 |
| India | 2004 | 6.81 | 2.51 |
| Nepal | 2013 | 5.56 | 5.97 |

Figure 6: Underemployment, male/female

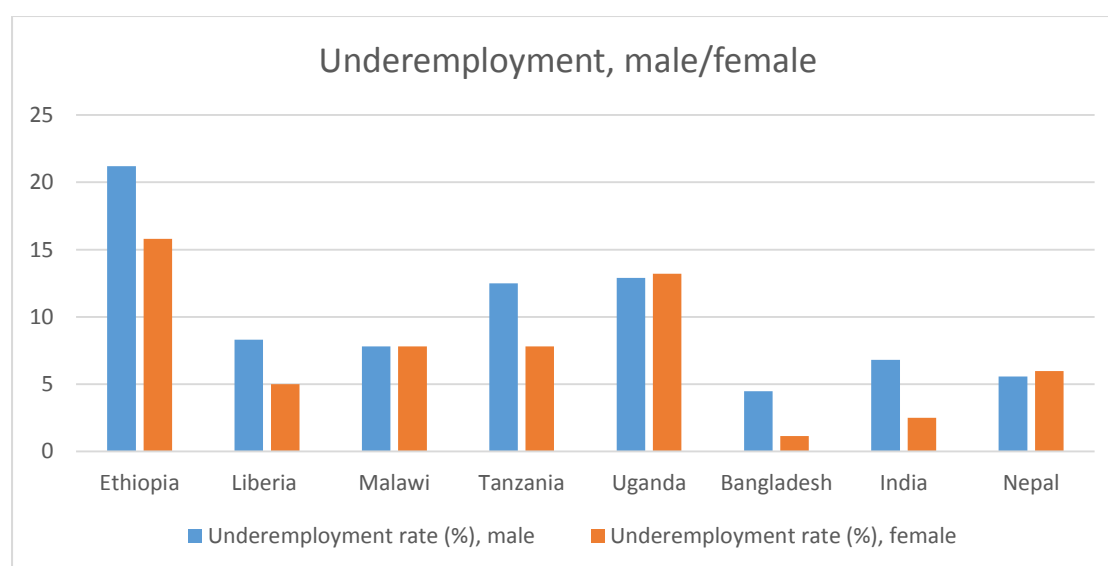
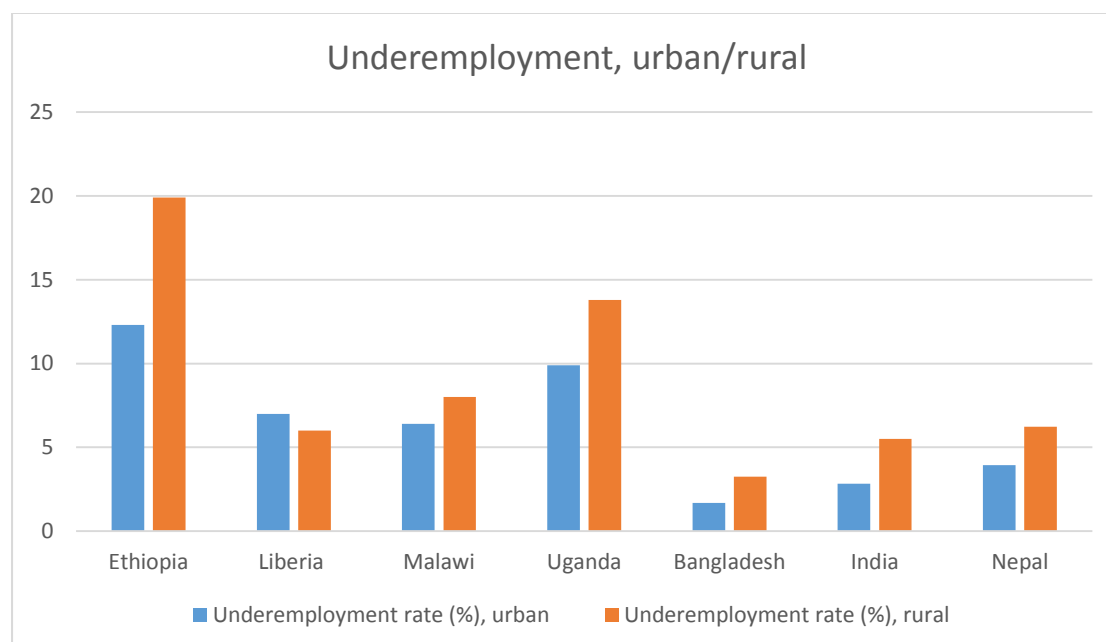


