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THE LEAST DEVELOPED COUNTRIES REPORT 2013

Growth with employment for inclusive and sustainable development

CHAPTER 3

EMPLOYMENT TRENDS IN LDCs

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A. The quantity of employment in the LDCs

1. Introduction

Since the 2009 global recession, LDCs have undergone a slowdown in GDP growth (see chapter 1). While recent growth patterns may have exacerbated these countries' employment challenge with respect to labour demand and sectoral reallocation, as shown in chapter 2, socio-demographic developments have also had a major impact from the labour supply side. This chapter considers the quantity of employment (labour demand and supply trends) and quality of employment (working poor and vulnerable employment) in LDCs since 1990. The chapter concludes with a brief discussion of the interaction between employment and growth in LDCs.

The central employment challenge in the LDCs is to create productive jobs and livelihoods for the millions of people who are entering the labour force each year.

2. The LDC employment challenge

The central employment challenge in the LDCs is to create productive jobs and livelihoods for the millions of people who are entering the labour force each year. The scale of this challenge will be even greater in the coming years. It is useful to illustrate what this increasing trend actually means for individual LDCs. In 45 of the 48 LDCs for which data are available, there are rising numbers of new entrants[1] to the labour market, and those numbers will not even have peaked by 2050. A few examples illustrate how dramatic the trend is. In Niger there were 224,000 new entrants in 2005, a number expected to increase five-fold (1.4 million) by 2050. In Ethiopia, there were 1.4 million new entrants in 2005, which should rise to 2.7 million by 2030 and 3.2 million by 2050 (see annex table 13). It was estimated that in Nepal, for example, new entrants to the labour force numbered 465,000 in 2005, a figure that is expected to peak at 633,000 by 2020. After that, the annual number will start to decline. Similarly, in Bangladesh, there were 2.9 million new entrants in 2005; this figure will peak at 3.1 million by 2020 and decline thereafter. These are the numbers of productive and decent jobs that will have to be created in these countries each year. If this does not happen, the likelihood is that poverty and international emigration rates will rise.

In 45 of the 48 LDCs for which data are available, there are rising numbers of new entrants to the labour market, and those numbers will not even have peaked by 2050.

It is also clear that the magnitude of the employment challenge is not only growing, but becoming increasingly complex to address. As previously noted, the main source of employment for the growing LDC labour force has been agriculture, largely through people cultivating new land. However, LDCs face persistent constraints on agricultural growth — declining research and development investment, missing and imperfect factor markets, limited access to producer-risk mitigation tools and poor infrastructure (UNCTAD, 2013). With rising population growth, declining agricultural farm sizes and low productivity, agricultural production is becoming a less viable livelihood for the rural poor. In addition, most LDC farmers cannot afford the means for sustainable intensification of agricultural production. More people are thus seeking work outside agriculture, and urbanization is forecast to accelerate in coming decades.

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Unfortunately, the least developed countries have not been able to generate sufficient productive off-farm jobs to absorb the growing labour force seeking work outside agriculture. Most of these people find work in survival urban informal activities. As shown in chart 14, LDC employment growth during the period 2000–2012 was 2.9 per cent per annum, slightly above population growth for the period. Employment growth in the African and island LDCs also outpaced the LDC average and will continue to do so until at least 2018. ILO

(2011) notes that employment growth for adults in LDCs during 2000–2009 was 3.2 per cent per annum, and for youths only 2.1 per cent, far below the period's average GDP growth levels of 7 per cent. Chart 14 also shows that average employment growth lagged behind real GDP growth in the LDCs during the period 2000–2012.

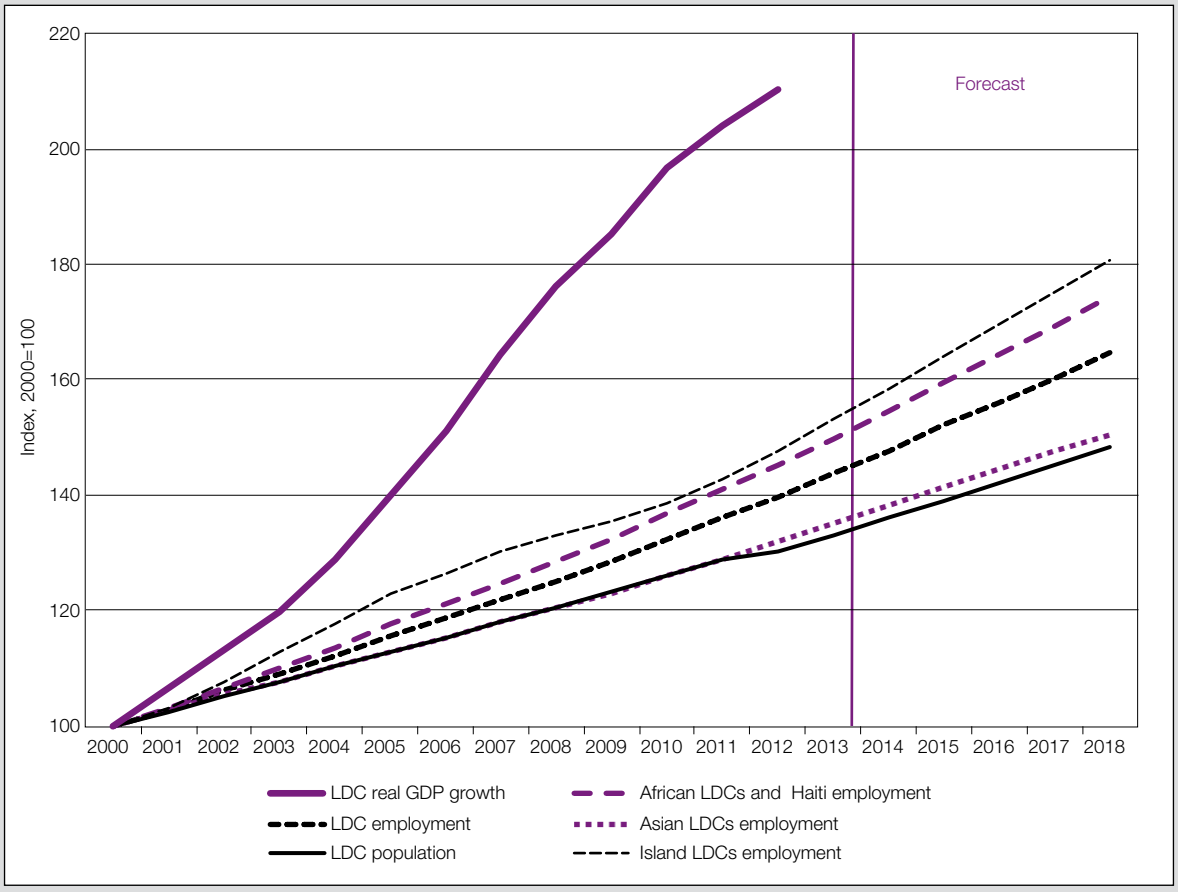
Existing labour market data on the LDCs are incomplete,[2] which makes a detailed empirical evaluation of labour conditions difficult. The broad description outlined in this section is based on data from ILO, the United Nations Population Fund (UNFPA) and the Food and Agriculture Organization of the United Nations (FAO). First, we consider the economically active population (EAP) and break down the LDC labour force[3] into agricultural and non-agricultural sectors. Next, we consider labour force participation, employment-to-population dynamics, labour productivity and rural non-farm (RNF) employment. The chapter concludes with a discussion of the quality of employment in LDCs, employment growth and estimated net job creation in LDCs.

Average employment growth lagged behind real GDP growth in the LDCs during the period 2000–2012.

3. Gross employment trends in the LDCs

This outline of gross employment trends in the LDCs is based largely on FAO estimates of the EAP. These estimates provide a labour force classification of the agricultural and non-agricultural sectors of the economy, the latter encompassing all economic activities outside agriculture (mining, construction,

Chart 14. LDC GDP, employment and population growth trends, 2000–2018
(Index, 2000=100)



Source: UNCTAD secretariat calculations, based on data from ILO, Employment Trends (EMP/TRENDS) econometric model, April 2013).
Note: Data series 2013 to 2018 are preliminary projections. Real GDP data series covers the period 2000 to 2012 ($ at constant prices, 2005 and constant exchange rates, 2005).

utilities, manufactures and various kinds of services). The EAP is defined as those who furnish the supply of labour for the production of goods and services during a specified reference period. This includes employers, self-employed workers, salaried employees, wage earners, casual day workers, unpaid workers assisting in a family farm or business operation, members of producers' cooperatives and members of the armed forces (International Labour Office, 2009).[4] The terms "EAP" and "labour force" will be used interchangeably throughout this chapter.

The total LDC labour force comprised 364 million people in 2010. Between 2000 and 2010, it increased by 86.9 million, and between 2010 and 2020 it is expected to grow by a further 109 million.

According to FAO estimates, the total LDC labour force comprised 364 million people in 2010. Between 2000 and 2010, it increased by 86.9 million, and between 2010 and 2020 it is expected to grow by a further 109 million (equivalent to 30 per cent of the 2010 labour force) to reach 474 million (chart 15). A significant share of the 30 per cent increment in the total labour force between 2010 and 2020 will occur in Ethiopia (accounting for 12 per cent), Bangladesh (11 per cent) and United Republic of Tanzania (9 per cent). However, all LDCs will experience substantial growth in their labour force during the same period. In 36 of the 48 LDCs for which data are available, the labour force should increase by over 25 per cent. The LDCs that will experience the most rapid growth in labour force are all African: Madagascar, Malawi, Niger, United Republic of Tanzania and Zambia.

In 36 of the 48 LDCs for which data are available, the labour force should increase by over 25 per cent.

Chart 15 also depicts past trends and future projections for the share of the labour force in non-agricultural activities and the distribution of the population between urban and rural areas. In 2010, 65 per cent was engaged in agriculture and 71 per cent lived in rural areas, both down from 2000 levels. The urbanization

Chart 15. Labour force dynamics in the LDCs, 1990–2020

Source: UNCTAD secretariat estimates based on FAO, FAOStat, June 2013.

rate has increased as well, from 20 per cent in 1990 to 29 per cent in 2010, while the share of the population engaged in non-agricultural activities rose from 24 per cent in 1990 to 34 per cent in 2010. The annual growth rate of the non-agricultural labour force, however, has slowed marginally since 1990–2000, to 4.1 per cent per annum in 2010–2020 (chart 15c).

In 2010, 65 per cent was engaged in agriculture and 71 per cent lived in rural areas.

Table 10 summarizes the projected shift between 1990 and 2020 in individual countries. In 1990, two thirds of the LDCs had less than one third of their population living in urban areas and less than one third of their EAP engaged outside agriculture. By 2020, however, this situation will have reversed, with the majority of countries having over a third of their population living in urban areas and engaged (economically active) outside agriculture. During the period 1990–2020, some LDCs — namely, Bangladesh, Chad, Democratic Republic of the Congo, Equatorial Guinea, Haiti, Myanmar, Sao Tome and Principe, and Yemen — will experience a very substantial shift in both the location of their population (largely urbanized) and the increased share of their non-agricultural labour force in the total labour force. As previously noted, the population is not only growing rapidly but also urbanizing quickly. More of the LDC population than ever before is entering the labour market, and a growing proportion of the labour force is working or seeking work outside agriculture. The convergence of these trends makes the current decade critical for these countries, particularly with regard to employment.

In 1990, two thirds of the LDCs had less than one third of their population living in urban areas and less than one third of their EAP engaged outside agriculture. By 2020, however, this situation will have reversed.

Nonetheless, agriculture will remain the major source of livelihood in the LDCs until at least 2020. The EAP in agriculture should also continue to rise until at least that year, when it is projected to increase to 285 million people, as against 187 million in non-agricultural activities. Moreover, according to recent projections of the EAP for 2010–2020, 62 million of the 109-million increase will be outside agriculture and 47 million in agriculture (chart 16).

African LDCs and Bangladesh (as the most populous LDC) are driving the overall pattern of change for the LDCs as a group. In African LDCs, 63 per cent of the increase in the total EAP is expected to be outside agriculture during 2010–2020 (as against 46 per cent during 2000–2010), and in Asian LDCs (excluding Bangladesh), 13 per cent in the 2010–2020 EAP (vs. 45 per cent in 2000–2010). When Bangladesh is included, the projected Asian LDC proportion rises to 37 per cent of the EAP (chart 16). Bangladesh has made significant progress in diversifying its economy and in improving health, fertility and educational outcomes. In addition, as the country has enjoyed a relatively prolonged and constant inward flow of remittances since 1980, families have increasingly reduced their reliance on cultivation and diversified into various non-farm activities (see box 3). African LDCs, by contrast — and despite a rise in the EAP outside agriculture — have not yet managed a sound economic diversification. Island LDCs account for 0.4 per cent of the increase in the total LDC EAP outside agriculture. That EAP is projected to grow faster than the EAP in agriculture during the decade 2010–2020 in all LDCs for which data are available (48 countries). The countries with the fastest expected growth in the non-agricultural labour force during 2010–2020 are Chad, Malawi, Mali, Uganda and United Republic of Tanzania in Africa; Afghanistan, Bangladesh and Yemen in Asia; and Comoros, Sao Tome and Principe and Timor-Leste among the island LDCs.

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According to recent projections of the EAP for 2010–2020, 62 million of the 109-million increase will be outside agriculture and 47 million in agriculture.

4. Sectoral distribution of employment by status

A further decomposition of the non-agricultural labour force provides a better picture of job creation across sectors.[5] As shown in chart 17A, the agricultural sector in 2000 accounted for 71 per cent of total employment in both LDCs and ODCs; by 2018, it is expected to represent 63 per cent in LDCs but only 29 per cent in ODCs. However, the industrial and services sectors are rising significantly

Table 10. Changing locus of the labour force in LDCs 1990–2020

Population in urban areas as percentage total population

Labour Force in non-agriculture, % total labour force in 1990	1990		
	0-33%	*34-66%*	*67-100%*
0-33%	Afghanistan	Angola	Djibouti
	Bhutan	Central African Rep.	
	Burkina Faso	Equatorial Guinea	
	Burundi	Gambia	
	Cambodia	Liberia	
	Chad	Sao Tome & Principe	
	Comoros	Senegal	
	Dem. Rep. of the Congo	Sierra Leone	
	Ethiopia	Timor-Leste	
	Guinea	Zambia	
	Guinea-Bissau		
	Haiti		
	Lao People's Dem. Rep.		
	Madagascar		
	Malawi		
	Mali		
	Mozambique		
	Myanmar		
	Nepal		
	Niger		
	Rwanda		
	Solomon Islands		
	Somalia		
	Sudan (former)		
	Uganda		
	United Rep. of Tanzania		
34-66%	Samoa	Benin	
	Vanuatu	Mauritania	
	Lesotho		
	Yemen		
	Bangladesh		
	Togo		
67-100%		Kiribati	
		Tuvalu	

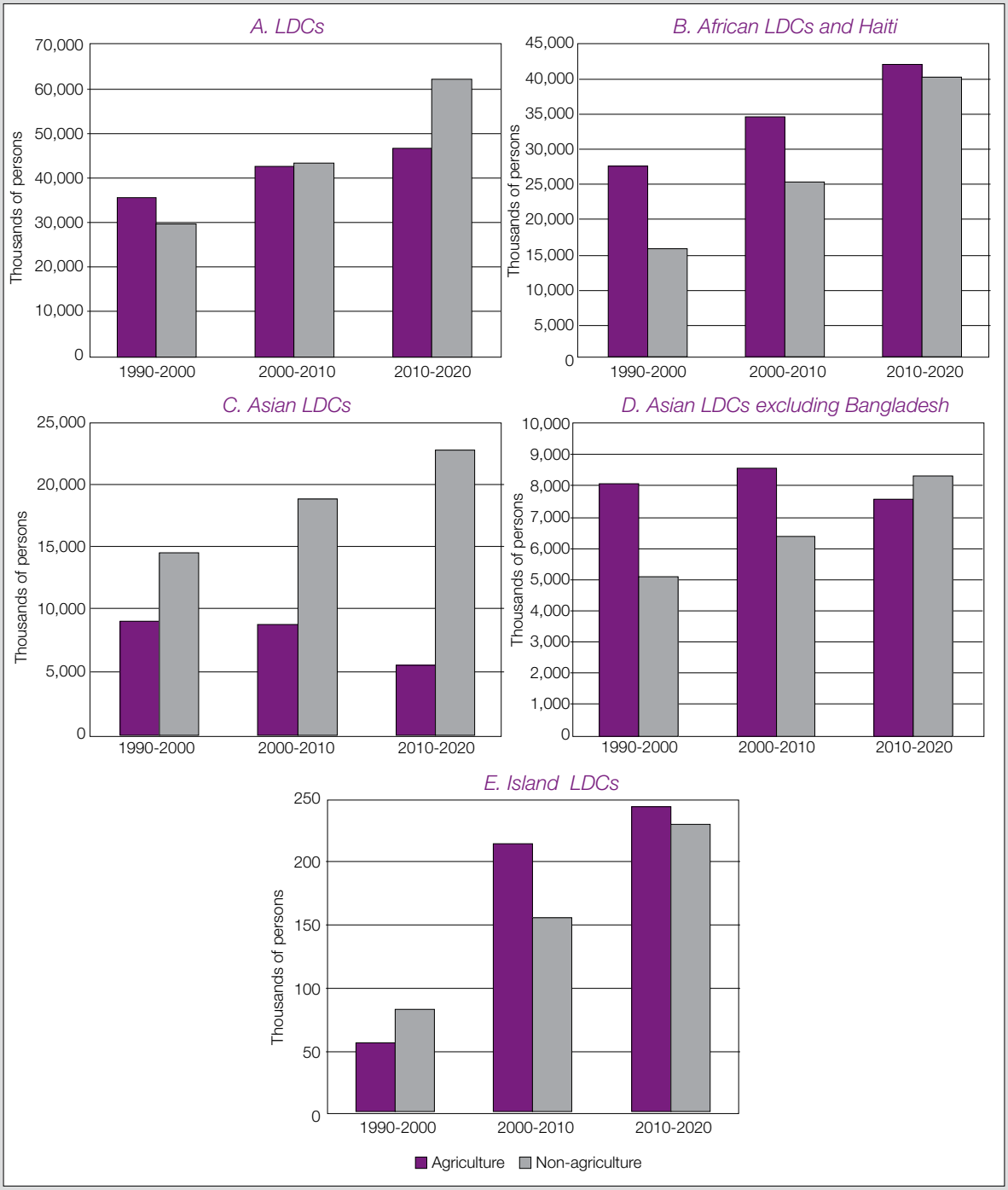
Labour Force in non-agriculture, % total labour force in 2000	2000		
	0-33%	*34-66%*	*67-100%*
0-33%	Bhutan	Angola	Djibouti
	Burkina Faso	Central African Rep.	
	Burundi	Equatorial Guinea	
	Cambodia	Gambia	
	Chad	Liberia	
	Comoros	Senegal	
	Eritrea	Somalia	
	Ethiopia	Zambia	
	Guinea		
	Guinea-Bissau		
	Lao People's Dem. Rep.		
	Madagascar		
	Malawi		
	Mali		
	Mozambique		
	Myanmar		
	Nepal		
	Niger		
	Rwanda		
	Solomon Islands		
	Uganda		
	United Rep. of Tanzania		
34-66%	Afghanistan	Sudan	
	Lesotho	Haiti	
	Samoa	Sierra Leone	
	Vanuatu	Benin	
	Bangladesh	Mauritania	
	Yemen	Togo	
	Dem. Rep. of the Congo	Sao Tome & Principe	
67-100%		Kiribati	
		Tuvalu	

Labour Force in non-agriculture, % total labour force in 2010	2010		
	0-33%	*34-66%*	*67-100%*
0-33%	Burkina Faso	Bhutan	Djibouti
	Burundi	Gambia	
	Eritrea	Guinea	
	Ethiopia	Lao People's Dem. Rep.	
	Guinea-Bissau	Mozambique	
	Malawi		
	Mali		
	Nepal		
	Niger		
	Rwanda		
	Timor-Leste		
	Uganda		
	United Rep. of Tanzania		
34-66%	Afghanistan	Angola	
	Bangladesh	Benin	
	Cambodia	Central African Rep.	
	Chad	Dem. Rep. of the Congo	
	Comoros	Equatorial Guinea	
	Lesotho	Haiti	
	Madagascar	Liberia	
	Solomon Islands	Mauritania	
	Yemen	Myanmar	
		Sao Tome and Principe	
		Senegal	
		Sierra Leone	
		Somalia	
		Sudan	
		Togo	
		Zambia	
67-100%	Samoa	Kiribati	
	Vanuatu	Tuvalu	

Labour Force in non-agriculture, % total labour force in 2020	2020		
	0-33%	*34-66%*	*67-100%*
0-33%	Burundi	Bhutan	Djibouti
	Eritrea	Burkina Faso	
	Ethiopia	Gambia	
	Malawi	Guinea	
	Nepal	Guinea-Bissau	
	Niger	Lao People's Dem. Rep.	
	Rwanda	Mali	
	Uganda	Mozambique	
	United Rep. of Tanzania	Timor-Leste	
34-66%	Afghanistan	Angola	Sao Tome & Principe
	Cambodia	Bangladesh	Haiti
	Comoros	Benin	
	Lesotho	Central African Rep.	
	Madagascar	Chad	
	Solomon Islands	Dem. Rep. of the Congo	
		Equatorial Guinea	
		Liberia	
		Mauritania	
		Myanmar	
		Senegal	
		Sierra Leone	
		Somalia	
		Sudan	
		Togo	
		Zambia	
67-100%	Samoa	Kiribati	
	Vanuatu	Tuvalu	
		Yemen	

Source: UNCTAD secretariat estimates based on 'Food and Agriculture Organization of the United Nations: Statistics'.

