CHAPTER 2

The National Dynamics of Graduation
A. Introduction

In the 45 years since the establishment of the least developed country (LDC) category, only four members of the group have succeeded in graduating out of it (Botswana, Cabo Verde, Maldives and Samoa). Even taking account of successive changes to the LDC criteria (as shown in box figure 1.1 of chapter 1), and the absence of provisions for graduation until 1991, this indicates very limited progress towards graduation. It also suggests that neither the domestic policy efforts of LDCs nor the international support measures (ISMs) established to support them have had a decisive effect in improving their development prospects. This chapter addresses the national dimension of this issue, focusing on the processes by which LDCs can emerge from the underdevelopment discussed in chapter 1 and progress towards graduation.

The present chapter begins, in section B, by examining the historical and current cases of graduation and assessing the outlook for graduation of the current LDCs in the period 2017–2024. Section C analyses the role of geographical factors in influencing graduation performance. Section D discusses the domestic processes that have allowed Botswana, Cabo Verde, Maldives and Samoa to graduate, and the national strategies and priorities of the remaining LDCs, from the perspective of the structural transformation required to achieve “graduation with momentum”. Section E examines the likely features of the group of LDCs once the next wave of expected graduations has taken place.

B. Historical, current and future cases of graduation

The past and current cases of graduation to date are listed in table 2.1. While Botswana graduated in 1994, three years after first meeting the criteria, others took much longer, and several countries that have met the criteria at some point have still not graduated. Samoa graduated 23 years after having met the criteria for the first time, Maldives 14 years after, and Cabo Verde 13 years after. Among these first four historical cases, one was a landlocked country in Africa exporting primarily minerals (mainly diamonds), and three were small island developing states (SIDS), with primarily services exports. All four qualified for graduation by virtue of the income criterion and the human assets index (HAI) criterion (or its forerunner, the augmented physical quality of life index), while none satisfied the vulnerability criterion.

For the purposes of this Report, UNCTAD has also assessed the outlook for graduation of the current LDCs in the period 2017–2024, based on the decisions taken by the United Nations General Assembly up to mid-2016 (which take into account the results of the last triennial review, held in 2015), and on projections of the performance of each LDC against the graduation criteria at the time of the triennial reviews of 2018 and 2021. The methodology used in these projections is outlined in box 2.1, and the results are summarized in table 2.2.

The objectives of the exercise were:

(a) To assess the impact of domestic processes in fostering the development of countries’ productive capacities and structural transformation and, hence, improving the likelihood of graduation;

(b) To identify the expected cases of graduation from the LDC category during the 2017–2024 period;

(c) To gauge the likelihood of the Programme of Action for the Least Developed Countries for the Decade 2011–2020 (Istanbul Programme of Action (IPoA)) target on graduation being met;
### Table 2.1. The history of graduation to date

<table>
<thead>
<tr>
<th>Country</th>
<th>Year of statistical pre-eligibility for graduation</th>
<th>Year of full statistical eligibility for graduation</th>
<th>Criteria satisfied</th>
<th>Year of CDP recommendation for graduation</th>
<th>Year of ECOSOC endorsement of the recommendation for graduation</th>
<th>General Assembly endorsement of the recommendation for graduation</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>2003</td>
<td>2006</td>
<td>Income, HAI</td>
<td></td>
<td>2006</td>
<td></td>
</tr>
<tr>
<td>Kiribati</td>
<td>2003 (pre-eligibility not recognized)</td>
<td>2006</td>
<td>Income, HAI</td>
<td></td>
<td>2006</td>
<td>Decision on graduation deferred by the CDP to the 2018 review</td>
</tr>
<tr>
<td></td>
<td>2006, 2012 (pre-eligibility recognized)</td>
<td>2015</td>
<td>Income, HAI</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tuvalu</td>
<td>2003 (pre-eligibility not recognized)</td>
<td>2006 (pre-eligibility recognized)</td>
<td>Income, HAI</td>
<td>2009</td>
<td>2012</td>
<td>ECOSOC did not take a decision on the case of Tuvalu until July 2015, when it decided to defer to 2018 its consideration of the recommendation to graduate Tuvalu</td>
</tr>
<tr>
<td></td>
<td>2009 (CDP questioned “the sustainability of the present level of income and did not recommend graduation)</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Bhutan</td>
<td>2015</td>
<td></td>
<td>Income, HAI</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nepal</td>
<td>2015</td>
<td></td>
<td>HAI, EVI</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sao Tome and Principe</td>
<td>2015</td>
<td></td>
<td>Income, HAI</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solomon Islands</td>
<td>2015</td>
<td></td>
<td>Income, HAI</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Timor-Leste</td>
<td>2015</td>
<td></td>
<td>Income only</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