Table 9: Underemployment data available for DFID focus countries in Sub-Saharan Africa and South Asia, disaggregated by urban/rural

| Country | Year | Underemployment rate (%), urban | Underemployment rate (%), rural |
|-------------------|------|---------------------------------|---------------------------------|
| Ethiopia | 2005 | 12.3 | 19.9 |
| Liberia | 2012 | 7.0 | 6.0 |
| Malawi | 2007 | 6.4 | 8.0 |
| Uganda | 2013 | 9.9 | 13.8 |
| Bangladesh | 2013 | 1.68 | 3.24 |
| India | 2004 | 2.82 | 5.50 |
| Nepal | 2013 | 3.93 | 6.23 |

Figure 7: Underemployment, urban/rural



5. Projections

World Employment and Social Outlook, Trends 2015

ILO (2015). ILO.

http://www.ilo.org/wcmsp5/groups/public/@dgreports/@dcomm/@publ/documents/publication/wcms_337069.pdf

South Asia faces a serious challenge of jobless growth, as average annual economic growth of 6.1 per cent from 2009 to 2014 corresponded to employment expansion of only 1.4 per cent per year for the same period. Moreover, much of the employment growth that occurred was in vulnerable and informal employment. For instance, vulnerable employment accounted for over three-quarters of all employment in 2014, with many of those in vulnerable employment working in subsistence agriculture and likely to be among the working poor. Moreover, the majority of women in South Asia are still heavily dependent on this sector, at 62.0 per cent in 2014, compared with 42.1 per cent for men. Most South Asian countries face a challenge of low labour force participation for women, with the exception of Nepal (see figure 2.7). Typically, low female participation in South Asia has been attributed to social norms associated with women burdened with household duties as well as relatively lower levels of female education.

The process of structural transformation remains unfinished in South Asia. In 2014 agriculture accounted for 46.8 per cent of all employment in the region, compared with the global average of 29.1 per cent. While the share in agriculture has been declining, from 52.2 per cent in 2008, there is a scarcity of quality opportunities for those leaving rural areas and for the large number of young people entering the labour market. An additional 2.1 million youth will enter the labour force over the next five years, potentially aggravating already high youth unemployment, which is 4 times higher than that for adults.

The unemployment rate is relatively low in South Asia, at 3.9 per cent in 2014 – lower than in all other regions – but this fails to reflect the quality of jobs. The share of those in employment who live below purchasing power parity (PPP) USD1.25 per day (the then international extreme poverty threshold) was estimated at 19.3 per cent in 2014 – equivalent to 124 million people. Only Sub-Saharan Africa has a higher share. The same is true at the USD2-a-day level (PPP)¹, which accounted for over half of the employed population (54.4 per cent in 2014), equivalent to 350 million people.

Youth unemployment projected to increase from 9.9 (2013) to 10.4 (lower and upper range 9.7-11.1) in 2019.

Sub-Saharan Africa has the highest labour force participation rate of all regions, estimated at 70.9 per cent – compared with a global average of 63.5 per cent in 2014 (see table 2.11). In addition, unemployment at 7.7 per cent in 2014 is expected to remain stable through to 2018. In terms of youth, the youth unemployment rate is comparatively low in relation to the adult rate, with a youth-to-adult ratio of 1.9 – the lowest of all regions worldwide. Indeed, the youth unemployment rate was 11.8 per cent in 2014 – only East Asia and South Asia had lower rates, at 10.5 per cent and 10.0 per cent, respectively. Furthermore, the unemployment rate is also

¹ PPP is used to convert to a common currency the amount of money needed in each country to buy the same amount of goods and services in the domestic market.

comparable across genders: the female unemployment rate, at 8.7 per cent, is only marginally higher than the rate for men (6.9 per cent).

However, the quality of jobs is of considerable concern, with working poverty and vulnerable employment the highest across all regions. In particular, nearly eight out of ten employed persons in Sub-Saharan Africa were in vulnerable forms of employment. Accordingly, the vulnerable employment rate – the share of own-account workers and unpaid family workers in total employment – was estimated at 76.6 per cent in 2014, significantly higher than the global average of 45.3 per cent, and followed closely by South Asia at 75.6 per cent. Female vulnerable employment (typically unpaid family work) was considerably higher than the rate for males, at 84.3 per cent compared with 70.1 per cent for males in 2014.

Youth unemployment in 2013 at 11.8 per cent is predicted to remain at 11.8 per cent in 2019 (range 11.3-12.3).

African Economic Outlook. Chapter 6: Promoting Youth Employment, ADB, OECD, UNDP, UNECA (2012)

<http://www.cpahq.org/cpahq/cpadocs/Promoting%20Youth%20Employment.pdf>

With almost 200 million people aged between 15 and 24, Africa has the youngest population in the world. And it keeps growing rapidly. The number of young people in Africa will double by 2045. Between 2000 and 2008, Africa's working age population (15-64 years) grew from 443 million to 550 million; an increase of 25 per cent. In annual terms this is a growth of 13 million, or 2.7 per cent per year. If this trend continues, the continent's labour force will be 1 billion strong by 2040, making it the largest in the world, surpassing both China and India (McKinsey, 2010).