Chart 16. Growth of agricultural and non-agricultural labour force in LDCs, 1990–2020



Source: UNCTAD secretariat estimates based on FAO, FAOStat, June 2013.

as a share of the LDC labour force. Industry accounted for 7 per cent of total LDC employment in 2000 and, based on recent trends, will reach 10 per cent by 2018. Services accounted for 22 per cent of LDC employment in 2000, a proportion likely to increase to 27 per cent by 2018. African LDCs will still have the least diversified economies in terms of employment share, retaining above-average levels of agricultural employment (67 per cent) and below-average levels of industry (8 per cent) and services (25 per cent) as a share of total employment by 2018 (chart 17B). Relatively high GDP growth rates in the LDCs have not translated into concomitant levels of employment growth in industry; only in the services sector has employment growth risen substantially. This reflects a shift

Relatively high GDP growth rates in the LDCs have not translated into concomitant levels of employment growth in industry; only in the services sector has employment growth risen substantially.

Box 3. Observations on rural non-farm employment in Bangladesh

The challenge for Bangladesh, as for other LDCs, is to create a dynamic rural economy that both attracts investment and provides productive employment for the population. During the period 2000–2012, Bangladesh enjoyed a per capita economic growth rate of around 4.6 per cent a year. Although exports of textiles and garments are its principal source of foreign exchange earnings, and the industry has about 4 million employees, the agricultural sector is the largest sector in terms of employment. Some 71 per cent of the population is rural, 46 per cent of them employed in agriculture and the remainder in the RNF sector. The agricultural sector accounts for 21 per cent of GDP, and the RNF sector, which is driven largely by the agricultural sector, for a further 33 per cent (World Bank, 2011). At present around 53 per cent of the rural population is classified as poor, and the average rate of poverty reduction has been only 1 percentage point per annum, which means that some 50 million people are still below the absolute poverty line (World Bank, 2011a). Employment creation as a means of reducing poverty is consequently a major development challenge. Despite the preponderant role of agriculture in rural employment, the sector cannot fully absorb the growing rural labour force or generate sufficient income to reduce poverty.[1] Rural–urban migration has created job opportunities for many, but overall employment growth in rural areas since the 1990s has been concentrated in the rural non-farm economy.

The main drivers of change in the rural economy of Bangladesh are technological innovation within agriculture, increased linkages between rural and urban areas (improved transportation, communications, electrification), growing market linkages and access (demand/supply), skills development, availability of financial services and rising migrant remittances (UNCTAD, 2012). Bangladesh has also undergone a continuous transformation of agricultural production since 1990 with the rising use of high-yield varieties of rice and other cereals, the increased use of chemical fertilizers and pesticides and a rapid increase in irrigation through both deep and shallow tube wells. While much of the supply system is privatized,[2] the new technology and market systems are widespread, and double cropping has become commonplace in many areas of the country (Toufique and Turton, 2002; Hossain, 2004).

Rising agricultural production (involving several crop seasons) has helped to reduce seasonal vulnerability and household dependency on one major crop per year. In addition, the steady decline in average farm size has been somewhat offset by a rise in average production gains for rural households (Mendola, 2007; Bäckman et al., 2011). Increased production has also affected the local labour market as demand for labour has increased, resulting in real wage increases for the landless poor and seasonal migration within the country (World Bank, 2011a; Howes, 2002). At the national level, Bangladesh has in recent years become self-sufficient in food grain. However, the value added of crop types and processing is often very low and the availability of other foodstuffs (such as dairy and wheat), with the exception of rice, has not increased, which may have negatively affected nutritional outcomes (Hossain et al., 2005).

The rural non-farm economy has emerged as a potential source of productive employment and consequently poverty reduction in Bangladesh since the 1990s. As shown in chart 26, this economy is primarily composed of rural manufacturing, agribusiness, livestock, fisheries, cottage industries, trade and marketing services, rural construction, transport, infrastructure and various other services. It also comprises a highly productive dynamic sector that caters mainly to urban demand and a low-productivity, mainly traditional sector that encompasses many of the rural poor. The latter sector is essential to many households' livelihoods and acts as a safety net for the poorest rural dwellers. The dynamic rural economy is composed of specialist firms run by entrepreneurs with relatively high skill levels. These businesses tend to be small and medium-sized enterprises (SMEs) that are larger in scope and scale than traditional household or microenterprises (World Bank, 2007). The case of Bangladesh is important because it highlights the role of supportive technological innovation, investment and rural infrastructure policies in promoting rural non-farm employment and diversification.

Nonetheless, the rural economy in Bangladesh still has the potential for substantial improvements, whether in the local labour market, physical capital, land, agricultural production and distribution or marketing linkages. However, a lack of investment in public goods, especially in remote rural areas; high barriers of entry for the poor or vulnerable groups to various dynamic RNF markets; high transaction costs for access to existing markets; and a general asymmetry of market information may limit this potential.

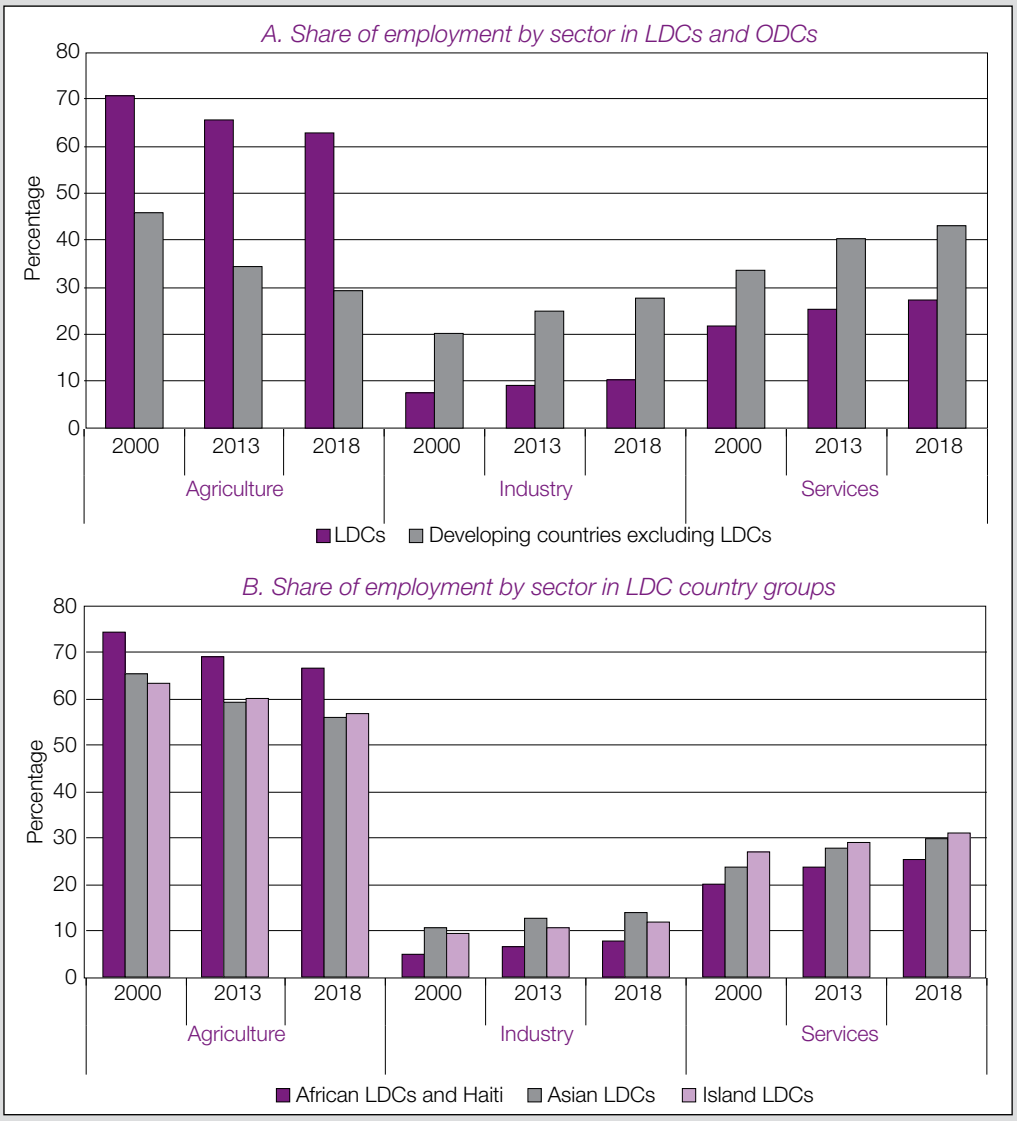
[1] During the period 2000–2012, the labour force grew by an average 1.5 million people a year due to overall population growth and other demographic changes.

[2] Irrigated boro rice has become more important than traditional amon rice as the primary crop.

of labour out of low-productivity activities — mainly in agriculture — to low-productivity activities in the services (largely non-tradable) sector. The services sector has accounted for a greater share of the LDC labour force over time, and that share is probably under-reported, since much of the sector is composed of informal activities. Employment in the LDC services and industrial sectors is rising fastest in the Asian LDCs.

Similarly, if we consider the share of employment by export specialization, mineral exporters have the highest forecast share of agriculture in the total labour force (74 per cent in 2013) and fuel exporters the lowest (45 per cent). In general, fuel-exporting countries are the least diversified in the LDC group, with among the highest export concentration ratios (UNCTAD, 2013). This

Chart 17. Employment in major economic sectors, 2000–2018
(Percentage)



Source: UNCTAD secretariat calculations, based on data from ILO, Employment Trends (EMP/TRENDS) econometric model, April 2013.
Note: Forecast data presented is from 2013 to 2018. There was no data series available beyond 2018 at the time of writing.

excessive dependence on fuel exports can cause capital to migrate to the sector, leading to exchange rate appreciation. This may in turn result in reduced competitiveness for domestically produced goods and services, crowding out previously productive sectors, such as agriculture.

Clearly, the agricultural sector still accounts for the dominant share of LDC employment. However, there is some evidence of structural change in employment, although not to the same extent as in ODCs, where the share should fall by 17 percentage points during the period 2000–2018. By comparison, it is likely that both African and Asian LDCs will experience less structural change in employment — around 8 percentage points of total employment change — over the same period. Island LDCs should undergo the least structural change in employment in the LDC group, with around 6 percentage points of total employment change over the period. We return to these issues later in this chapter in the context of a broader decomposition of GDP growth in the LDCs.

During the period 2000–2018, only one LDC of the 42 will have experienced a higher share of agricultural employment in total employment; in the 41 other countries, that share will have declined.

Table 11 provides a further breakdown of the sectoral share of employment for 42 LDCs. It shows that during the period 2000–2018, only one LDC

Table 11. Sectoral share of total employment for selected LDCs, various years

	Agriculture			Percentage point change 2000–2018	Industry			Percentage point change 2000–2018	Services			Percentage point change 2000–2018
	2000	*2013*	*2018*		*2000*	*2013*	*2018*		*2000*	*2013*	*2018*	
Total LDCs	71	65	63	-8	7	9	10	3	22	26	27	5
Afghanistan	61	54	51	-9	9	13	14	5	30	33	35	5
Angola	54	38	34	-20	7	10	12	5	39	51	54	15
Bangladesh	65	56	53	-12	11	13	15	4	25	31	33	8
Benin	45	42	39	-6	10	9	9	-1	45	50	52	7
Bhutan	80	57	47	-33	3	10	17	14	17	33	36	19
Burkina Faso	87	84	82	-5	3	3	4	1	10	13	14	4
Burundi	92	91	90	-2	2	2	3	1	6	6	7	1
Cambodia	74	72	68	-5	8	8	11	2	18	20	21	3
Central African Republic	74	74	72	-2	4	4	4	0	22	22	23	1
Chad	83	77	76	-7	2	4	5	2	15	19	20	5
Comoros	70	71	70	0	8	7	8	0	22	22	22	0
Dem. Rep. of the Congo	85	82	80	-5	2	2	3	1	13	16	17	4
Equatorial Guinea	49	38	47	-1	14	18	10	-4	38	43	43	5
Eritrea	79	79	78	-1	6	5	5	-1	15	16	17	1
Ethiopia	86	78	76	-10	4	9	10	6	10	13	14	4
Gambia	64	59	56	-8	5	5	6	1	31	36	37	7
Guinea	74	68	64	-10	7	8	10	3	19	24	27	7
Guinea-Bissau	69	68	65	-4	6	4	5	-1	25	28	30	5
Haiti	50	45	41	-9	11	11	13	2	39	43	46	7
Lao People's Dem. Republic	83	74	68	-15	4	7	10	6	13	19	22	10
Lesotho	72	66	63	-9	9	10	11	2	18	25	26	8
Liberia	55	47	45	-11	8	10	11	3	37	43	45	8
Madagascar	77	80	78	1	8	3	4	-5	15	17	18	3
Malawi	77	75	73	-4	7	8	9	2	15	17	18	2
Mali	69	65	62	-7	6	6	7	1	25	29	31	6
Mauritania	62	57	52	-10	9	10	13	4	29	33	35	6
Mozambique	82	75	73	-9	3	5	6	3	15	20	21	6
Myanmar	61	60	56	-6	13	14	16	3	26	26	28	3
Nepal	75	71	69	-6	10	12	13	2	15	17	19	4
Niger	56	54	51	-5	11	12	13	2	32	34	36	4
Rwanda	83	75	73	-10	3	5	6	3	14	20	21	7
Senegal	50	37	35	-15	13	16	17	4	37	47	48	10
Sierra Leone	72	60	57	-15	4	8	9	5	24	33	34	10
Solomon Islands	60	56	53	-7	11	13	14	3	29	31	33	4
Somalia	78	76	74	-4	4	4	4	1	18	20	22	4
Sudan (former)	41	38	36	-5	9	9	10	1	50	53	54	4
Timor-Leste	61	55	51	-10	10	12	14	4	29	33	35	6
Togo	55	53	50	-5	8	7	8	0	37	40	42	5
Uganda	71	64	60	-11	5	8	9	4	23	28	31	7
United Republic of Tanzania	82	73	70	-12	3	5	6	4	15	21	23	8
Yemen	52	50	47	-4	12	13	13	2	36	38	39	3
Zambia	72	71	68	-4	6	10	11	6	22	20	21	-2

Source: UNCTAD secretariat calculations, based on ILO *Key Indicators of the Labour Market (KILM)*, Seventh Edition, 2013.
Note: Sample of 42 LDCs.

(Madagascar) of the 42 will have experienced a higher share of agricultural employment in total employment; in the 41 other countries, that share will have declined. Angola, Bhutan, and Senegal are expected to see the largest declines in the agricultural labour force. Bhutan, Chad, Ethiopia, Laos and United Republic of Tanzania should have the largest increases in the share of industrial sector employment, but this share will shrink in five other countries (Benin, Comoros, Guinea-Bissau, Madagascar and Togo). With the exception of Comoros and Zambia, the services sector's share of employment is likely to rise in the LDCs. Some countries — Bangladesh, Bhutan, Haiti, Liberia and Senegal — should enjoy a more balanced portfolio of jobs across the different sectors, although like most other LDCs, their industrial sector will still account for the smallest share of total employment.

The estimates presented in charts 15, 16 and 17 are projections that may not prove accurate, as they rely on international data, and national estimates may vary. They nonetheless capture the basic dimensions of the employment and poverty reduction challenges faced by the LDCs. Certainly, poverty reduction requires employment creation in both the agricultural and non-agricultural sectors. As Gurrieri and Sainz (2003) note, productive labour absorption may occur when there are "employment changes in the economically active population that increase the average productivity of those in work, without increasing open unemployment and without average productivity falling in major production branches or groupings".

Poverty reduction requires employment creation in both the agricultural and non-agricultural sectors.

5. LDC LABOUR PRODUCTIVITY

The present section identifies trends in labour productivity using data from various sources, including ILO, World Bank, the United Nations Statistical Division and FAO. However, it is difficult to acquire detailed, internationally comparable data on what LDCs produce and how people in these countries earn a living. The following analysis is accordingly limited to the relatively broad level of sectoral disaggregation allowed by the data, namely, agriculture, industry, manufacturing and services. The information available on LDC wage data is similarly sparse, and there is an urgent need for more data collection and statistical analyses, which should figure prominently in the post-2015 MDG debate. Improved data collection and labour market statistics should help improve government policy analysis and planning. In any case, we show here that wage employment in LDCs is a small share of total employment, which means that average wage data may create a misleading impression of the labour market. Accordingly, the focus here is more on productivity, on the assumption that productivity drives wage adjustment (in a perfectly competitive labour market).

The labour productivity divide between LDCs and ODCs remains substantial, but has narrowed since 2000.

a. Shifts in production structure

As previously noted, there has been little structural transformation in the LDCs as a group over the past 30 years, as most of these countries continue to be dominated by agriculture and minor (largely informal) services activities. Nonetheless, manufacturing and industrial activities and services have become more important for the group as a whole. Since 2000, in the wake of the commodity boom of 2002–2008, the types of industrial activities that have expanded are mining and the exploitation of crude oil. Petty trade and commercial services have grown, among services; and particularly in the Asian LDCs, the manufacturing sector has gained quite significantly as a share of GDP (see annex table 5).

b. Labour productivity: output per worker

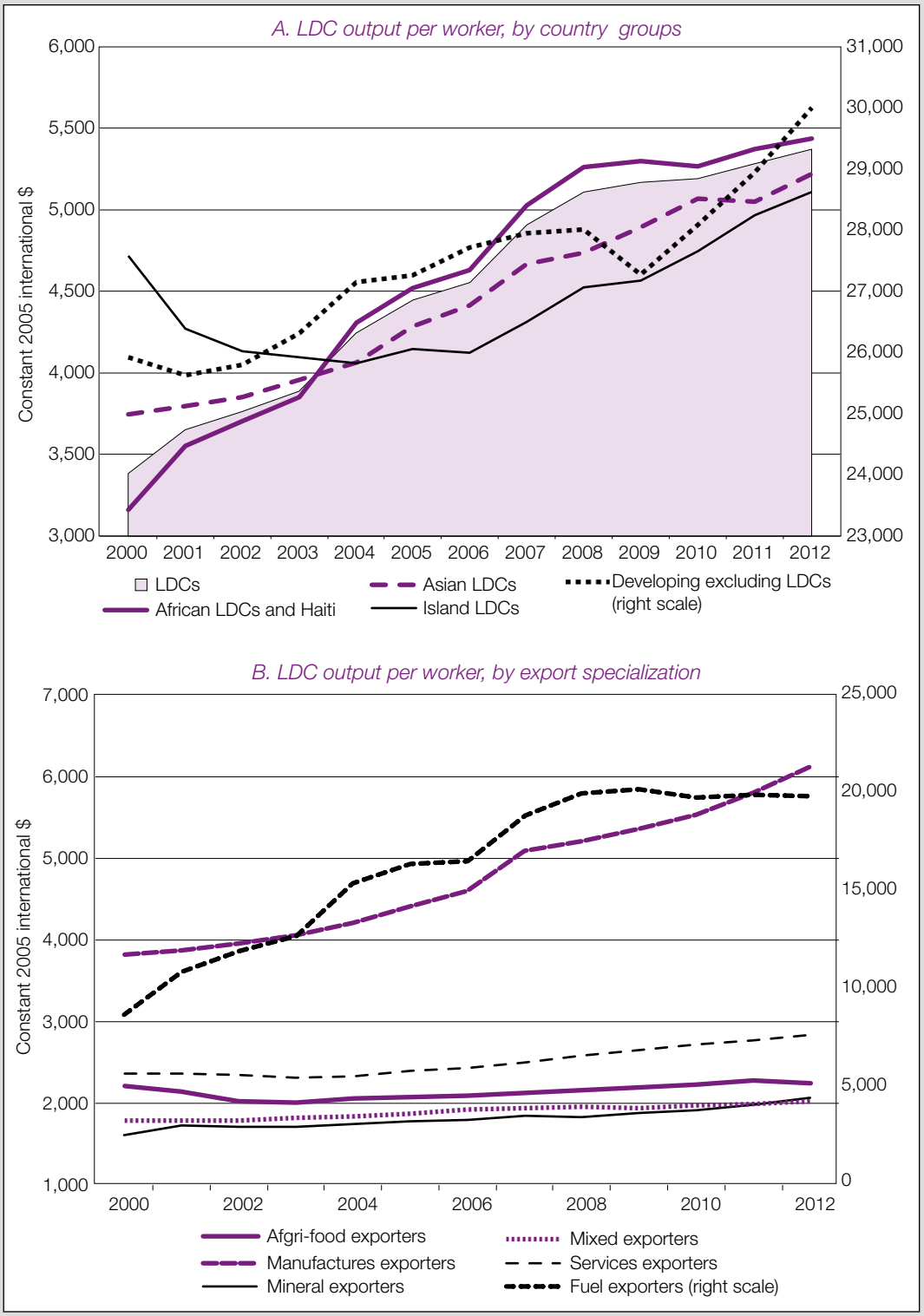
LDC output per worker in 2012 was just 22 per cent that of ODCs, 10 per cent that of the EU average and 7 per cent that of North America.

Labour productivity is a key measure of economic performance, as it highlights some of the underlying drivers of growth, particularly improvements in human capital (e.g. skills, education and health), technological accumulation, innovation, organization, and physical and institutional infrastructures. All of these are critical for formulating policies to promote economic growth and develop productive capacities.

As shown in chart 18A, the labour productivity divide between LDCs and ODCs remains substantial, but has narrowed since 2000. Average output per worker in the ODCs was $30,000 in 2012 (constant 2005 international $), as compared with $5,372 in the LDCs. Thus, the average LDC worker can be said to produce 18 per cent of the output of the average ODC worker. LDCs are not, however, a homogeneous group, since during the period 2003–2012 African

labour productivity grew steadily[6] and has been higher than levels in the Asian and island LDCs. The oil and metals exporters in the African group may at least partly have driven this phenomenon. The trend is even more apparent if we consider labour productivity by export orientation. Chart 18B shows that during the period 2000–2012 the fuel-exporting LDCs had the highest labour productivity of the group (an average $19,800 in 2012).

Chart 18. LDC labour productivity, by country groups and by export specialization, 2000–2012
(Constant 2005 international dollars)



Source: UNCTAD secretariat calculations, based on data from ILO, Employment Trends (EMP/TRENDS) econometric model, April 2013.

There is also evidence of steady growth in output per worker in the manufacturing and mixed exporter groups (an average $6,000 in 2012). For the Asian LDCs — such as Bangladesh, Cambodia and Laos, which, together with Haiti, account for the bulk of LDC exports in this sector — the garment industry is a leading driver of growth and employment.

The agricultural labour productivity gap between LDCs, ODCs and developed economies has widened since 1985.

Using an alternate ILO KILM dataset, chart 19 shows that LDC output per worker in 2012 (constant 1990 international $) was just 22 per cent that of ODCs, 10 per cent that of the EU average and 7 per cent that of North America (comprising Canada and the United States). Although the LDC sample covers only 18 countries, it would appear that their average productivity levels have increased only marginally compared to other developing economies, the EU and North America.

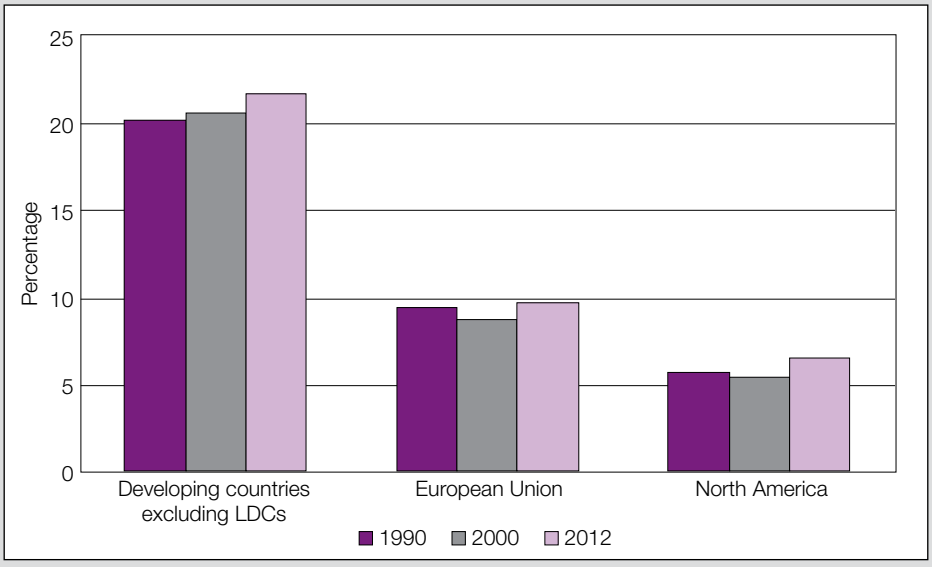
During the period 2009–2011, average agricultural labour productivity was just 7 per cent that of ODCs and 3 per cent that of developed countries.

Given the importance of the agricultural sector as a share of both GDP and employment in the LDCs, we specifically consider agricultural labour productivity in these countries. The agricultural labour productivity gap between LDCs, ODCs and developed economies has widened since 1985. Agricultural labour productivity fell in over a third of the LDCs (in 10 of the 27 countries for which there were comparable data) between 1985–1987 and 2009–2011. As shown in chart 20A, during the period 2009–2011, average labour productivity was just 7 per cent that of ODCs and 3 per cent that of developed countries. Chart 20B shows that between 1985 and 2011, value added per worker in agriculture[7] in the LDCs increased 17 per cent.[8] The equivalent rise in agricultural labour productivity in ODCs was 152 per cent, and in developed countries, 194 per cent. In the LDC group, value added per worker is higher in Asian LDCs ($338) than in African LDCs ($276) (see chart 20C). However, during the period 1993–2011, what is particularly striking is the rapid rise in agricultural labour productivity in Asian LDCs (up around 79 per cent). In African LDCs, by contrast, productivity levels have been stagnant (up only 1 per cent), and in island LDCs these levels actually declined by 5 per cent over the same period.

Raising agricultural productivity in the LDCs is a sine qua non for their development and the structural transformation of the sector.

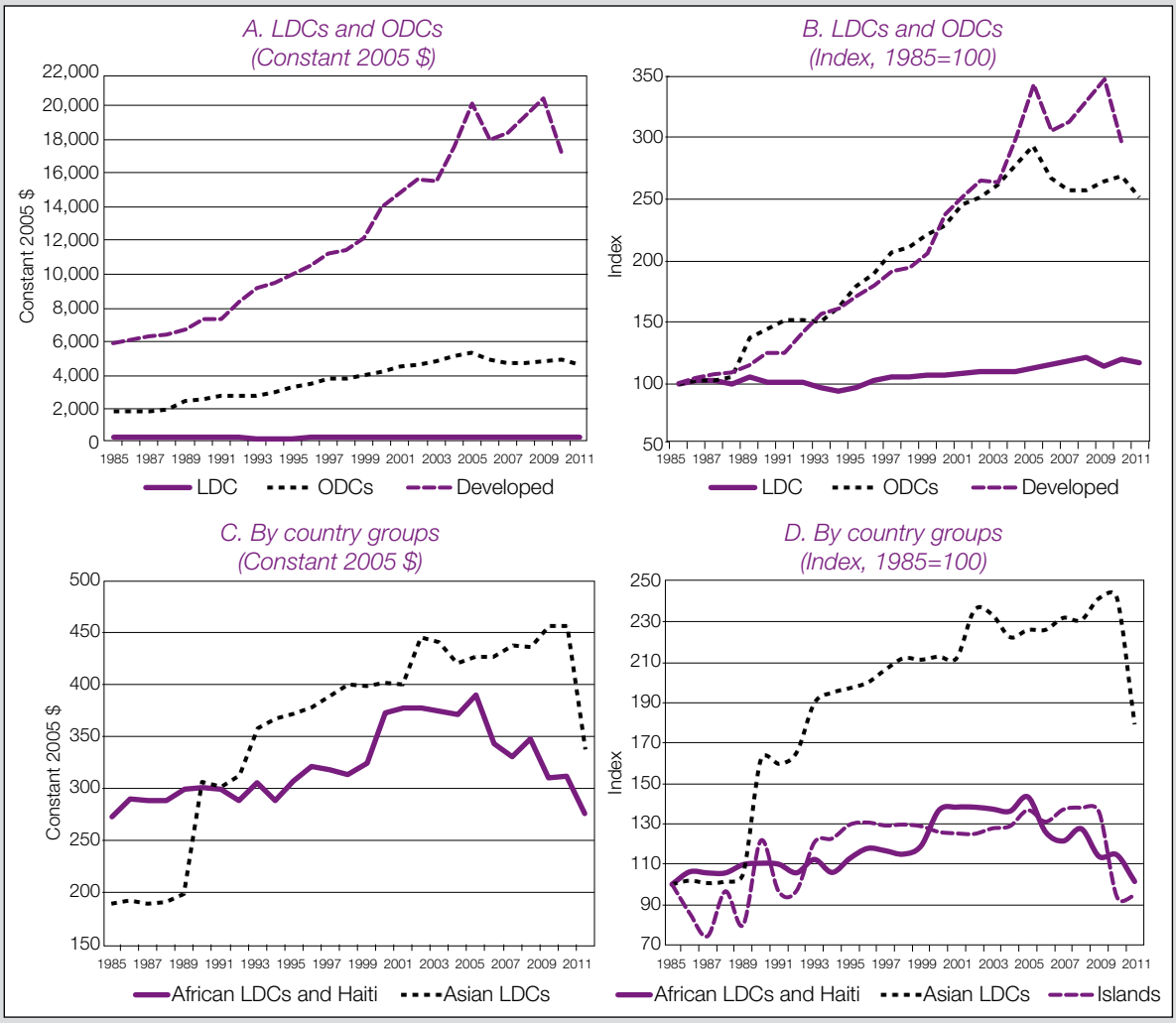
Raising agricultural productivity in the LDCs is a *sine qua non* for their development and the structural transformation of the sector. The introduction of

Chart 19. LDC output per worker as a share of more developed economies, 1990–2012
(Constant 1990 international dollars)



Source: UNCTAD secretariat calculations, based on ILO, *Key Indicators of the Labour Market (KILM)*, Seventh Edition, 2013..
Note: LDC sample includes 18 countries due to limited available data.

Chart 20. Agricultural labour productivity trends in LDCs, developed and other developing countries, 1985–2011



Source: UNCTAD secretariat calculations, based on UNCTADstat and *World Development Indicators* online databases.
Notes: The LDC group sample in A and B includes 41 countries; the ODC group sample, 65 countries; and the developed countries' group sample, 30 countries. Labour per worker data are based on constant 2005 dollars. Indices are based on data in constant 2005 dollars. The data series for developed countries covers the period 1985–2010. All other data cover the period 1985–2011.

Greater agricultural labour productivity in LDCs has the potential to both raise the real incomes of rural households and stimulate demand for rural non-farm goods and services.

innovations and technology in order to increase output per worker in the sector could also be critical for improved food availability per capita and food security. If LDCs can raise their relatively low levels of agricultural labour productivity, this could lower food prices relative to agricultural incomes, thereby reducing food expenditures and potentially increasing household budget surpluses. Such surpluses could then be used to increase demand for rural-non-farm goods and services. Increases in farm-based income are closely linked with increases in non-farm income, such as from vending, petty trading and transport services. Non-farm income is especially pronounced in broad-based smallholder-led agricultural growth, because as local labour is hired, income is typically spent locally (Deichmann et al., 2009; Haggblade et al., 2007; Davis, 2005). This could have major employment generation benefits for the rural non-farm economy. In addition, with higher agricultural labour productivity over time (following Lewis, 1954), less on-farm labour will be required to raise output levels, thus releasing labour resources for other sectors of the economy. Greater agricultural labour productivity in LDCs therefore has the potential to both raise the real incomes of rural households and stimulate demand for rural non-farm goods and services. Curiously, these factors are often overlooked by policymakers intervening in the sector.

6. Labour force participation rates

LDCs have a high labour force participation rate (LFPR)[9] of 75 per cent on average (table 12), as compared to 68 per cent in ODCs. With limited or no social security in many least developed countries, the poor have no option but to seek work, since they would starve without engaging in some sort of work, no matter how poorly paid. To some extent, this is also a result of the significant share of economic activity accounted for by subsistence farming in these countries. Moreover, with earnings from work being low, more household members need to enter the labour market to ensure that family earnings are sufficient to provide the household with a subsistence income. One consequence is that a high labour force participation rate is by no means indicative of a comfortable labour market situation. Unemployment rates, however, do not reveal much, since the poor cannot afford the luxury of choosing open unemployment when only extremely low-paid employment is available.

LDCs have a LFPR of 75 per cent on average. With limited or no social security in many LDCs, the poor have no option but to seek work, since they would starve without engaging in some sort of work

A breakdown of the LFPR by gender and age group provides further insights into the distribution of the EAP in LDCs. Women in these countries have a high propensity to work in the labour market, especially in the informal sector (housekeeping, child-rearing, farming and so forth). In chart 21A, the LDC labour force participation rate in 2012 by gender and age group is an inverted-U shape, more pronounced for men than for women. The fact that the male curve is above the female curve reflects the higher LFPR of men in all age groups. As to the gender dimension, the curve increases at low ages as youths leave school and enter the labour market, and peaks in the 35–39-year age group for men and the 40–49-year group for women. Thereafter, it decreases gradually for women and more sharply for men as they retire from the labour market.

Women in these countries have a high propensity to work in the labour market, especially in the informal sector.

Chart 21B–D illustrates the extent to which the LFPR varies between LDCs by gender and age group. In the African LDCs, the rate for both men and women follows patterns similar to the LDC average, and gender differences are much less accentuated than for other LDCs. Indeed, the female rate is almost equal to the male rate for the 15–24-year age group. In African LDCs it appears that most 15-to-24-year-olds of both genders are in the labour force, where women remain until they reach 60–64 years of age. This pattern may reflect a lack of social security for elderly Africans and a preponderance of agricultural sector employment in Africa, which relies heavily on female labour. The Asian LDCs have a much wider gender gap in labour participation rates (around 24 percentage points) for people aged 35–54 years. The difference is particularly acute in the island LDCs (38 percentage points) (chart 21D).

The overwhelming majority of women in LDCs work in the informal sector with few employment rights, such as maternity leave. The age at which most LDC youths enter the labour force is between 15 and 24 years for both genders, whereas in high-income OECD countries the equivalent is 20–24 years.

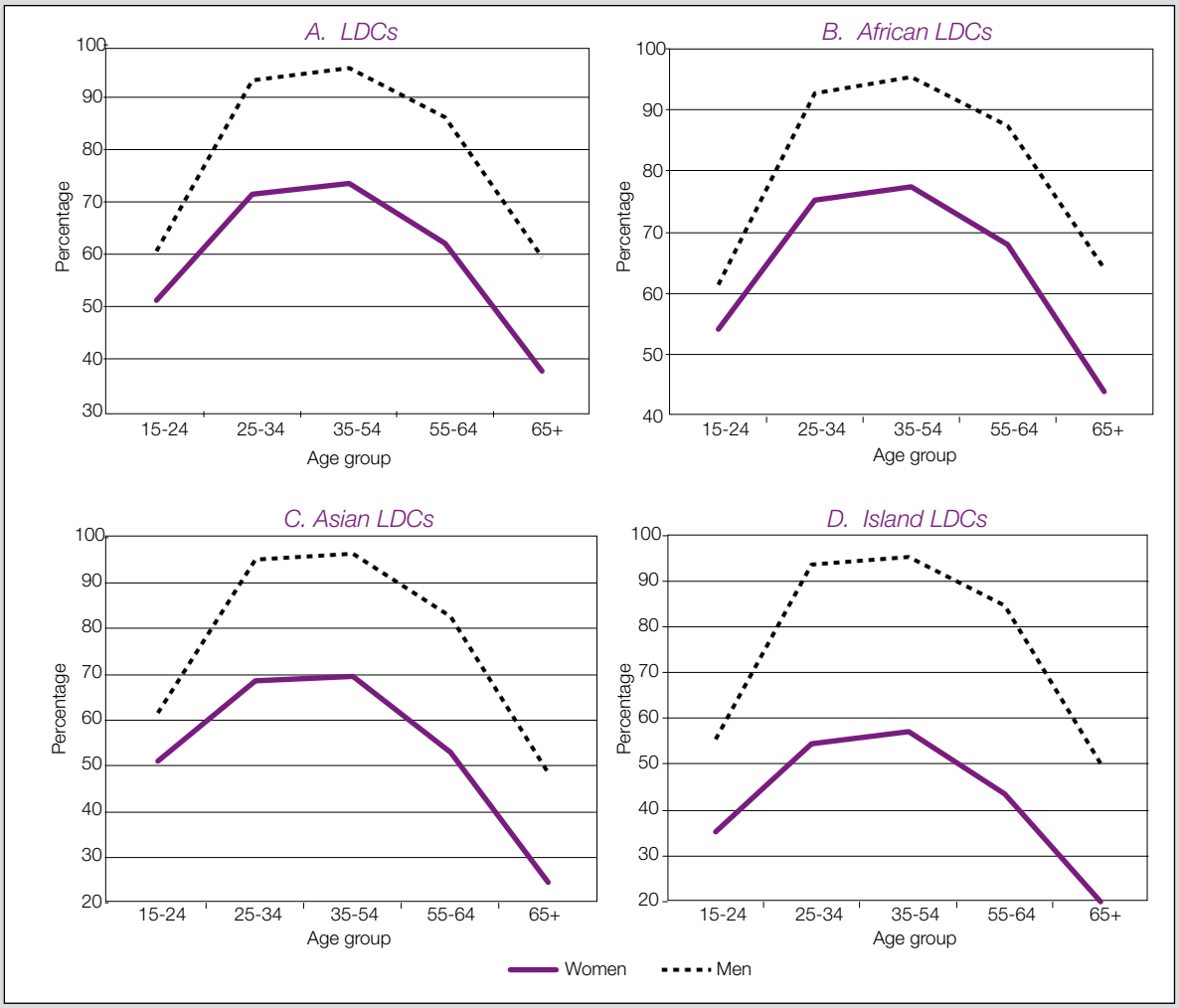
If we consider the world average, we see that most men leave the labour force between 60 and 64 years of age; most women, between 50 and 54 years. In contrast to the LFPR for women in high-income OECD countries, in LDCs there are no discernible peaks reflecting the age at which women leave the labour market due to marriage and childbearing (25–29 years) or at which they return to the labour market (45–49 years) (OECD, 2012). The overwhelming majority of women in LDCs work in the informal sector with few employment

Table 12. Labour force participation rates, 1980–2009
(Percentage of working-age population, aged 15-64 years)[a]

	1980	1990	2000	2009
Total LDCs	75.6	75.8	74.8	75.1
LDCs African LDCs and Haiti	77.3	76.6	77.0	77.5
Asian LDCs	73.4	74.9	71.9	71.7
Island LDCs	68.5	66.8	66.4	68.4
ODCs	70.2	70.5	69.5	68.4

Source: UNCTAD secretariat calculations, based on ILO *Key Indicators of the Labour Market (KILM)*, Seventh Edition, 2013.
a Weighted averages.

Chart 21. LDC labour force participation rates by gender and region, 2012



Source: UNCTAD secretariat calculations, based on ILO, *Key Indicators of the Labour Market (KILM)*, Seventh Edition, 2013.