Youth population trends and sustainable development

UNECA (2015). Population Facts No. 2015/1.

http://www.un.org/en/development/desa/population/publications/pdf/popfacts/PopFacts_2015-1.pdf

After rapid and sustained growth through the latter half of the twentieth century, the number of young people aged 15- 24 years in Asia is projected to decline from 718 million in 2015 to 711 million in 2030 and 619 million in 2060.

In Africa, the number of youth is growing rapidly. In 2015, 226 million youth aged 15-24 years lived in Africa, accounting for 19 per cent of the global youth population. By 2030, it is projected that the number of youth in Africa will have increased by 42 per cent. Africa's youth population is expected to continue to grow throughout the remainder of the twenty-first century, more than doubling from current levels by 2055.

Nigeria and Zambia, with youth unemployment rates of 14 and 24 per cent respectively in 2015, are projected to see their youth populations grow by 60 per cent over the next 15 years.

World Population Prospects. The 2012 Revision Highlights and Advance Tables.

United Nations, Department of Economic and Social Affairs, Population Division. (2013). Working

Paper No. ESA/P/WP.228.

https://esa.un.org/unpd/wpp/publications/Files/WPP2012_HIGHLIGHTS.pdf

In Africa, the age 15-24 population is predicted to move from 217 million (2013) to 437 million (2050). In Asia, the youth population of 738 million in 2013 is predicted to fall to 642 million in 20150.

6. Data quality

ILO Labour Statistics databases (LABORSTA): The issue of quality control procedures

Cornu, P. (2004) UN conference paper

<http://unstats.un.org/unsd/accsub/2004docs-CDQIO/3ii-ILO.pdf>

Data quality framework:

Considering that the mandate of the Bureau of Statistics is to collect and disseminate official national statistics, without or with only limited further processing of the data, our main objective as regards data quality is to ensure that the data we are provided with or that we glean through other means are properly integrated into LABORSTA, in conformity with their original production as far as possible. Our responsibility is also to ensure that the statistics that we release publicly have been controlled for the utmost possible precision to reflect the outputs of the national statistical agencies. The data quality framework helps to ensure that all statistics released on behalf of individual member or participatory non-member States, in the form of printed publications, electronic records, etc. are fully representative and serves to check the different parts and components for consistency. The framework therefore also ensures that any difficulties that are detected which cannot be imputed to the data collection means or mechanisms, are reverted to the originating countries by the responsible statisticians to request further information or correction of the data.

The data quality framework is constructed around the fact that all statistics requested from countries are a representation of the statistical norms adopted for their own national purposes. The use of an ILO common questionnaire system, according to the latest international classifications, does not imply nor guarantee that the statistics and the tables that we disseminate are comparable between countries. These statistics cannot be used for any kind of ranking of the different countries.

With respect to the issue of comparability, the Bureau of Statistics consequently also provides users with extensive methodological metadata to assist in identifying the various factors that may hinder comparability that are needed to process the data. This metadata accompanies the data themselves. It concerns the type of statistical source, specific notes related to any figure, and links to special publications on methodology.

This document goes on to outline a number of quality tests and systems. For example:

- all discrete variables are checked against a specific range of allowed values
- tests on the statistical values verify whether the time-series of the newly input values for the screen do not show important variations
- totals and aggregates are tested for

Child labour statistics

ILO (2008) ILO

http://www.ilo.org/wcmsp5/groups/public/---dgreports/---stat/documents/meetingdocument/wcms_099577.pdf

This document notes that translating the broad legal concepts contained in the international legal standards into statistical terms involves confronting a number of specific challenges. It goes on to describe the most important of these challenges, and possible ways of tackling them through different measurement approaches. One of the key issues is how to deal with treatment of non-market and non-economic production.

Labour Force Data Analysis: Guidelines with African Specificities

ADB (2012) ADB

http://www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/Labour%20Force%20Data%20Analysis_WEB.pdf

Coherence and comparability of samples: The quality of the results of the labour force survey may be assessed by comparing the survey data with data from other sources deemed more accurate. Lack of coherence of data from different sources is a problem because users of data are puzzled when faced with different figures referring to identical or similar concepts. From the point of view of data producers, reconciliation of the survey data with other sources can help to identify measurement errors and to take actions to reduce them.

School-to-Work Transition Survey (SWTS)

Webpage accessed: 22.11.16.

http://www.ilo.org/employment/areas/youth-employment/work-for-youth/WCMS_191853/lang-en/index.htm

The ILO SWTS was designed in a way that applies a stricter definition of “stable employment” than is typically used in the genre. By starting from the premise that a person has not “transited” until settled in a job that meets a very basic criteria of “decency”, namely a permanency that can provide the worker with a sense of security (e.g. a permanent contract), or a job that the worker feels personally satisfied with, the ILO is introducing a new quality element to the standard definition of labour market transition.

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