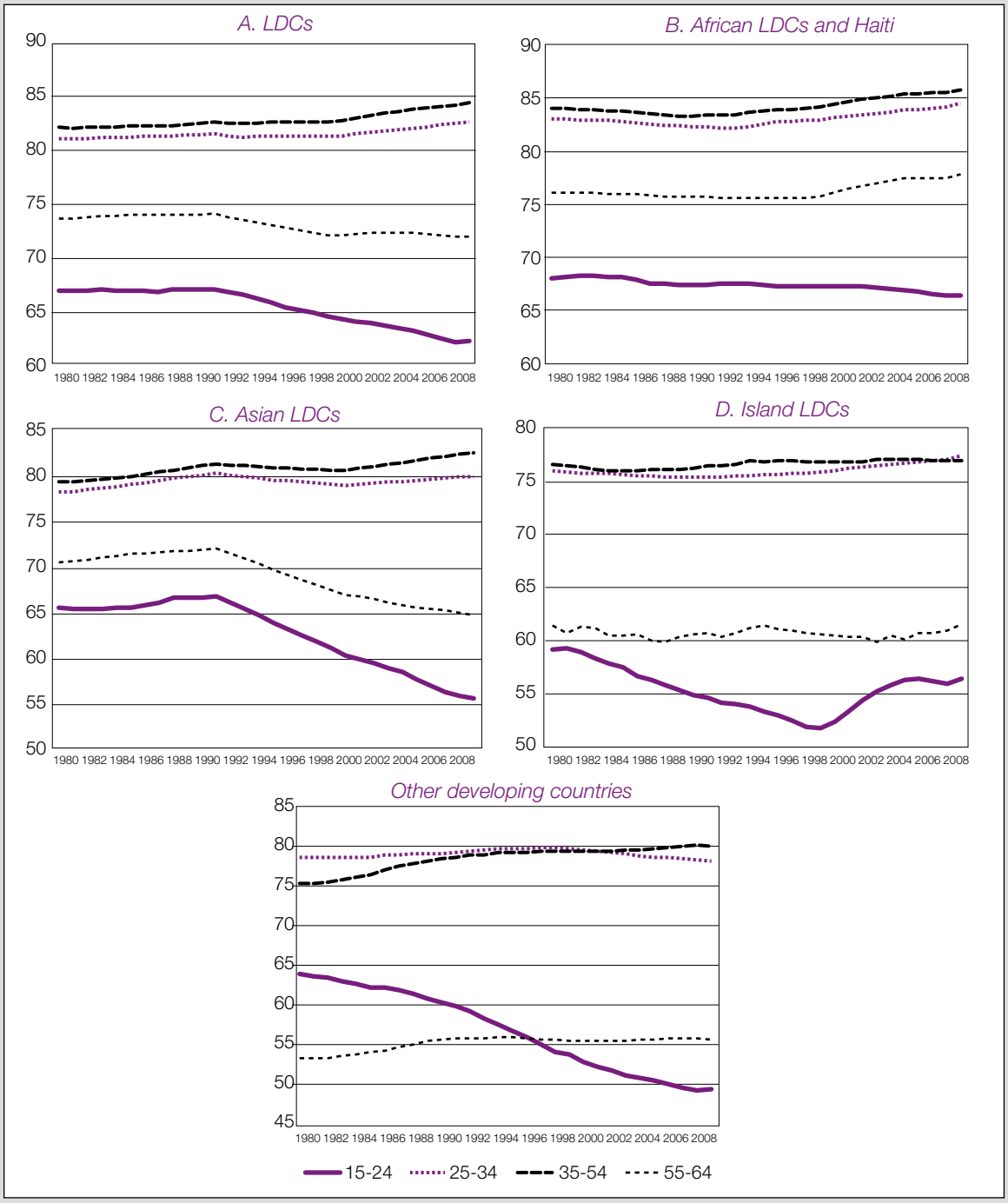
rights, such as maternity leave. The age at which most LDC youths enter the labour force is between 15 and 24 years for both genders, whereas in high-income OECD countries the equivalent is 20–24 years (OECD, 2012).

As shown in chart 22A, the LFPR has risen most for people aged between 25 and 54 years. For the LDC working-age population (15–64 years) as a whole, however, the rate barely declined between 1990 and 2009 (by 0.7 percentage points). Similarly, the youth rate has fallen quite sharply since 1990 for the LDC group, by an average 4.7 percentage points, compared to a 10.9-percentage-point decline in the ODC rate. At the LDC regional level, this drop was driven largely by the Asian LDC group, which recorded an 11-percentage-point decline (chart 22C). As previously noted, this may be a function of the higher rates of primary, secondary and tertiary education enrolment and completion rates in the LDCs (see chapter 5). There was a modest (1.5-percentage-point) rise in youth employment in the island LDCs (chart 22D), and a modest (1-percentage-point) decline in the African LDCs.

Between 1990 and 2012, around 290 million women entered the LDC labour force.

Between 1990 and 2012, around 290 million women entered the LDC labour force. During this period, the labour force participation rates for women in LDCs rose by 3 percentage points, from 59 to 62 per cent on average (chart 23). Within the LDC group as a whole, the LFPRs are highest, and have risen the most, in Africa and Asia (by 3 percentage points), and are the lowest in the island LDCs (by 0.1 percentage point).

Chart 22. LDC Labour force participation rates, by region and age, 1980–2009
(Percentage)

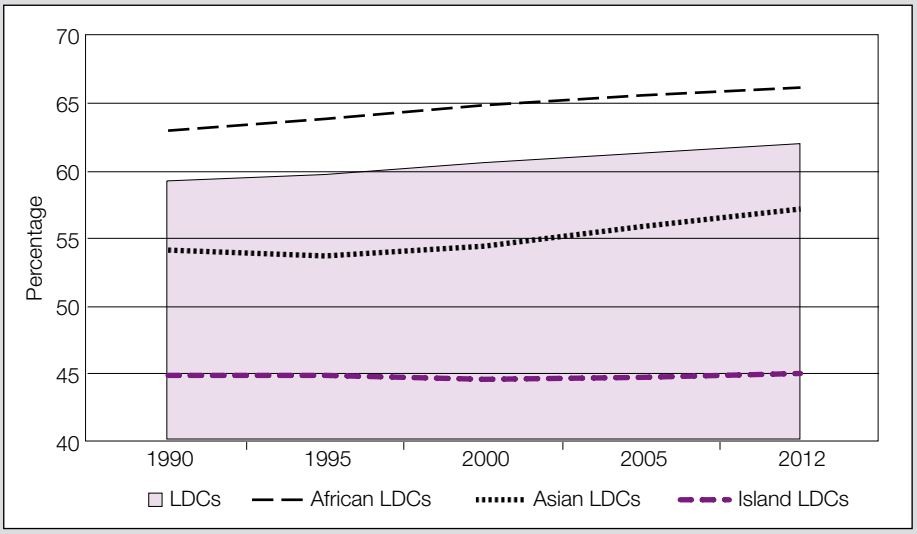


Source: UNCTAD secretariat calculations, based on ILO, *Key Indicators of the Labour Market (KILM)*, Seventh Edition, 2013.
Note: Weighted averages.

7. LDC EMPLOYMENT-TO-POPULATION RATIOS

The employment-to-population ratio is an indicator of the availability of jobs.[10] When considered jointly with the employment level, it enables us to evaluate the magnitude of job growth. Fluctuations in the employment level reflect net changes in the number of people employed, while movements in the ratio are net changes in the number of people employed relative to changes in the size of the population. As the LDC population is growing rapidly, a rise in employment may or may not appear as an increase in the employment-to-population ratio, while a fall in employment is usually reflected as a decline in the ratio. In a developing-

Chart 23. Labour force participation rates for women in LDCs, 1990–2012



Source: UNCTAD secretariat calculations based on ILO, *Key Indicators of the Labour Market (KILM)*, Seventh Edition, 2013.
Note: Sample of 46 LDCs.

country context, a high employment-to-population ratio is often correlated with high levels of working poverty.[11]

For the LDCs as a group, the average employment-to-population ratio is 65 per cent, which is much higher than the 53 per cent average for ODCs.

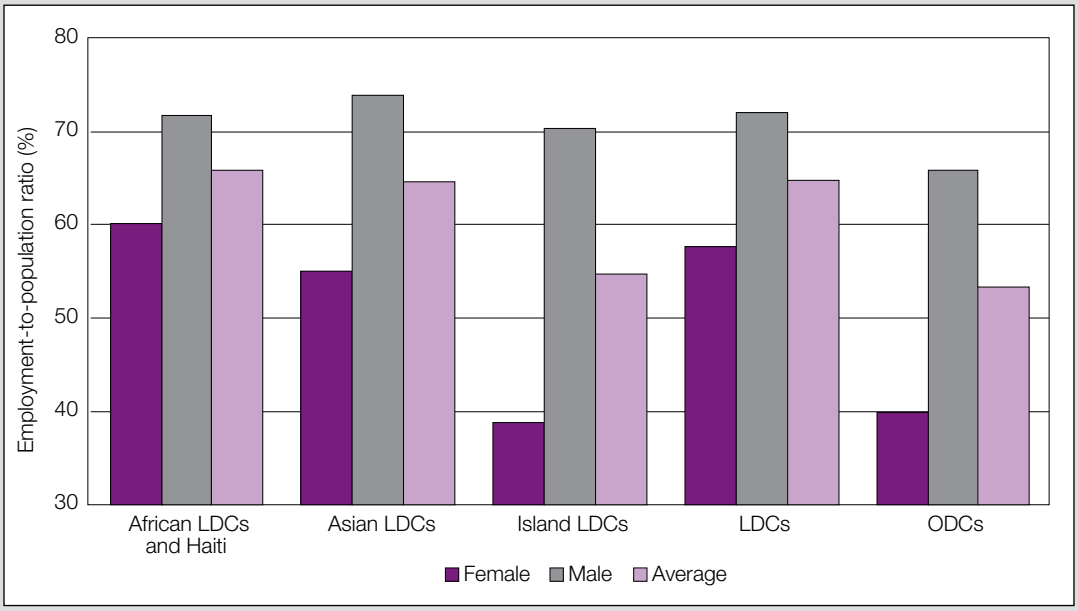
Employment-to-population ratios for the LDCs range from 54 per cent in island LDCs to 65 per cent in African LDCs. Chart 24 shows simple averages of available employment-to-population ratios in 2012 by region. For the LDCs as a group, the average ratio is 65 per cent, which is much higher than the 53 per cent average for ODCs. Most ODCs and developed countries are within the range of 50 to 60 per cent. Countries whose average ratio is above 70 per cent tend to have a high share of the population in poverty, relying on their labour as a means of survival. In fact, 16 of the 42 LDCs for which data are available had employment-to-population ratios of above 70 per cent during the period 2000–2012. The following countries had both high employment-to-population ratios (above 80 per cent) and a relatively high share of the population (above 75 per cent)[12] living below the $2-per-day poverty line: Burkina Faso, Madagascar, Nepal, Rwanda and United Republic of Tanzania.

In some African LDCs — namely, Burundi, Malawi, Mozambique and Rwanda — the female ratio is higher than the male ratio.

The average female employment-to-population ratio is highest in African LDCs, at 60.1 per cent, and lowest in island LDCs, at 38.7 per cent, which have the lowest such ratio in the group. In Asian LDCs and some island LDCs, women's economic contribution may be constrained by social institutions and cultural norms. For example, in Afghanistan and Bangladesh the difference between the male and female employment-to-population ratio was 57 and 24 percentage points, respectively, in 2012. By contrast, men and women in African LDCs are involved almost equally in the labour market. In some African LDCs — namely, Burundi, Malawi, Mozambique and Rwanda — the female ratio is higher than the male ratio. During the period 2000–2012, most LDCs experienced an overall rise in the employment-to-population ratio. In 26 LDCs, that ratio increased more for women than for men, and was greatest (although starting from a relatively low base) in Afghanistan, Bhutan, Comoros, Mauritania and Yemen. The increased female ratio may in part reflect the wider introduction of equality legislation and increased educational and employment opportunities for women in LDCs.

Youths in most LDCs experienced a decline in employment-to-population ratios relative to adults between 2000 and 2012, as shown in chart 25. The only

Chart 24. Employment-to-population ratios, LDC regional averages by gender, 2012



Source: UNCTAD secretariat calculations, based on ILO, *Key Indicators of the Labour Market (KILM)*, Seventh Edition, 2013.
Note: Sample of 46 LDCs.

exceptions were Angola, Burundi, Myanmar, Timor-Leste, Uganda and Zambia, where both youth and adult ratios declined. A falling youth employment-to-population ratio may be positive if the change is due to youths staying on at school or moving into tertiary-level education, rather than becoming unemployed. However, it is difficult to determine whether this is the case.

8. Rural non-farm employment: panacea, or Pandora's box?

The rural non-farm economy (RNFE) may be defined as comprising all those non-agricultural activities that generate income for rural households (including income in kind), either through waged work or through self-employment. In some contexts, rural non-farm activities are also major sources of local economic growth (e.g. tourism, mining and timber processing). The RNFE is of great importance to the rural economy because of its production linkages and employment effects, and the income it provides to rural households represents a substantial and sometimes growing share of rural incomes. Often this share is particularly high for the rural poor. There is evidence that these contributions are becoming increasingly significant for food security, poverty alleviation and farm sector competitiveness and productivity (Dirven, 2011; World Bank, 2005; Balcombe et al., 2005).

Youths in most LDCs experienced a decline in employment-to-population ratios relative to adults between 2000 and 2012.

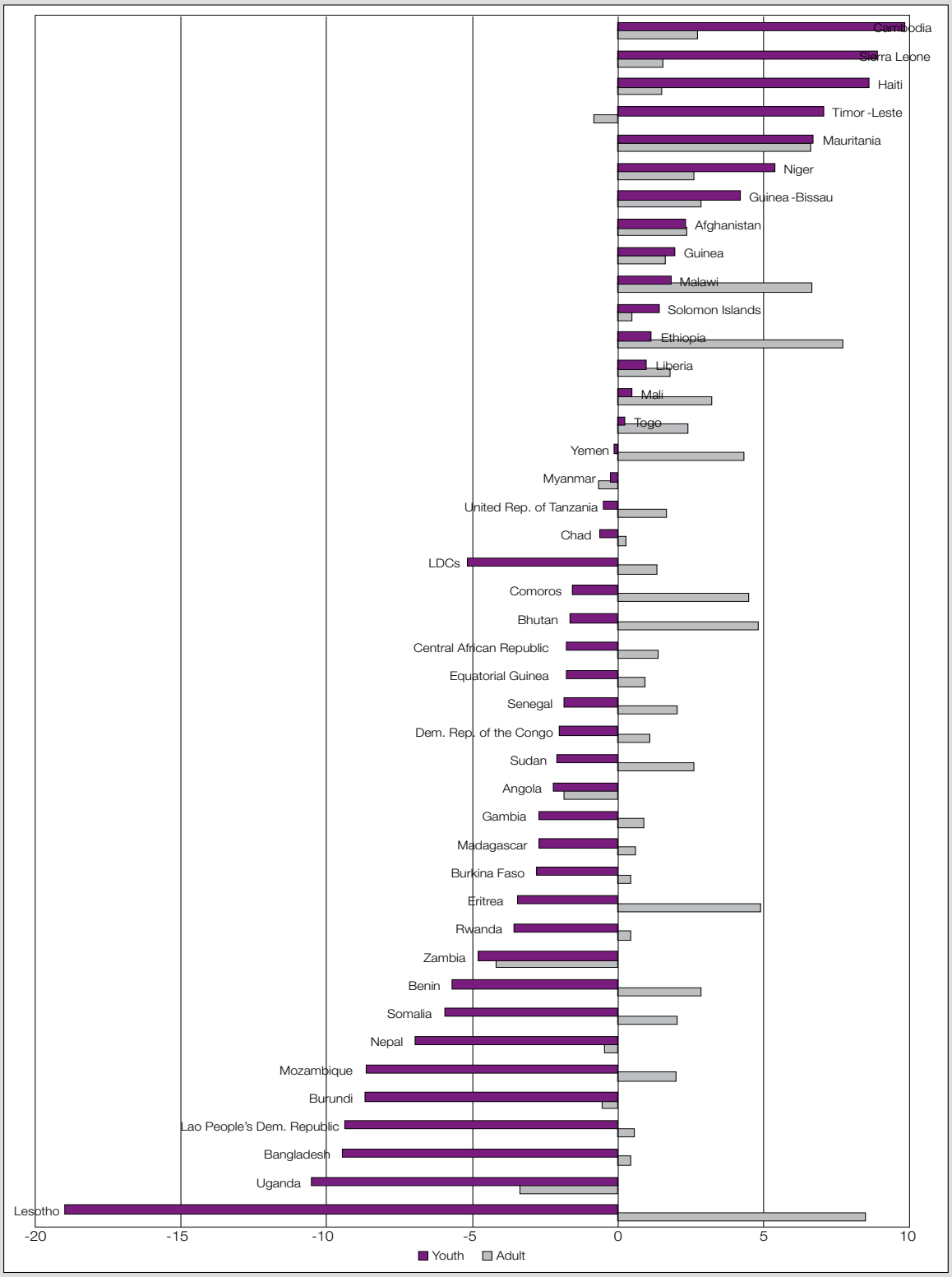
The RNFE can also be defined or classified according to many dimensions, such as on-farm/off-farm, wage/self-employment and agriculturally related/other. An ideal classification of the RNFE should capture some or all of the following distinctions:

(i) Activities closely linked to farming and the food chain, and those not part of that chain, since agricultural linkages are often important determinants of the RNFE's potential for employment and income generation;

(ii) Activities producing goods and services for the local market (often non-tradables);

(iii) Activities producing for distant markets (tradables), since the latter have the potential to create employment and incomes independently of the rural economy;

Chart 25. Youth and adult employment-to-population ratios in selected LDCs, 2000 to 2012
(Percentage change)



Source: UNCTAD secretariat calculations based on ILO, *Key Indicators of the Labour Market (KILM)*, Seventh Edition, 2013.

(iv) Activities that are on a sufficiently large scale, are sufficiently productive and have enough capital to generate incomes above returns obtainable from farming; and

(v) Activities that offer only marginal returns, since this reflects the RNFE's capacity to generate local economic growth. Although low-return activities can keep households above the poverty line, they usually do not foster growth.

The RNFE accounts for about 30 per cent of full-time rural employment in Asia, 45 per cent in Latin America (Dirven, 2011), 20 per cent in West Asia and 40–45 per cent in Africa (Haggblade et al., 2007; Davis, 2005; Stifel, 2010; Hossain, 2004). Surveys covering part-time employment in the RNFE are relatively scarce, but would suggest that as most rural households in Asia and Africa are increasingly pluriactive, the share of non-farm employment may be even higher than these estimates suggest, due in part to the under-reporting of female part-time labour activities (Stifel, 2010). The RNFE is largely composed of a highly heterogeneous collection of trading, agro-processing, manufacturing, commercial and service activities, which results in its widely varying productivity and profitability (Haggblade et al., 2007). It may be further broken down into at least three categories: the activities undertaken; employment and the use of labour time; and incomes generated. These clearly overlap, particularly for incomes, since most rural income arises from payments to factors used in activities and from employment.

The RNFE accounts for about 30 per cent of full-time rural employment in Asia, 45 per cent in Latin America, 20 per cent in West Asia and 40–45 per cent in Africa.

The fact that most of the poor live in rural areas is as much an argument for social welfare as for economic development. Nonetheless, the data highlight the importance of RNF employment in providing sustainable livelihoods for many rural LDC households. Moreover, as Haggblade et al. (2010) note, poverty-reducing rural non-farm growth requires an aggregate increase in rural non-farm income coupled with growing income per worker, which in turn depends on the development of productive capacities and improved productivity of rural tradables (e.g. agriculture, mining and tourism).

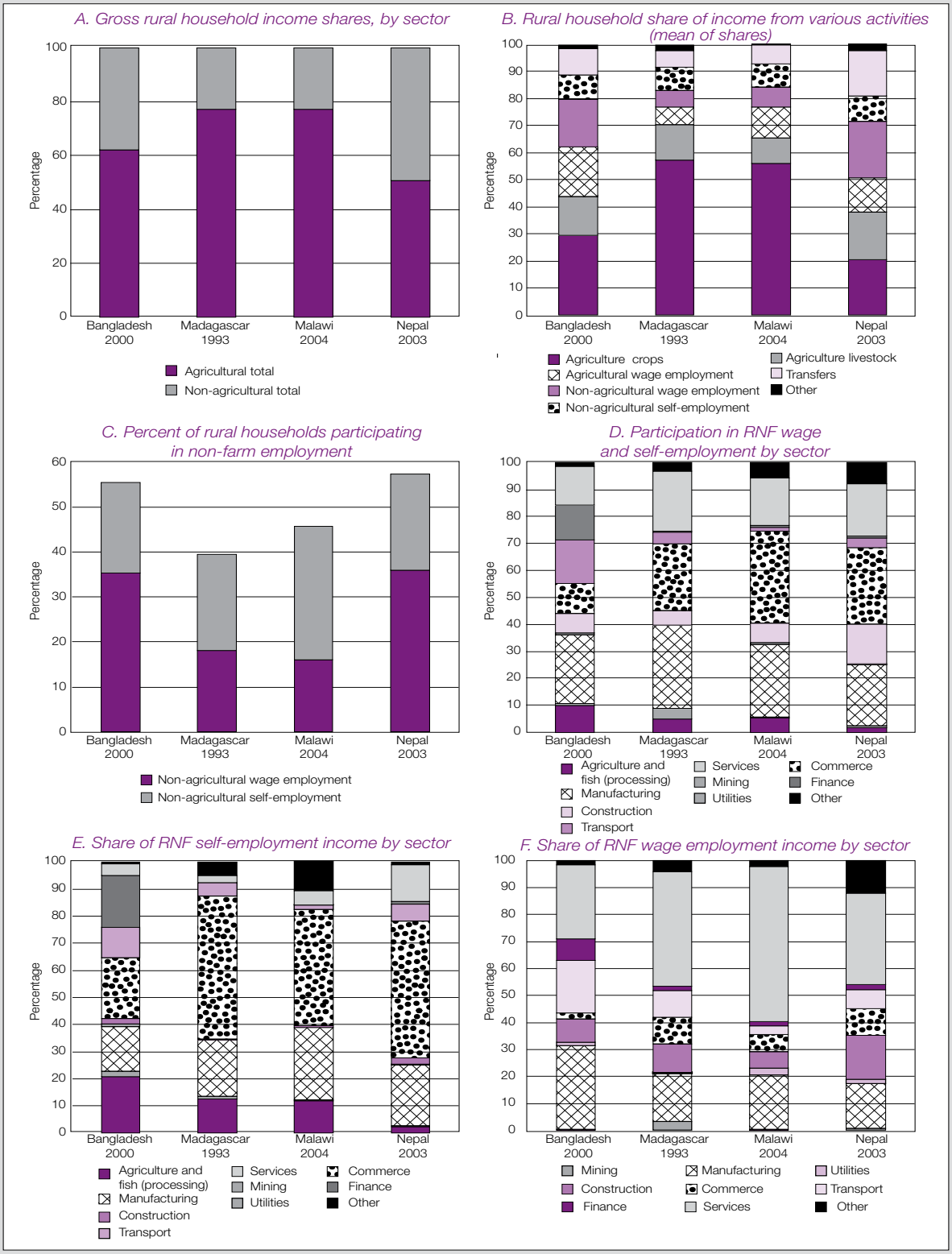
The data in chart 26 on non-agricultural income are disaggregated first into non-farm wage and self-employment components and then by sector, indicating which activities are more important in the LDC rural non-farm economy. Following Davis et al. (2010), eight sectors in wage employment are identified (mining, manufacturing, utilities, construction, commerce, transport, finance, services and other), and nine sectors in self-employment, with the addition of agriculture and fish processing.

Although RNF employment is increasingly important in LDCs, on-farm production and jobs remain the mainstay for most of them.

As GDP per capita levels increase, the share of rural on-farm (agricultural) income typically falls and the share of rural non-agricultural income rises (Haggblade et al., 1989; Davis et al., 2007). Chart 26A shows that agricultural sources of income account for significant shares (between 45 and 78 per cent) of total household income in selected LDCs (Bangladesh, Madagascar, Malawi and Nepal) for which we have detailed data, drawn from Davis et al. (2010) (see annex table 15).[13] On-farm sources of income tend to be more important for African LDCs, as they typically have a less diversified economy than most Asian LDCs (UNCTAD, 2009). If income from agricultural labour, livestock and crop production is combined, all the LDCs in this dataset derive the majority of household income from agricultural sources (chart 26B). Although RNF employment is increasingly important in LDCs, on-farm production and jobs remain the mainstay for most of them. However, as depicted in chart 26C for Bangladesh, Malawi and Nepal, whose non-farm activity participation rates are in excess of 45 per cent, the RNFE is a vital source of employment (see box 3).

Further examination shows that for these countries, the range of participation in RNF wage and self-employment is quite diverse. RNF employment income from the commerce and manufacturing sectors features very prominently, although the services and construction sectors are also important (chart 26D). Chart 26E shows that Bangladesh has the most diversified RNF self-employment income by sector, whereas the commerce sector dominates in the other countries. Agricultural processing in Bangladesh accounts for a relatively large share of RNF self-employment income (21 per cent), in contrast to the more dominant manufacturing sector, which represents 31 per cent of RNF wage employment income (chart 26F). The services sector holds the dominant share in the other

Chart 26. Household participation and shares in rural non-farm income-generating activities in four selected LDCs



Source: UNCTAD secretariat calculations, based on Davis et al., (2010, 2007).

Note: The data presented in B. Davis et al., (2010, 2009) utilize the Rural Income Generating Activities (RIGA) database, which is constructed from a pool of several dozen Living Standards Measurement Study (LSMS) and other multi-purpose household surveys made available by the World Bank through a joint project with the FAO. The authors identify rurality via the domicile of the household, and not the location of the job. Participation is defined as the receipt of any household income (negative or positive) by any household member from that income-generating activity. All the charts are based on the mean of shares which is defined as the income shares calculated for each household, and then the mean of the household shares of each type of income is calculated. The mean of shares reflects the household-level diversification strategy, regardless of the magnitude of income (Davis et al., 2010).

LDCs, especially Malawi, where it provides 57 per cent of such income. Country-specific cultural and labour market institutions play a key role in determining both access to non-farm employment and the associated remuneration (Barrett et al., 2001; Davis, 2005; Hossain, 2004). In Malawi, for example, 50 per cent of the households surveyed earned an agricultural wage, which is much higher than the rate observed in the other LDCs because casual *ganyu*[14] labour on non-own farms is much more prevalent (Davis et al., 2010). There appears to be a high rate of labour force participation in both agricultural and non-agricultural activities, which suggests a relatively high diversity of non-farm income-earning opportunities in rural areas. Most RNF labour market opportunities in LDCs will initially be agriculture-linked and will often involve elements of seasonal non-own farm labour migration. Rural construction businesses, processing mills, manufacturing and assembly market networks are other significant sources of non-farm wage employment. There are also many government and private-sector opportunities for RNF employment for both unskilled and professional workers.

There appears to be a high rate of labour force participation in both agricultural and non-agricultural activities.

Most RNF labour market opportunities in LDCs will initially be agriculture-linked and will often involve elements of seasonal non-own farm labour migration.

When considering the importance of the RNFE for employment and development in the LDCs, two key factors should be stressed: the potential multiplier effects (demand-led growth linkages between the RNFE and farming), and the integration of farming into national and international value chains, shifting value addition to rural areas (UNCTAD, 2009). These factors should help rural areas to take advantage of the potential benefits of trade and improve incomes and employment opportunities.

The process of structural transformation is not identical in all LDCs and regions, and is shaped in part by such factors as a region's comparative advantage in the production of tradable products (especially agriculture), population density, infrastructure, location, and government policies. Regions with significant recreational, mineral or trade advantages (e.g. ports or highways) may be less dependent on agriculture as an engine of growth, and hence may expand and diversify their RNFE much earlier in the development process. Growth of the RNFE can also be delinked from agriculture to varying degrees by market and trade liberalization policies that enhance non-agricultural opportunities. Moreover, an engine of growth does not even have to be local, as long as the local economy is open, in the sense that workers can commute and local farm and non-farm firms can sell to the area where the engine is providing job opportunities and generating growth (Dirven, 2011; UNCTAD, 2009; Stifel, 2010).

When considering the importance of the RNFE for employment and development in the LDCs, two key factors should be stressed: the potential multiplier effects, and the integration of farming into national and international value chains, shifting value addition to rural areas.

9. Unemployment and inactivity

a. Unemployment trends

Registered unemployment in LDCs did not fall significantly during the boom period of 2002–2008. Chart 27A shows a remarkably stable unemployment rate during the period 2000–2012, at around 5.5 per cent. Even in 2009–2010, with the onset of the global financial and economic crisis, the rate barely changed from the 2000–2012 average. In 2012, island LDCs had the highest rate of unemployment (7.3 per cent on average), followed by African LDCs at 6.1 per cent and Asian LDCs at 4.7 per cent.

Registered unemployment in LDCs did not fall significantly during the boom period of 2002–2008.

Female unemployment was an average 1 percentage point higher than male unemployment in LDCs during the period 2000–2012, which suggests that it was largely unaffected by the relatively high rates of real GDP growth of 2002–2008 (chart 27B). Also in 2000–2012, the gender gap in unemployment was above 1 per cent on average in African LDCs, less than 1 per cent in Asian LDCs and around 2 per cent in island LDCs.

Generally speaking, it is the LDC youth labour force (aged 15–24 years) that is most affected by unemployment, in disproportionate numbers, as that rate is almost invariably higher than that of adults. In most LDCs, it is higher than the average LDC unemployment rate for both men and women, and in most cases is almost twice the rate (chart 27C). The relative prevalence of youth unemployment is evident particularly in the island LDCs (16 per cent in 2011) and Asian LDCs (10.5 per cent in 2012).

Generally speaking, it is the LDC youth labour force that is most affected by unemployment, in disproportionate numbers, as that rate is almost invariably higher than that of adults.

The causes of LDC youth unemployment are numerous and include the following: (i) a skills mismatch on entering the labour market; (ii) low levels of entrepreneurial, education and technical skills among youths (World Bank, 2013); (iii) a low absorptive capacity of the labour market for new entrants; (iv) limited access to adequate finance, technology and markets (UNCTAD, 2010); and (v) a lack of structural change and diversification, which reinforces the concentration of growth in traditional capital-intensive and urban-based sectors like mining and oil extraction (UNCTAD, 2013). These sectors typically generate limited labour-intensive growth multipliers.

b. Inactivity rates

The inactivity rate is the proportion of the working-age population that is not in the labour force. Inactive people are those who are outside the labour force

Chart 27. LDC total unemployment rate by region, gender and youth, 1991–2012

Source: UNCTAD secretariat calculations, based on data from ILO, Employment Trends (EMP/TRENDS) econometric model, April 2013.

if they are neither employed nor unemployed or are not actively seeking work. Inactive people may include the early retired; women who leave the labour force to raise a family and provide childcare; school or university students; the sick or disabled, or discouraged workers.[15] Table 13 shows that although LDC inactivity rates have been increasing since 1980, they remain lower on average (24.9 per cent) than in ODCs (30 per cent). The 2010 rate in developed economies and the EU was 52 per cent (ILO, *Key Indicators of the Labour Market (KILM),* Seventh Edition, 2013). The reason why inactivity rates are lower in LDCs and other low-income countries than in developed countries is probably that the option of being unemployed or inactive is unavailable to the poor.

Although LDC inactivity rates have been increasing since 1980, they remain lower on average (24.9 per cent) than in ODCs (30 per cent).

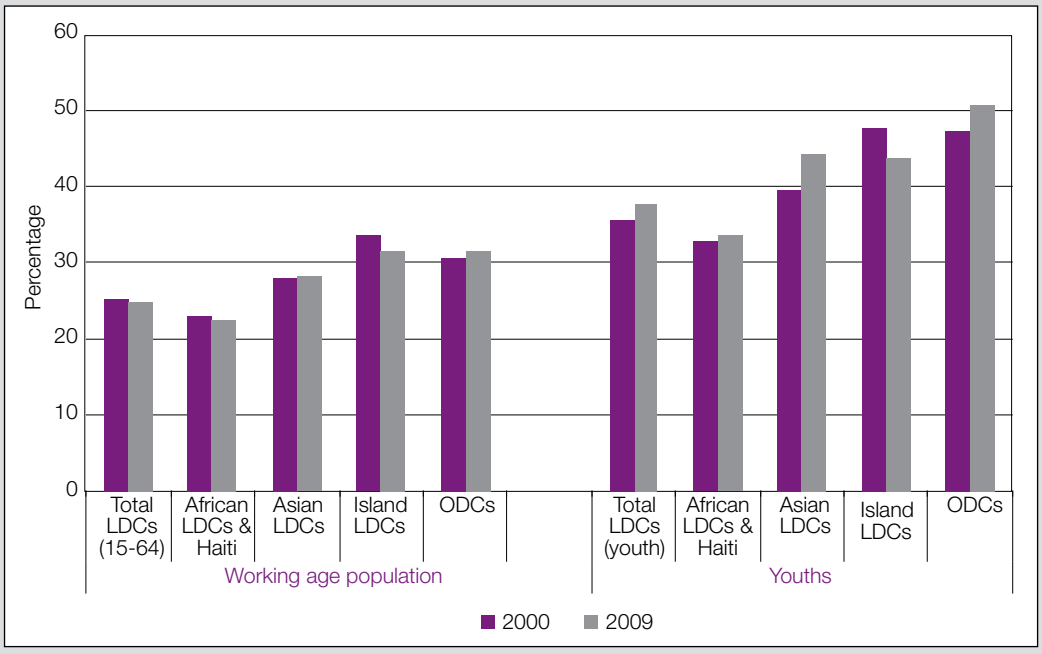
Chart 28 compares the inactivity rates for the LDC working-age and youth (aged 15–24 years) populations. With the exception of the island LDCs, these rates climbed during the period 2000–2009, especially in Asian LDCs. Nonetheless, at 38 per cent for all LDCs in 2009, the rates were well below the ODC levels of 52 per cent, and above the working-age inactivity rates. Typically, rising youth inactivity rates are due to the following: higher rates of young people enrolling in education than entering the labour market; and higher rates of discouraged workers, which is untypical of most LDCs. It is often assumed that LDC youths do not have the option of continuing their education due to a lack of educational infrastructure and high tuition fees. In addition, the opportunity cost for youths — particularly from the poorest households — of continuing their

Table 13. LDC Inactivity rates, 1980–2009
(Percentage of working age population, aged 15-64 years)[a]

	1980	1990	2000	2009
Total LDCs	24.4	24.2	25.2	24.9
LDCs African LDCs and Haiti	22.7	23.4	23.0	22.4
Asian LDCs	26.6	25.1	28.1	28.3
Island LDCs	31.5	33.2	33.6	31.6
ODCs	29.8	29.5	30.5	31.6

Source: UNCTAD secretariat calculations, based on ILO *Key Indicators of the Labour Market (KILM)*, Seventh Edition, 2013.
a Weighted averages.

Chart 28. LDC inactivity rates for youths and working-age population, 2009



Source: UNCTAD secretariat calculations, based on data from ILO, *Key Indicators of the Labour Market (KILM)*, Seventh Edition, 2013.
Note: Weighted averages.

education, as opposed to entering the labour market, is often high (World Bank, 2008). As previously noted, however, education enrolment and completion rates have steadily risen in LDCs since 1990 (see chapter 2, table 7). Inactivity rates increased by an average 2 percentage points between 2000 and 2009, and rose the most (4 percentage points) in the Asian LDCs. For LDC policymakers tackling a burgeoning youth labour force, it may be preferable to focus less on rising inactivity rates (or declining participation rates) and more on the type of activities in which youths can productively engage, given appropriate public- and private-sector support.

For LDC policymakers tackling a burgeoning youth labour force, it may be preferable to focus less on rising inactivity rates and more on the type of activities in which youths can productively engage, given appropriate public- and private-sector support.

LDCs will need comprehensive job creation programmes to address youth unemployment and underemployment.[16] Typically, their youths find work in the informal sector, but often such jobs do not pay reasonable wages, improve skills or offer much job security. More than 70 per cent of youths in Democratic Republic of the Congo, Ethiopia, Malawi, Mali, Rwanda, Senegal and Uganda are either self-employed or contributing to family work (Brookings Institute, 2012). LDC job strategies will need to encourage investment in the agricultural sector, promote rural development and help prepare youths for employment opportunities in urban areas.

More than 70 per cent of youths in Democratic Republic of the Congo, Ethiopia, Malawi, Mali, Rwanda, Senegal and Uganda are either self-employed or contributing to family work.

B. The quality of employment in the LDCs

Having examined the quantity of jobs available to LDC citizens in the previous section, we now look at the quality of those jobs, and more specifically at what ILO has termed "decent employment", the "working poor" and "vulnerable employment". Vulnerable employment is defined as the sum of contributing family workers (unpaid work) and own-account workers as a share of total employment. It represents around 80 per cent of total employment in LDCs and is therefore very important for these countries (International Labour Office, 2011). Table 14 provides a detailed summary of vulnerable employment and working-poor dynamics in the LDCs for the period 2000–2018. Each of these indicators has improved since 2000, but from a relatively weak base, especially in African and Asian LDCs. We explore these trends in greater detail below.

The percentage of the working poor living on less than $1.25 per day is declining as a share of total employment.

1. The LDC working poor

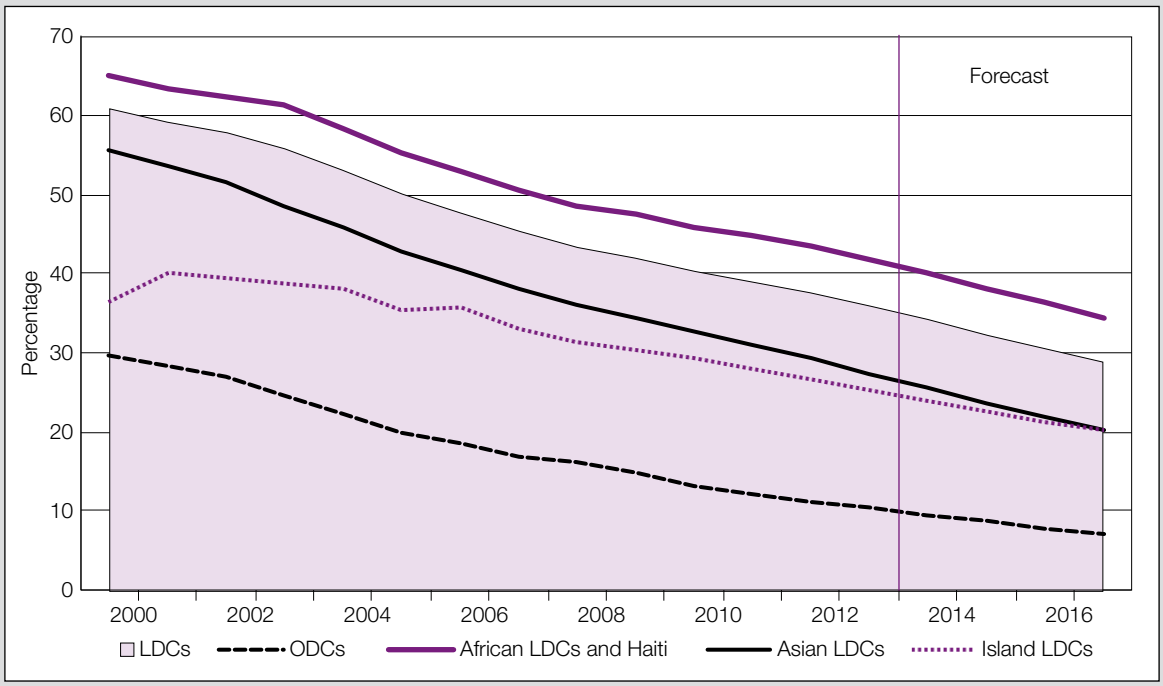
The working poor are broadly defined as working persons who are unable to earn enough to maintain either their own welfare or that of their families. More specifically, they are persons who are working and living in households with income below the poverty line. They comprise two distinct categories: working people living as unrelated (non-own-family) individuals with income below the poverty level; and working people living in families with total income below the poverty level. As shown in chart 29, the percentage of the working poor living on

Table 14. Employment and poverty dynamics in the LDCs, 2000–2018
(Percentage)

	Vulnerable employment as a share of total employment (*percentage*)					Share of extremely poor (less than $1.25 in PPPs) in total employment (*percentage*)					Total unemployment rate (*percentage*)			
	2000	*2005*	*2010*	*2015*	*2018*	*2000*	*2005*	*2010*	*2015*	*2018*	*2000*	*2005*	*2010*	*2012*
Total LDCs	86	84	82	80	79	61	50	41	33	29	5.5	5.5	5.6	5.6
ODCs	61	59	56	53	52	30	20	13	9	7	5.9	5.8	5.2	5.2
African LDCs and Haiti	86	84	82	80	79	65	55	46	38	35	6.7	6.1	6.1	6.1
Asian LDCs	85	84	81	80	79	56	43	33	24	20	3.9	4.7	4.7	4.7
Island LDCs	75	78	77	75	74	36	36	29	22	20	7.0	7.0	7.5	7.3

Source: UNCTAD secretariat calculations, based on ILO *Key Indicators of the Labour Market (KILM)*, Seventh Edition, 2013.
Note: Data series 2013 to 2018 are preliminary projections.

Chart 29. Share of the working poor in LDCs living on less than $1.25 per day in total employment, 2000–2017



Source: UNCTAD secretariat calculations, based on data from ILO, Employment Trends (EMP/TRENDS) econometric model, April 2013.
Note: Data series 2013 to 2017 are preliminary projections.

less than $1.25 per day is declining as a share of total employment, from 61 per cent in 2000 to a projected 29 per cent by 2017. However, that percentage is still substantially above levels prevalent in ODCs, where it is expected to shrink from 30 per cent in 2000 to 7 per cent by 2017.

African LDCs are forecast to have the highest share of working poor in the LDC group by 2017.

African LDCs are forecast to have the highest share of working poor in the LDC group by 2017. Among that group, Liberia and Madagascar experienced no overall change in the share of the working poor living on less than $1.25 per day during the period 2000–2012. The share fell the most in Sierra Leone (down by 49 percentage points), Ethiopia (40) and Mozambique (32). Using actual and forecast data, chart 29 shows that Asian and island LDC levels of the working poor are likely to be below the LDC average for the period 2000–2017 and to begin to converge by 2015. During this period, the Asian LDCs' share of working poor in total employment declined by 36 percentage points; the island LDCs' share, by 16 percentage points. Of the Asian LDCs, only Yemen witnessed an increase in the share of working poor (up 4 percentage points); Myanmar is expected to have the largest decline in the group (down by 50 percentage points). Among the island LDCs, the share should remain high in Comoros (at around 43 per cent) and decline sharply in Solomon Islands and Timor-Leste during 2000–2017.

Asian and island LDC levels of the working poor are likely to be below the LDC average for the period 2000–2017.

2. Employment status and vulnerable work in the LDCs

Vulnerable employment is often characterized by inadequate earnings, low productivity and difficult working conditions. Since 2009 the number of workers in vulnerable employment worldwide has increased by around 100 million, and with it global poverty (ILO, 2013). Such workers are less likely to have formal employment arrangements and also tend to lack adequate social security and effective representation by labour organizations (e.g. trade unions).

As indicated in chart 30, during the period 2000–2018, the share of vulnerable employment will have declined by 7 percentage points in LDCs and 9 percentage points in ODCs. However, the level of vulnerable employment is on average 25 percentage points higher in the former than in the latter. Further data disaggregation by export specialization shows that LDC fuel exporters have experienced the largest reduction (11 percentage points) in vulnerable employment. On a country group basis, the island LDCs have seen the smallest decline (1-percentage-point change on average), and the African LDCs the largest (7 percentage points on average). In addition, for the group as a whole, the gender gap in vulnerable employment is not only wide but has increased marginally, averaging 11 percentage points during the period 2000–2012. In 2012, 85 per cent of women and 73 per cent of men on average were vulnerably employed.

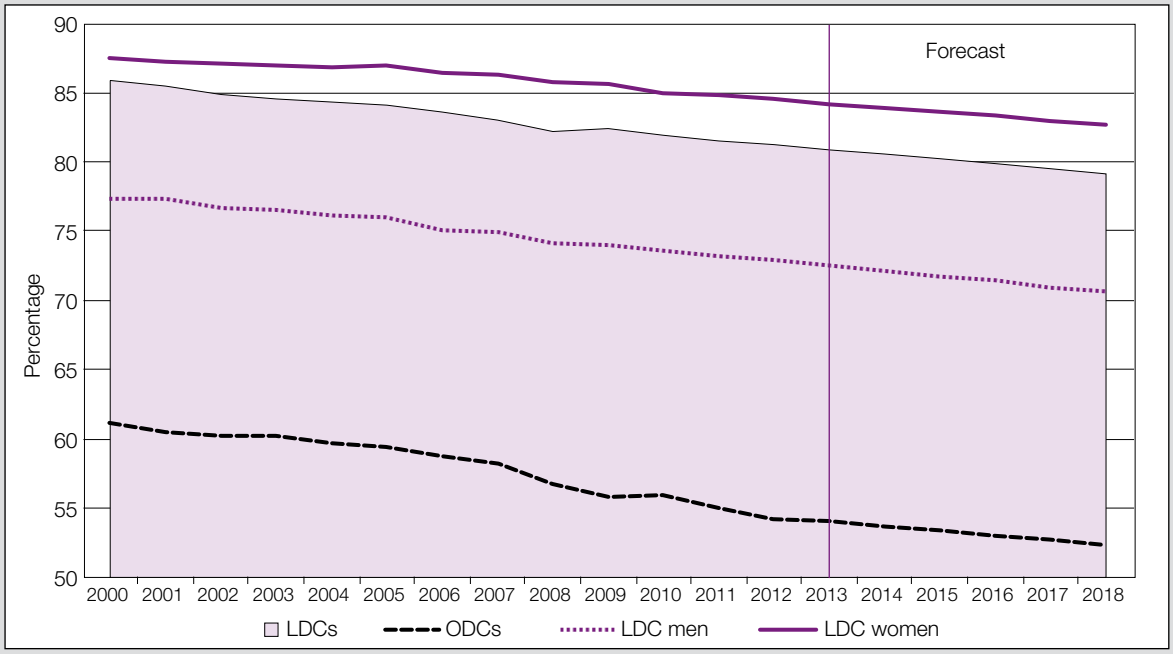
During the period 2000–2018, the share of vulnerable employment will have declined by 7 percentage points in LDCs and 9 percentage points in ODCs. However, the level of vulnerable employment is on average 25 percentage points higher in the former than in the latter.

ILO data on LDC employment status distinguish between two categories of the employed: wage and salaried workers; and the self-employed. These two groups are presented in table 15 and chart 31 as percentages of the total employed. The self-employed are the most prevalent group in LDCs and comprise: (i) self-employed workers with employees (employers); (ii) self-employed workers without employees (own account-workers); and (iii) contributing family workers (usually unpaid family workers) and members of producers' cooperatives. The distribution of employment by status is an important indicator for describing and comparing LDC conditions of work, vulnerability, the informal sector and levels of economic development.

For the group as a whole, the gender gap in vulnerable employment is not only wide but has increased marginally, averaging 11 percentage points during the period 2000–2012.

Table 15 presents data for 2012 on the distribution of employment by status in LDCs, ODCs and country groups, and by gender. As previously noted, women in LDCs are concentrated primarily in the most vulnerable job categories: own-account (44 per cent) and contributing family workers (40 per cent). Only 20 per cent of LDC men were employed as contributing family workers. The island

Chart 30. Share of vulnerable employment in LDCs and ODCs, 2000–2018



Source: UNCTAD secretariat calculations based on data from International Labour Organisation, Employment Trends (EMP/TRENDS) econometric model, April 2013.
Note: Data series 2013 to 2018 are preliminary projections.

Table 15. Distribution of employment by status, 2012
(Percentage of total employment)

	Waged and salaried workers		Employers		Own-account workers		Contributing family workers	
	Women	*Men*	*Women*	*Men*	*Women*	*Men*	*Women*	*Men*
Total LDCs	15	26	1	2	44	52	40	20
ODCs	61	63	2	5	24	27	13	5
African LDCs and Haiti	14	25	1	2	48	53	37	20
Asian LDCs	17	30	1	1	35	53	47	16
Island LDCs	19	25	0	1	27	46	54	28

Source: UNCTAD secretariat calculations, based on data from ILO Employment Trends (EMP/TRENDS): ILO Trends econometric models, April 2013.

LDCs have the highest concentration of women in the contributing family workers category (54 per cent), 14 percentage points above the LDC average. African LDC women are found mainly in the own-account worker category (48 per cent), and Asian women in the contributing family workers category (47 per cent). There is also a clear gender disparity in employment in the waged/salaried worker and employer categories, which boast the most secure jobs and the best employment conditions. LDC men are employed at almost twice the rate of women in these sectors, whereas in ODCs there is a greater gender balance in employment (61 per cent of women and 63 per cent of men are employed as waged or salaried workers).

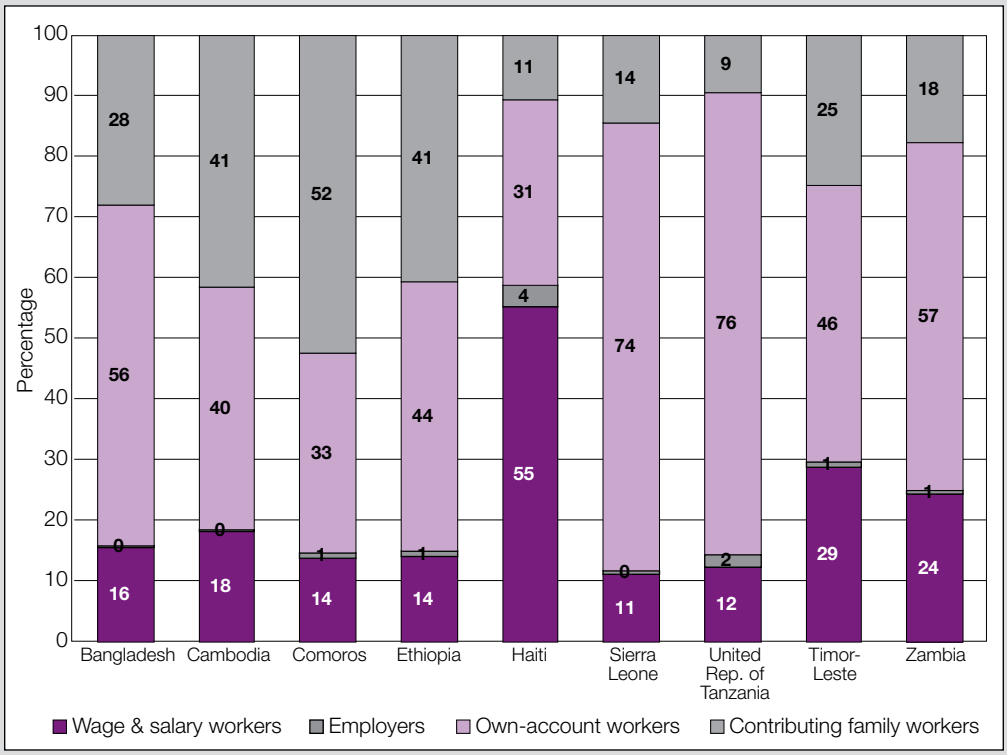
Women in LDCs are concentrated primarily in the most vulnerable job categories: own-account (44 per cent) and contributing family workers (40 per cent).

Despite the relatively high rates of GDP growth in 2002–2008, and despite a small rise in the share of waged and salaried workers, the level of vulnerable employment in LDCs has not declined significantly because of the high share of own-account and unpaid family workers in total employment.

The level of vulnerable employment in LDCs has not declined significantly because of the high share of own-account and unpaid family workers in total employment.

Chart 31 shows the distribution of employment by status in nine LDCs in 2012. Based on this small sample, most LDCs had a relatively low proportion of waged and salaried workers (22 per cent on average) and employers (1 per

Chart 31. Distribution of employment by status in selected LDCs, 2012
(As a percentage of total employment)



Source: UNCTAD secretariat calculations, based on data from ILO, Employment Trends (EMP/TRENDS) econometric model, April 2013.

cent); only in Haiti does that share exceed 30 per cent of total employment. The proportion of own-account workers (50 per cent on average) and contributing family workers, by contrast, is much higher (26 per cent). The predominance of these employment categories in LDCs may reflect the importance of the agricultural sector (which accounted for an average 65 per cent of the labour force and 26 per cent of GDP in 2010), widespread informality and low growth in the formal sector. Own-account workers (the self-employed) and vulnerable employment are the main categories of the informally employed. Emigration from rural to urban areas due to low-productivity agriculture is largely responsible for the observed informality in these countries. The majority of workers in LDCs with a high share of contributing family workers are doing unpaid work, often supporting agricultural production for the market, and most of this unpaid work is undertaken by women (International Labour Office, 2011).

Own-account workers (the self-employed) and vulnerable employment are the main categories of the informally employed.

In the LDC group as a whole, based on a sample of 42 countries, Somalia (96 per cent), Guinea-Bissau (95 per cent), Central African Republic (94 per cent), Malawi and Togo (both 90 per cent) have the highest shares of vulnerable employment in total employment, most of it concentrated in the informal sector. Again, it is useful to illustrate what this meant for individual LDCs in 2012: in Bangladesh, there were 62 million in vulnerable employment; in Ethiopia, 36 million; in Myanmar, 24 million; and in United Republic of Tanzania, 19 million.

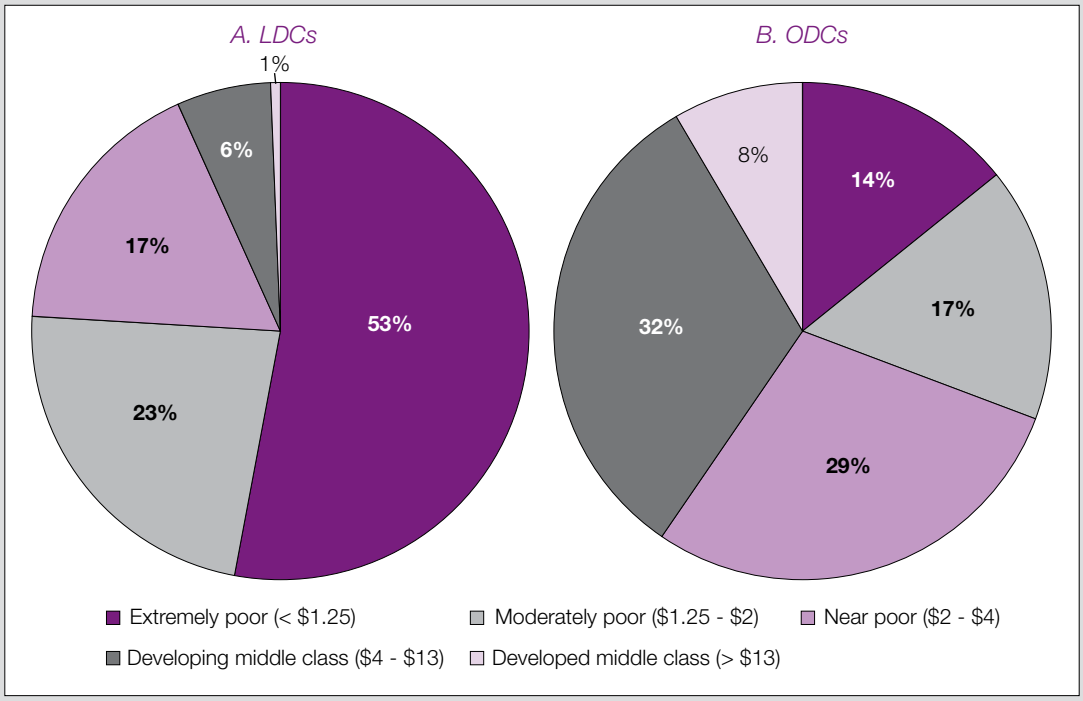
It is often argued that growth in a developing country's middle class is an important driver of economic and social development, with positive effects on labour markets.[17] But if this is so, is there much evidence of the trend in the LDCs? While the assertion is beyond the scope of this Report, we discuss the question below. Following Kapsos and Bourmpoula's (2013) study of the working poor, in which they introduce a model for generating national estimates and projections of the distribution of the employed across five economic classes for 142 developing countries over the period 1991–2017, we derive aggregate estimates of employment by economic class for 20 LDCs from that dataset (see chart 32). They put the developing world's workforce into five classes, for the first time. Those classes are defined as: the extreme working poor (< $1.25 a day), moderate working poor (< $2 a day), near poor ($2–4 a day), middle class ($4–13 a day) and above middle class (> $13 a day).[18] During the period 2000–2012, the number of workers living with their families below the $2-a-day poverty line in the LDCs increased by 27.3 million, and by 2012 there were 246 million such people.[19]

Nearly two thirds of LDC workers are living on less than $2 a day. The extremely poor account for 50 per cent of those employed in LDCs, as compared to 14 per cent in ODCs.

As shown in chart 32, nearly two thirds of LDC workers are living on less than $2 a day. The extremely poor account for 50 per cent of those employed in LDCs, as compared to 14 per cent in ODCs. Near poor workers are defined as those who are not poor but who are highly vulnerable to poverty; they account for 17 per cent of LDC employment. Workers in the developing middle class category are considered an emerging consumer class and are more likely to have access to higher levels of education and health care than the aforementioned classes. In ODCs, the near poor and developing middle class categories account for the majority (61 per cent) of those employed. The group described as developed middle class and above encompasses workers in developing countries who are equivalent to the lower end of the middle class in the United States and who are able to afford most international consumer goods (Kapsos and Bourmpoula, 2013). Based on the data presented, there is little evidence of a large or substantial employed middle class in the LDCs, which may have negative implications for wider economic growth, investment and employment generation. However, other evidence suggests that in sub-Saharan Africa and Asia, over the past 20 years the middle class has been growing quite rapidly (African Development Bank, 2011; Ravallion, 2009a).

In ODCs, the near poor and developing middle class categories account for the majority (61 per cent) of those employed.

Chart 32. Employment by economic class in the LDCs and ODCs (various years)



Source: UNCTAD secretariat calculations, based on Kapsos and Bourmpoula (2013).
Note: The LDC sample comprises 20 LDCs: Benin, Bhutan, Burkina Faso, Burundi, Cambodia, Democratic Republic of the Congo, Guinea, Lesotho, Liberia, Madagascar, Malawi, Mali, Mozambique, Nepal, Niger, Senegal, Sierra Leone, Timor-Leste, Togo and Uganda. The ODC sample comprises 32 developing countries. The dataset includes several household and enterprise panel surveys and databases for each individual country conducted during the period 2000–2011 (see Kapsos and Bourmpoula, 2013).

3. Informal sector employment

The informal sector may be defined as consisting of units engaged in the production of goods or services with the primary objective of generating employment and incomes for the persons concerned. It covers a wide range of labour market activities that combine two main groups of activities. The first group is made up of coping strategies (survival activities, such as casual jobs, temporary jobs, unpaid jobs, subsistence agriculture and multiple job holding) of individuals and families in an economic environment where alternative income generation opportunities are scarce. The second group comprises activities that are a product of frequently rational behaviour and unofficial earning strategies of entrepreneurs seeking to avoid State regulations; such strategies may include tax evasion and the avoidance of labour regulation and other government or institutional regulations. In the informal sector, labour relations are based more on casual employment, kinship or personal and social relations than on contractual arrangements. In the LDCs, the informal sector is typically characterized by the following:

- Labour-intensive low-technology activities (ILO, 2012);
- Limited (if any) social protection schemes;
- A predominance of microenterprises (employing a maximum of five people);
- A prevalence of unskilled labour, although in some LDCs this is changing (e.g. Ethiopia, Uganda and Zambia, where more graduates are entering the informal labour market because of few formal-sector employment opportunities) (World Bank, 2012a);
- Production mainly for urban or peri-urban markets using local raw materials; and

- Heterogeneity of scope, scale, activities and employees (e.g. children, women, etc.).

Employment in the informal sector accounts for between 40 and 82 per cent of non-agricultural employment.

Employment in the informal economy compares the estimated number of people in informal employment to the total number of employed persons in the non-agricultural sector. Table 16 presents available data on the importance of informal sector firms in LDC employment. The number of persons employed in the informal sector greatly exceeds those in informal employment outside the informal sector. If both components of informal sector employment in informal firms and informal (wage) employment outside informal firms as a share of non-agricultural employment are considered, employment in the informal sector accounts for between 40 and 82 per cent of non-agricultural employment. For example, in Mali, employment in informal firms is especially significant, comprising 72 per cent of non-agricultural employment, while informal employment outside informal firms is estimated at 11 per cent of non-agricultural employment. Some 83 per cent of all non-agricultural employment in Mali is in the informal sector.

Informal employment is associated with low income per capita and relatively high rates of poverty.

The share of women employed in the informal sector in total non-agricultural employment is much higher than for men in all LDCs except Uganda. This is primarily because the non-agricultural informal sector there is dominated by traditionally male occupations (such as carpentry, handicrafts and transportation services), and gender norms continue to dictate what women are allowed to do and whether they can work outside the marital home. In 2008, 40 per cent of Ugandan women were unpaid family workers, mainly in agriculture (Kasirye, 2011).

Table 16 also presents cross-country data suggesting that informal employment is associated with low income per capita and relatively high rates of poverty. As previously noted, significant sections of the LDC population struggle to survive and face extreme poverty with no option other than to work in the informal sector, with little legal, employment or social welfare protection.

Employment opportunities in the formal sector are not expanding quickly enough to absorb the growing non-agricultural labour force.

Employment opportunities in the formal sector are apparently not expanding quickly enough to absorb the growing non-agricultural labour force, and consequently the proportion of employment in the informal sector as a share of non-agricultural employment is rising. The informal economy plays a significant role in the LDCs' socio-economic and political life in terms of both size and growth. As discussed earlier, in those LDCs characterized by high rates of population growth and/or urbanization, the informal sector tends to absorb much of the labour force.

C. Employment growth and estimated net job creation

In those LDCs characterized by high rates of population growth and/or urbanization, the informal sector tends to absorb much of the labour force.

As we have previously stressed, sustainable and inclusive economic growth in the LDCs will critically depend on the creation of productive and decent employment, which paves the way for broader social and economic advancement. But the pattern of economic growth also matters for both job creation and poverty reduction. Where growth is largely driven by capital-intensive industries (e.g. mining), employment multipliers and poverty reduction are often low. Although the LDCs' growth performance of the past decade has been impressive, it has failed to generate sufficient productive employment. A broad vindication of this assertion is provided by the evolution of employment elasticities to GDP growth, which measure the relative change in employment associated with each percentage point of economic growth. Employment elasticities also furnish useful information about employment and labour productivity trends. LDCs with a fast-growing working-age population and high

Table 16. Contribution of informal sector to total non-agricultural employment in selected LDCs

Countries	Year of estimate	A+B Persons employed in the informal sector *('000)*	Share of persons employed in the informal sector in total non-agricultural employment *(percentage)*			C Persons in informal employment outside the informal sector *('000)*	Share of persons in informal employment outside the informal sector *(percentage)*			A+C Persons in informal employment as a share of total non-agricultural employment *(percentage)*			Labour force participation rate as a share of working age population	Poverty share of population living below national poverty line (various years)	GDP per capita (in current 2012 dollars)
			F	*M*	*Average*		*F*	*M*	*Average*	*F*	*M*	*Average*	*(percentage)*	*(percentage)*	*(dollars)*
Ethiopia*	2004	1,089	48	36	42	-	-	-	-				46	39	474
Lesotho	2008	225	48	49	49	99	24	20	22	36	34	35	42	57	1067
Liberia	2010	342	65	33	49	62	7	15	11	72	47	60	63	64	305
Madagascar	2005	1,271	64	41	53	378	17	26	22	81	67	74	87	69	456
Mali	2004	1,180	80	63	72	163	10	13	11	89	74	82	49	47	612
Rwanda	2005	659	-	-	73	-	-	-	-	-	-	-	-	-	643
Uganda	2010	2,720	62	58	60	512	12	15	13	71	65	68	38	25	662
United Rep. of Tanzania	2005/06	3,467	50	53	52	-	-	-	-	-	-	-	-	33	604
Zambia	2008	920	70	61	66	155	12	11	12	80	63	72	56	59	1453

Source: Based on data from (Key Indicators of the Labour Market (KILM), Seventh Edition, 2013).

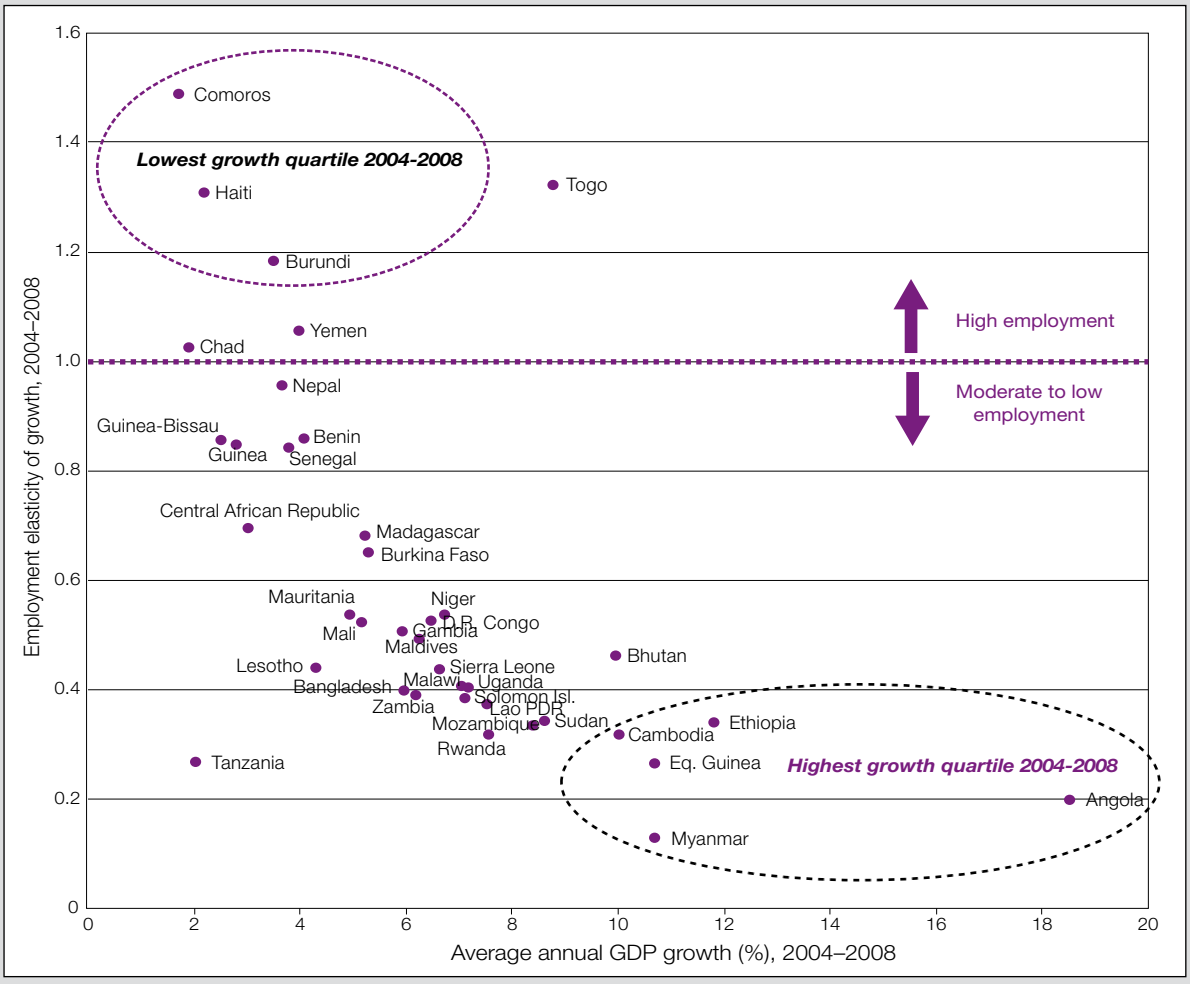
Notes: A+C = Persons in informal employment (excluding employees with formal jobs in informal enterprises);
A+B = Persons employed in the informal sector (including formal employment (where relevant) in the informal sector, i.e. employees holding formal jobs in informal enterprises);
B = Formal employment in the informal sector: comprising employees who, even though they work in an informal sector unit, have basic social or legal protection, and employment benefits.
C = Informal employment outside the informal sector (i.e. employees holding informal jobs in formal enterprises including government units and non-profit-institutions, and/or holding informal jobs as paid domestic workers employed by households, or as contributing family workers in formal enterprises).
A+B+C = Total employment in the informal economy
* = Informal sector data for Ethiopia cover urban areas only.

The pattern of economic growth also matters for both job creation and poverty reduction. Where growth is largely driven by capital-intensive industries (e.g. mining), employment multipliers and poverty reduction are often low.

rates of labour force participation need relatively high employment elasticities because their population relies primarily on its own labour for survival. The provision of sufficient employment opportunities for the working poor and youths is thus a crucial government policy objective. It is worth noting that during the "Arab Spring" of 2011 and other anti-government protests in Africa, joblessness was a key issue in bringing youths onto the streets. Similarly, a World Bank (2011) report notes that half of the young people who join a dissident movement cite unemployment as the main reason for doing so.

Following Martins (2013), the elasticities[20] presented in chart 33 and chart 34 should be interpreted as follows: During periods of positive economic and employment growth, elasticities below unity suggest that employment growth is dominated more by labour productivity growth than by broad-based employment generation. For developing countries, employment elasticities should be around 0.7, and for some African countries even higher, given the rapid rise in labour force growth (Martins, 2013; Khan, 2007). In chart 33, employment elasticities to GDP for 2004–2008 indicate that some LDCs have been able to translate modest GDP growth into higher employment. The data further suggest that some of the LDCs with the lowest average GDP growth per annum during the period enjoyed the highest growth elasticities of employment. This is the case, for example, in Burundi (1.18), Chad (1.02), Comoros (1.49), Haiti (1.31) and Yemen (1.05). Conversely, the LDCs with the highest average GDP growth per annum during the same period had some of the lowest growth

Chart 33. Growth elasticity of employment in LDCs, 2004–2008



Source: UNCTAD secretariat calculations, based on ILO, *Key Indicators of the Labour Market (KILM)*, Sixth Edition, 2009.

elasticities of employment: Angola (0.20), Myanmar (0.13), Equatorial Guinea (0.27), Mozambique (0.30) and United Republic of Tanzania (0.27). Each of these countries averaged GDP growth rates in excess of 8 per cent per annum (above the 2001 Brussels Programme of Action target of 7 per cent) during the period 2004–2008. The relatively low elasticities for countries like Angola, Equatorial Guinea, Ethiopia, Mozambique and United Republic of Tanzania indicate that their economic growth has been primarily capital-intensive — since some of these countries are mainly energy and minerals exporters — with relatively limited employment generation.

Some of the LDCs with the lowest average GDP growth per annum during the period 2004–2008 enjoyed the highest growth elasticities of employment.

Nonetheless, the data suggest that some countries, such as Bhutan, Togo and Uganda, have been better able to translate high rates of GDP growth into employment increases, especially during the 2000s. Their elasticities for 2004–2008 were considerably higher than those for Angola, Equatorial Guinea, Mozambique and United Republic of Tanzania.

Chart 34 shows employment elasticities to GDP covering two periods (2004–2008 and 2000–2008) for a sample of 39 LDCs. For Bhutan (0.73), Ethiopia (0.66), Rwanda (0.40) and Uganda (0.47), the 2000–2008 elasticities are much higher than the 2004–2008 iteration.

Although employment elasticities to GDP are often unstable, and to some extent depend on the pattern of growth and related policy frameworks, it is nonetheless clear that in most LDCs those elasticities have declined over the past decade; hence, the average 2004–2008 elasticity tends to be lower than that for 2000–2008 (for 17 of the 39 LDCs in the sample). During the past decade, employment elasticities to growth have declined in at least half of the LDCs (see chart 34). When elasticity estimates are compared for the periods 1996–2000 and 2004–2008, 21 of the 39 LDCs experienced a decline in employment elasticities to growth. This is a concern, given the high rates of labour force growth in the LDCs (see chart 16).

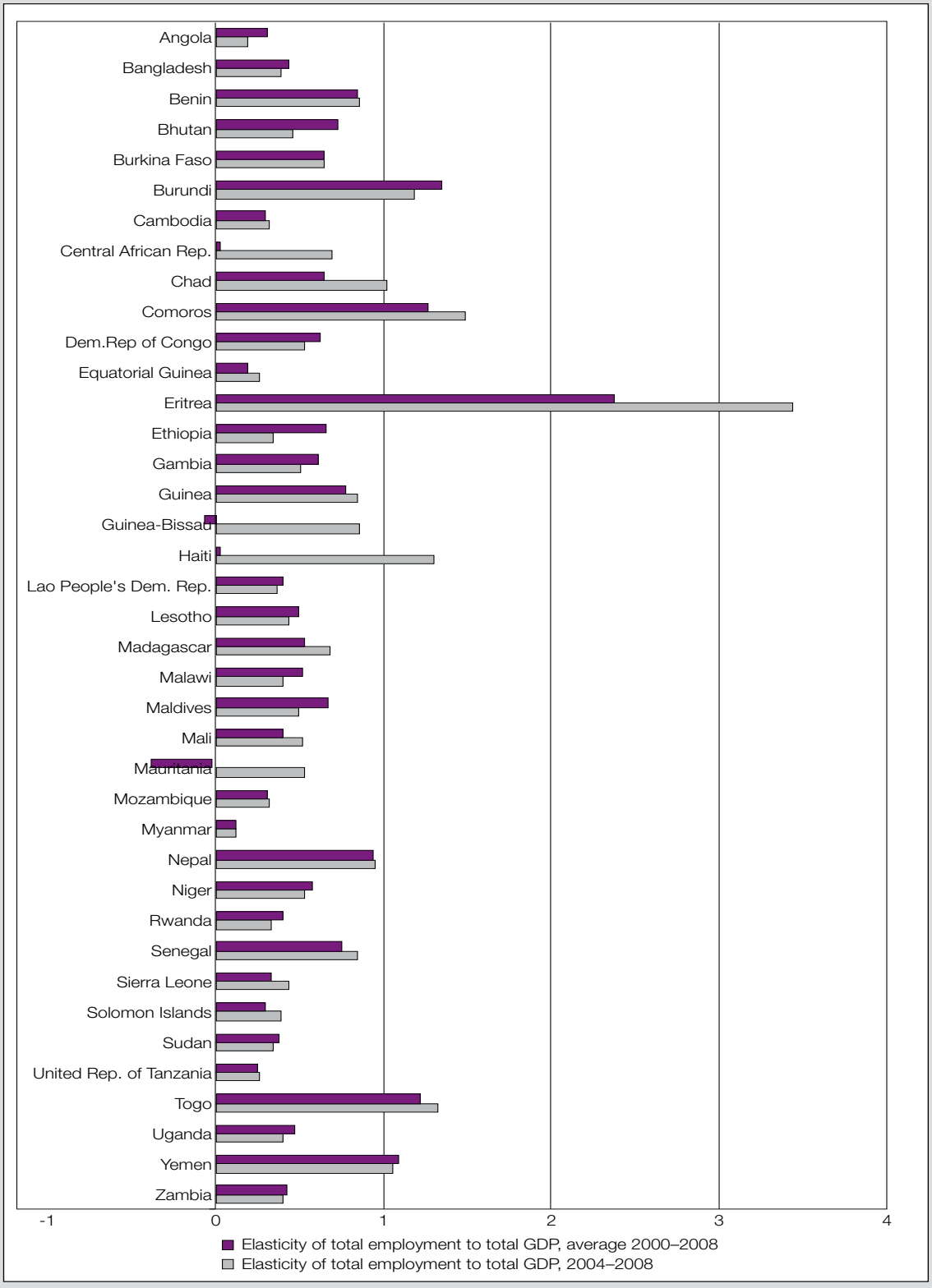
The LDCs with the highest average GDP growth per annum during the same period had some of the lowest growth elasticities of employment.

Only two LDCs have negative employment elasticities to GDP: Guinea Bissau and Mauritania. Negative elasticity, together with positive rates of economic growth, suggests that employment decreased over the period, while labour productivity grew faster than overall GDP. Eritrea is clearly a statistical outlier, given its exceptionally high elasticity of employment to GDP growth (exceeding 2.0) during the period 2000–2008. This may be due to contentious government policies, such as the National Service Programme and its concomitant Warsai-Yikaalo Development Campaign, which are based on compulsory labour schemes (Kibreab, 2009, World Report 2013: Eritrea, 2013).

During the past decade, employment elasticities to growth have declined in at least half of the LDCs. This is a concern, given the high rates of labour force growth in the LDCs.

In summary, the negative relationship depicted in chart 33 demonstrates that those countries with faster GDP expansion grew with relatively lower employment creation. Moreover, as Valensisi and Davis (2011a) have shown, elasticity tended to fall more frequently precisely in those LDCs that were growing faster. Considering the elasticities in conjunction with growth data provides useful complementary information about productivity change. As previously noted, McMillan and Rodrik (2011) argued that a pattern of sectoral labour reallocation has emerged in African developing countries, with perverse effects on aggregate labour productivity, which they term *"productivity-reducing structural change"*. This is where labour has moved towards less productive activities, such as urban services, in the informal sector, rather than towards higher-productivity activities, which enhance growth and structural change. However, Martins (2013) notes that in Ethiopia, although agricultural productivity is low, much of the services sector is modern (primarily financial, business and real estate services) and has the highest productivity levels.

Chart 34. Elasticity of total employment to total GDP in the LDCs, 2000–2008



Source: UNCTAD secretariat calculations, based on ILO, *Key Indicators of the Labour Market (KILM)*, Sixth Edition, 2009.

A useful conceptual experiment involves computing the counterfactual effect that growth could have had on employment if the elasticities had remained the same as during 1996–2000. In this respect, the estimates suggest that, ceteris paribus, nearly 25 million additional jobs could have been created in the LDCs had all elasticities remained at their 1996–2000 levels (Valensisi and Davis, 2011). Although the question is beyond the scope of this chapter, given that the LDCs apparently failed to translate growth adequately into employment

during the boom of 2002–2008, what are the key impediments to their doing so? Valensisi and Gauchi (2013) combine secondary labour force data with different growth scenarios based on historical employment elasticities of growth to assess whether achieving the IPoA target of a 7-per-cent growth rate by 2020 would actually be enough to generate sufficient employment. They show that, even if the IPoA target is achieved, a number of LDCs will not be in a position productively to employ all the new labour market entrants unless their pattern of growth shifts towards more diversified employment-intensive sectors.

The estimates suggest that, ceteris paribus, nearly 25 million additional jobs could have been created in the LDCs had all elasticities remained at their 1996–2000 levels.

For the LDCs, improved labour productivity growth, especially through structural change, may have consequences for several elements of the labour market since intersectoral shifts of labour require different sets of skills and mobility. If, due to a lack of appropriate training and skills and to limited geographical mobility, LDC citizens cannot avail themselves of these job opportunities, the process may be impeded, creating barriers to successful job-hunting.

Table 17 presents the main data used for a decomposition of GDP growth per capita for 11 LDCs (listed in the following paragraph) in order to explore whether growth has translated into increased productivity and employment at the aggregate level and by sector. Following the World Bank (2012b), to begin the decomposition we use the equation $Y/N = A/N * Y/E$ – where Y is total GDP, N the total population, A the working-age population (i.e., the labour force), and E is total employment. This approach allows us to assess the contribution of the following factors to GDP growth: the employment rate (i.e., the employment-to-population ratio);[21] output per worker (i.e., labour productivity); and demographic change.

LDCs will not be in a position productively to employ all the new labour market entrants unless their pattern of growth shifts towards more diversified employment-intensive sectors.

This chapter began by outlining the main employment trends in the quantity and quality of jobs in the LDCs. Most LDCs have the potential to benefit from a demographic dividend (fewer dependants per working-age adult), given the rising and relatively high share of working-age population in the total population. For this section of the chapter, we have selected 11 LDCs that are broadly representative of the group (Angola, Bangladesh, Cambodia, Comoros, Ethiopia, Haiti, Mozambique, Nepal, Sierra Leone, United Republic of Tanzania and Zambia) in terms of export orientation, employment structure and data availability, (see table 17). The results of the decomposition are quite interesting.

Table 17. Decomposition of GDP per capita in selected LDCs, 2000–2010

Sectoral classification	LDC	Percentage change 2000–2010					Decomposition of growth in per capita value added, percentage contribution, 2000–2010		
		Total Growth in per capita GDP (value added, 2000 $) Δ(Y/N)	*Total number of employed*	*Total population of working age*	*Output per worker*	*Employ-ment rate*	*Growth linked to output per worker Δ(Y/E)*	*Growth linked to changes employment rate Δ(E/A)*	*Growth linked to changes in the share of population of working age Δ(A/N)*
Manufactures	Bangladesh	54.7	24.6	25.4	42.5	-0.6	81.0	-1.5	20.5
	Cambodia	84.3	39.3	31.8	50.3	5.6	66.3	9.1	24.6
	Haiti	-6.6	27.1	23.6	-15.0	2.8	239.4	-41.1	-98.3
Agriculture	Ethiopia	80.3	36.4	36.6	67.2	-0.2	87.0	-0.3	13.3
	United Rep.of Tanzania	48.7	33.7	31.2	46.6	1.9	96.3	4.7	-1.0
Mining and minerals	Angola	91.9	36.7	40.0	92.3	-2.3	100.3	-3.7	3.4
	Zambia	52.7	24.3	25.4	57.6	-0.9	107.7	-2.1	-5.6
Mixed	Mozambique	71.5	27.2	27.6	73.3	-0.4	102.0	-0.7	-1.3
	Sierra Leone	61.8	44.9	40.6	58.2	3.0	95.2	6.3	-1.5
Services	Comoros	-3.2	35.8	28.0	-6.9	6.1	219.7	-182.4	62.7
	Nepal	18.8	29.9	32.2	12.3	-1.7	67.2	-10.0	42.8

Source: UNCTAD secretariat calculations, from UNCTADstat and *World Development Indicators* data using World Bank JoGGs (2012).
Note: Δ(Y/N): Total Growth in per capita GDP (value added, 2000 $). (Y= total GDP and N= the total population).
Δ(Y/E): Growth linked to output per worker. (E is total employment).
Δ(E/A): Growth linked to changes in the employment rate. (A is the working-age population).
Δ(A/N): Growth linked to changes in the share of population of working-age.

For the whole period 2000–2010, Angola — the only oil exporter in the sample — had the highest per capita GDP growth rate (91.9 per cent). This growth was accompanied by a rise in output per worker (92.3 per cent), an increase in the working-age population (40 per cent) and a decline in employment rates (-2.3 per cent).

Cambodia (84.3 per cent), Ethiopia (80.3 per cent), Mozambique (71.5 per cent) and Sierra Leone (61.8 per cent) all had high per capita GDP growth rates for the decade. Only the island and services-oriented LDCs in the sample had relatively low or negative growth rates: Comoros (-3.2 per cent) and Haiti (-6.6 per cent).

During the period 2000–2010, the LDC extractive industry economies registered a fall in employment rates and a strong rise in output per worker. The manufactures exporters had a mixed growth and employment performance.

Over the period concerned, the extractive industry economies of Angola, Mozambique and Zambia all registered a fall in employment rates and a strong rise in output per worker. The manufactures exporters — namely, Bangladesh, Cambodia and Haiti — had a mixed growth and employment performance. The employment rate declined in Bangladesh (-0.6 per cent) but grew in Cambodia (5.6 per cent). Haiti not only registered a negative per capita GDP growth rate, it also had a decline in output per worker (i.e., labour productivity fell), in part due to the disastrous economic impact of the 2010 earthquake. Nonetheless, the country's employment rate rose by 2.8 per cent.

If we consider the contribution of demographic change ($\Delta(A/N)$), the employment rate ($\Delta(E/A)$) and output per worker ($\Delta(Y/E)$), it is clear that for all 11 countries the bulk of the growth per capita was accounted for by productivity growth (output per worker), with minor changes in the demographic structure and employment rate. Growth linked to changes in the share of population of working age (demographic structure) was significant only in Nepal and to a lesser extent in Bangladesh, Cambodia and Ethiopia. Nepal appears to be successfully exploiting its demographic dividend, since its working-age population as a share of the total population is rising (i.e., fewer dependants per working-age adult) and accounted for about 42 per cent of the change in GDP per capita during 2000–2010. Ceteris paribus, the demographic transition would thus have generated per capita growth equivalent to 42 per cent of the actual observed growth (table 17).

The bulk of the growth per capita was accounted for by productivity growth (output per worker), with minor changes in the demographic structure and employment rate.

The only countries in the sample where the employment rate made a positive contribution to GDP were Cambodia (where it accounted for 9 per cent of the change in GDP per capita), Sierra Leone (6.3 per cent) and United Republic of Tanzania (4.7 per cent). This may reflect important positive changes for these economies, such as youths continuing their education for longer periods of time, which helps build future productive capacities. A negative contribution of the employment rate implies that had the rate not declined, then GDP per capita would have been higher. The decomposition does not provide information about the quality of work.

In order tentatively to explore employment, growth and structural change, productivity growth should be decomposed into two parts: within sectors, and across sectors (McMillan and Rodrik, 2011b). Table 18 summarizes the results of a sectoral disaggregation of GDP and employment for three broad sectors: agriculture, industry and services. Unfortunately, further disaggregation was not possible because of insufficient sectoral-level employment data for the LDCs. Where such data from household or other micro-level surveys exist (for example, a World Bank Living Standards Measurement Study), they are often not internationally comparable due to different sampling, data collection and collation methodologies. For the 11 selected LDCs, we decompose growth, changes in employment and intersectoral shifts to highlight the sectors with potentially high employment intensity and productivity growth.

Table 18. Growth decomposition, percentage contribution to total growth in GDP (value added) per capita, 2000–2010
(Percentages)

LDC	Sectoral contributions	Contribution of within sector changes in output per worker	Contribution of changes in employment	Contributions of inter-sectoral shifts	Total
Bangladesh	Agriculture, hunting, forestry, fishing	12.8	-22.0	13.8	4.7
	Industry	19.1	5.1	6.6	30.8
	Services	15.1	15.4	13.5	44.1
	Subtotals	47.1	-1.5	33.9	79.5
	Demographic component	-	-		20.5
	Total				100.0
	Total percentage change in value added per capita 2000–2010				*54.7*
Cambodia	Agriculture, hunting, forestry, fishing	10.1	4.8	1.0	15.9
	Industry	26.1	0.3	-1.0	25.4
	Services	27.4	4.0	2.7	34.1
	Subtotals	63.6	9.1	2.7	75.4
	Demographic component	-	-		24.6
	Total				100.0
	Total percentage change in value added per capita 2000–2010				*84.3*
Ethiopia	Agriculture, hunting, forestry, fishing	27.0	-3.5	1.5	25.0
	Industry	10.9	0.1	0.5	11.5
	Services	40.4	3.1	6.7	50.2
	Subtotals	78.3	-0.3	8.7	86.7
	Demographic component				13.3
	Total				100.0
	Total percentage change in value added per capita 2000–2010				*80.3*
United Rep.of Tanzania	Agriculture, hunting, forestry, fishing	18.5	-16.8	12.4	14.2
	Industry	0.0	5.7	26.5	32.3
	Services	14.6	15.7	24.2	54.5
	Subtotals	33.1	4.7	63.2	101.0
	Demographic component				-1.0
	Total				100.0
	Total percentage change in value added per capita 2000–2010				*48.7*
Angola	Agriculture, hunting, forestry, fishing	14.0	-24.0	18.0	8.0
	Industry	31.2	3.9	28.5	63.6
	Services	17.9	16.5	-9.3	25.1
	Subtotals	63.1	-3.7	37.2	96.6
	Demographic component				3.4
	Total				100.0
	Total percentage change in value added per capita 2000–2010				*91.9*
Zambia	Agriculture, hunting, forestry, fishing	15.9	-3.4	1.1	13.6
	Industry	8.1	8.5	17.2	33.8
	Services	74.1	-7.2	-8.8	58.1
	Subtotals	98.2	-2.1	9.5	105.6
	Demographic component				-5.6
	Total				100.0
	Total percentage change in value added per capita 2000–2010				*52.7*
Mozambique	Agriculture, hunting, forestry, fishing	28.2	-10.0	6.2	24.4
	Industry	9.7	2.5	12.0	24.2
	Services	32.2	6.8	13.6	52.6
	Subtotals	70.2	-0.7	31.8	101.3
	Demographic component				-1.3
	Total				100.0
	Total percentage change in value added per capita 2000–2010				*71.5*
Sierra Leone	Agriculture, hunting, forestry, fishing	79.7	-13.3	3.7	70.1
	Industry	-3.6	4.6	4.3	5.3
	Services	6.2	15.0	4.9	26.1
	Subtotals	82.3	6.3	12.9	101.5
	Demographic component	-	-		-1.5
	Total				100.0
	Total percentage change in value added per capita 2000–2010				*61.8*

Table 18 (contd.)

LDC	Sectoral contributions	Contribution of within sector changes in output per worker	Contribution of changes in employment	Contributions of inter-sectoral shifts	Total
Comoros	Agriculture, hunting, forestry, fishing	104.1	-162.2	10.7	-47.4
	Industry	30.0	0.6	5.9	36.5
	Services	52.4	-20.9	16.6	48.1
	Subtotals	186.5	-182.4	33.3	37.3
	Demographic component	-	-		62.7
	Total				100.0
	Total percentage change in value added per capita 2000–2010				*-3.2*
Haiti	Agriculture, hunting, forestry, fishing	71.1	23.6	-23.5	71.2
	Industry	62.2	-6.8	-4.4	51.0
	Services	138.6	-57.9	-4.6	76.1
	Subtotals	271.9	-41.1	-32.5	198.3
	Demographic component	-	-		-98.3
	Total				100.0
	Total percentage change in value added per capita 2000–2010				*-6.6*
Nepal	Agriculture, hunting, forestry, fishing	21.1	-24.3	9.3	6.0
	Industry	-9.2	4.5	3.2	-1.4
	Services	17.8	9.8	25.0	52.6
	Subtotals	29.6	-10.0	37.5	57.2
	Demographic component	-	-		42.8
	Total				100.0
	Total percentage change in value added per capita 2000–2010				*18.8*

Source: Secretariat calculations based on UNCTADstat and *World Development Indicators* data using World Bank JoGGs (2012).

Within-sector productivity growth contributions to GDP per capita growth during the period 2000–2010 were large for most of the selected LDCs.

Within-sector productivity growth contributions to GDP per capita growth during the period 2000–2010 were large (70 to 98 per cent) for most of the selected LDCs. The main exceptions are United Republic of Tanzania and Nepal, where the respective 63-per-cent and 37.5-per-cent contributions of intersectoral shifts (i.e., structural change) are the largest such contributions. In terms of within-sector contributions to GDP growth, the services sector plays a prominent role in 6 of the 11 countries. The contribution of agriculture is still predominant in three LDCs: United Republic of Tanzania, Sierra Leone and Comoros. The industrial sector plays a key role in Angola and to a lesser extent in Cambodia. Nonetheless, gains in labour productivity within sectors (especially industry and services) are often the main driver of aggregate economic growth. Finally, the data suggest that demographic change made a relatively small contribution to per capita GDP growth in most of the selected LDCs, with the exception of Comoros (62.7 per cent) and Nepal (42.8 per cent). These trends in turn indicate that economic growth tended to become less effective in terms of employment generation.

The data suggest that demographic change made a relatively small contribution to per capita GDP growth in most of the selected LDCs.

While these estimates represent simple orders of magnitude, the nature of the problem can clearly not be overlooked: Relatively high rates of economic growth in the LDCs had limited employment intensity. On the other hand, if technological change, macroeconomic conditions and labour supply issues are also considered, there is little doubt that the "employment challenge" faced by LDCs is, at least to some extent, a consequence of the prevailing pattern of structural change.

D. Conclusions

Following the path to full, decent employment is a challenge in any country, let alone in those with special needs. It requires that per capita GDP is adequate to ensure reasonable compensation and to leave a surplus for financing investment, social security and other human development needs, while also delivering a satisfactory profit in economies driven predominantly by private initiative. However, per capita GDP depends, *inter alia*, on productivity, and the higher the productivity, the lower the employment delivered by every unit increment in GDP. Ensuring adequate decent work thus entails combining a reasonably high average productivity with a rejuvenation of some traditionally important employment-intensive areas of activity, such as agriculture, and a fast enough rate of growth in the volume of economic activity to foster conditions for realizing both employment expansion and reasonable compensation.

This chapter shows that relatively high rates of GDP growth in the LDCs have not translated into concomitant levels of employment growth in industry.

This chapter shows that relatively high rates of GDP growth in the LDCs have not translated into concomitant levels of employment growth in industry. Instead, the services sector has seen employment rise more vigorously. This reflects a shift of labour from low-productivity activities (mainly in agriculture) to low-productivity activities in the services (largely non-tradable) sector. Over time, the services sector is thus accounting for a greater share of the LDC labour force. Furthermore, the historic labour productivity divide between LDCs and ODCs remains substantial, although it has narrowed since 2000. The agricultural labour productivity gap between LDCs, ODCs and developed economies has also widened since 1985. Increased agricultural labour productivity in LDCs has the potential to both raise the real incomes of rural households and stimulate demand for rural non-farm goods and services. The employment-creating potential of investment in rural irrigation, drainage, provision of feeder channels, local land reclamation, afforestation and so forth is considerable. This can be strengthened if such investment is embedded in well-designed and well-targeted employment programmes (see chapter 5).

More women than ever before are part of the LDC labour force, but this has not translated into better jobs or less gender discrimination.

Although RNF employment is increasingly important in LDCs, on-farm production and jobs are still the mainstay for most LDCs. As the Report shows, the rural non-farm economy is a vital source of employment for Bangladesh, Malawi and Nepal, with non-farm activity participation rates in excess of 45 per cent.

The LDCs have a high labour force participation rate because with limited or no social security in many of these countries, the poor have no option but to seek work. More women than ever before are part of the LDC labour force, but this has not translated into better jobs or less gender discrimination. Similarly, the rise in women's employment has in most LDCs failed to generate a significant improvement in their standard of living. A disproportionate number of women are "contributing family workers" in vulnerable employment.

Vulnerable employment still accounts for about 80 per cent of total employment in the LDCs.

This chapter also documents the fact that indicators of vulnerable employment and working poor have improved since 2000, but from a relatively weak starting point. Vulnerable employment still accounts for about 80 per cent of total employment in the LDCs.

Generally speaking, unemployment in the LDCs disproportionately affects the youth labour force. In most LDCs, the youth unemployment rate (i.e., the unemployment rate for those aged 15–24 years) is higher than the average LDC unemployment rate for both men and women, and in most cases is almost twice that rate. LDC youths typically find work in the informal sector, but often these jobs do not pay reasonable wages, improve skills or offer much job security. If,

however, LDCs can provide the burgeoning youth population with the necessary skills, education and decent jobs, their youth can potentially become a major source of global and domestic consumption.

The chapter has further shown that countries with faster GDP growth achieved this with relatively lower employment creation. Employment elasticities declined in about half of the LDCs in the period 2000–2008, and tended to fall more frequently in precisely those LDCs that were growing faster. Although the reported LDC employment elasticities to growth have generally not been very low by international standards, given the demographic and economic challenges these countries are likely to face, these elasticities will probably not be high enough to reach the necessary employment levels.

Although the reported LDC employment elasticities to growth have generally not been very low by international standards, given the demographic and economic challenges these countries are likely to face, these elasticities will probably not be high enough to reach the necessary employment levels.

It is clear from the chapter's consideration of the contribution of demographic change, the employment rate and output per worker to per capita GDP growth that for all of the selected LDCs, the bulk of the growth per capita was accounted for by productivity growth (output per worker), with minor changes in the demographic structure and employment rate. There were only three countries in the sample where the employment rate made a positive contribution to GDP. But the chapter also argues that economic growth has tended over time to become less effective in terms of creating jobs.

This fact has been recognized to some extent at the multilateral level by the inclusion of "full and productive employment" among the targets for MDG 1, especially as the functioning of the labour market is also critical to human development and poverty reduction. But the available labour market and informal sector information for LDCs is sparse. There is an urgent need for more data collection and statistical analyses, which should figure prominently in the post-2015 MDG debate. Further poverty reduction will, however, require the sustained creation of productive employment, especially in countries where extreme poverty affects the majority of the population and where government is unable to address the problem through redistribution (McKinley and Martins, 2010; Ravallion, 2009b; UNCTAD, 2010).

The bulk of urban workers in LDCs have accordingly sought employment in services or remain underemployed in the informal sector.

During the 2002–2008 commodity boom, mining and quarrying thrived as relatively capital-intensive industries, although with limited multiplier effects on other sectors of the economy. The agricultural sector, by contrast, performed poorly, further entrenching subsistence living standards in rural areas. Certainly, the relatively poor performance of the agricultural sector in most LDCs has been particularly detrimental, given that the poverty elasticity of growth in agriculture is typically much higher than the corresponding elasticity of growth in other sectors of the economy (Warr, 2002; Ravallion and Chen, 2004). While the manufacturing and services sectors also grew during this period, that growth was too weak to absorb large segments of the labour force. The bulk of urban workers in LDCs have accordingly sought employment in services or remain underemployed in the informal sector. McMillan and Rodrik (2011) maintain that this pattern of sectoral labour reallocation has perverse effects on aggregate labour productivity, which they term "productivity-reducing structural change". In most LDCs, rather than moving from low-productive to highly productive sectors, thereby enhancing the GDP per person employed, this labour reallocation tends to perpetuate the dual nature[22] of their economies, which could potentially keep large sections of the labour force underemployed or unemployed.

In most LDCs, rather than moving from low-productive to highly productive sectors, thereby enhancing the GDP per person employed, this labour reallocation tends to perpetuate the dual nature of their economies.

Thus, much of the relatively strong economic growth performance of the LDCs during the 2000s may have represented a lost opportunity to stimulate employment generation and foster stronger demand for "human capital deepening" by encouraging a shift towards more knowledge-intensive activities. Since 1990, these countries have made significant improvements in primary school completion rates and literacy rates for people aged 15–24 years (see

chapter 5). However, the critical issue for LDCs is whether their economies will be able productively to employ new labour market entrants, thereby seizing the window of opportunity created by the "youth bulge" and realizing the potential benefits arising from significant long-term investments in education.

Notes

1 These data reflect the group (cohort) of workers (aged 15–24 years) entering the LDC labour market, or reaching the age when they seek an income-generating activity, which is considered to represent 1/10 of the 15–24 year age group (Losch et al., 2012). The annual group (cohort) of new workers highlights the weight of youth in the labour market. The estimate also makes it possible to avoid statistical uncertainties about whether people in developing countries actually leave the workforce after age 64 (the working-age population is usually defined as 15–64 years). This is because in most LDCs, the labour markets include many people who continue to work after age 64, notably in the agricultural and urban informal sectors.

2 Labour market data for Sudan also include South Sudan. In the ILO *Key Indicators of the Labour Market (KILM)* series, there are no available data for Djibouti, Liberia, Sao Tome and Principe, and Somalia.

3 The labour force is the sum of the employed and the unemployed. The population not economically active is generally classified by the reason for inactivity.

4 FAO estimates of the economically active population and the agricultural/non-agricultural population segments are obtained by systematically applying to the total population the series of relevant ratios, such as the proportion of economically active population by age. The time series of estimates for the total population are provided by the United Nations Population Division.

5 Most of the data presented here on LDC employment by sector are from ILO and cover only the period 2000–2012. Other ILO employment forecasts cover the period 2013–2018 (International Labour Organisation, Employment Trends (EMP/TRENDS) econometric model, April 2013).

6 During the 1990s many African LDCs introduced microeconomic reforms (such as strengthening legal and regulatory systems and privatization) and policies to improve their business and investment climate. These internal reforms (or structural changes) helped spur productivity growth. In addition, urbanization is rising rapidly in African LDCs and may in turn be boosting labour productivity (which tends to rise as workers move from farm production to urban jobs) and investment.

7 Agriculture value added per worker is a measure of agricultural productivity. Value added in agriculture measures the output of the agricultural sector (divisions 1–5 of the International Standard Industrial Classification (ISIC)) less the value of intermediate inputs. Agriculture comprises value added from forestry, hunting and fishing as well as from the cultivation of crops and livestock production (World Development Indicators, 2013).

8 On the face of it, this outcome is somewhat surprising. However, there is growing evidence that the adoption of technology (mainly in Asian LDCs) and expanding land holdings (mainly in African LDCs) of small farmers result in changes in factor ratios that in turn lead to productivity gains (Dercon and Zeitlin, 2009; Salami et al., 2010; World Bank, 2007). However, the type of technology adopted, and the extent of access to land, can affect productivity in different ways. For example, increased access to land tends to lift labour productivity at the expense of land productivity, while technology adoption tends to improve the productivity of all factors of production (Thirtle et al., 2003; Dercon and Zeitlin, 2009; Salami et al., 2010).

9 The labour force participation rate is an indicator of the level of labour market activity. It reflects the extent to which a country's working-age population is economically active and is defined as the ratio of the labour force to the working-age population, expressed in percentage terms.

10 Additional indicators would be required in order to assess such issues as income, working hours, informal sector employment, and underemployment, but they are not available.

11 The term "working poverty" refers to those working persons with income below the poverty line.

12 According to Karshenas' (2010) LDC poverty estimates, in 2007, 53 per cent of the population was living on less than $1.25 a day, and 78 per cent on less than $2 a day. This means that 421 million people were living in extreme poverty in LDCs in 2007. The incidence of extreme poverty ($1.25 a day) was significantly higher in African LDCs, at 59 per cent, than in Asian LDCs, at 41 per cent. For the $2-a-day poverty line, however, the difference was less marked: 80 per cent in African LDCs and 72 per cent in Asian LDCs.

13 The agricultural total is the sum of the mean of shares for the following income sources: agricultural crops, livestock and agricultural wage employment.

14 In Malawi the term *ganyu* describes various short-term rural labour relationships, such as casual non-own-farm work (e.g. weeding, tillage) for other smallholders or plantations.

15 Discouraged workers are defined as persons not in the labour force who are available for work but do not seek work because they think they will not find a job.

16 Underemployment reflects underutilization of the productive capacity of the employed population.

17 See, for example, Birdsall (2010) and Banerjee and Dufflo (2008), who maintain that because the middle class tend to have greater levels of human, financial and physical capital, growth in this group tends to lead to widespread gains in living standards due to a higher propensity to invest in productive capacities.

18 All the dollar figures are calculated at purchasing power parity (PPP), a conversion rate that eliminates differences between countries in the cost of goods and services. National poverty rates are taken from the World Bank's PovcalNet database of internationally comparable poverty data.

19 UNCTAD secretariat calculations, based on data from ILO, Employment Trends (EMP/TRENDS) econometric model, April 2013. This group now accounts for 62 per cent of the LDCs' workforce.

20 The employment elasticities presented here are derived from KILM (2004–2008 and 2000–2008) averages. No post-crisis (after 2009) elasticities have been utilized, as they may be subject to errors and bias.

21 For a full explanation of the empirical relationship between the employment elasticity of growth and the contribution of the employment rate methodology, see World Bank (2012b), Job Generation and Growth Decomposition Tool (JoGGs).

22 An economy is considered to be dual when there are two distinct economic sectors within a country that can be classified by different levels of development (for example, the modern industrial sector and the traditional agriculture sector) and technology.

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