Note: APQLI: augmented physical quality of life index; ECOSOC: United Nations Economic and Social Council; EDI: economic development index; EVI: economic vulnerability index; HAI: human assets index.

(d) To evaluate the trajectories followed by LDCs likely to graduate based on two criteria vis-à-vis those graduating based on the income-only criterion;

(e) To examine the likely major features of the LDC group once the countries projected to graduate have left the category.

It should be emphasized that these projections are purely indicative and are made for analytical purposes only. They are not meant to prejudge the decisions.
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either of LDCs themselves, or of the Committee for Development Policy (CDP), the United Nations Economic and Social Council (ECOSOC) or the United Nations General Assembly. As noted in chapter 1, the decisions of these States and organs concerning graduation do not follow mechanically from the statistical criteria, but rely also on other considerations. Such considerations are not taken into account in the projections used here, although some cases in which they are likely to modify a decision based purely on the statistical criteria (and hence the timing of graduation) are indicated in the notes to table 2.2. Cases of prolonged military conflict, for example, are likely to have adverse effects on the three graduation criteria.

The main results of this exercise are as follows.

- Sixteen LDCs are projected to graduate during the 2017–2024 period, including most of the Asian and island LDCs, but only three LDCs in Africa.
- Graduation may result from a broad-based process of development of productive capacities, structural transformation and diversification of the economic structure, in line with what this Report calls “graduation with momentum”, as in the case of two manufactures exporters (Bangladesh and Bhutan) and two mixed exporters (the Lao People’s Democratic Republic and Myanmar). However, this is by no means always the case.

Sixteen LDCs are projected to graduate during 2017–2024.
• Almost half of the projected graduates are services exporters, indicating the significant role of services exports in progress towards graduation. These countries have diversified their exports into tourism (particularly the island LDCs, but also Nepal) or government services (Afghanistan and Djibouti). Diversification of exports towards services has an impact on the economic vulnerability index (EVI), but does not necessarily mean structural transformation of the economy.

• Fuel extraction is an important driver of graduation over the period. It tends to boost income growth, but this is not necessarily associated with commensurate human development or with economic diversification. Four fuel-exporting LDCs are projected to graduate (Angola, Equatorial Guinea, Timor-Leste1 and Yemen), all based on the income-only criterion except for Yemen, which is projected to graduate based on two criteria.2

• Afghanistan, Myanmar and Nepal are projected to graduate on the basis of the HAI and the EVI. If this is the case, this will be the first time that the income criterion has not been met at the time of graduation.

• The IPoA target on graduation is interpreted here as meaning that half of the LDCs should achieve full statistical eligibility for graduation by 2020 (as explained in chapter 1). However, the UNCTAD projections indicate that this target is unlikely to be met, as only 10 LDCs are projected to be fully statistically eligible for graduation by that date, rather than the 24 targeted. Even in 2021, only 16 countries are projected to have achieved full statistical eligibility, still well below the IPoA target.

The different growth and development paths leading to graduation are of particular significance in the present context. Some LDCs are on course for a process of graduation with momentum, characterized by a broad-based process of development of productive capacities and structural economic transformation. However, other LDCs are projected to graduate without such a process. In some cases this occurs through enclave-led growth (especially in cases where growth is led by extractive industries). In others, particularly small economies, it occurs through investment in human development combined with a limited degree of export diversification, which push the HAI and EVI, respectively, beyond graduation thresholds. In neither case does graduation indicate that these countries have undergone structural transformation.

The possibility of countries graduating without being on the path to structural transformation indicates a need to reconsider the graduation criteria, so that they reflect more fully the long-term development processes that underpin graduation with momentum. This issue is further discussed in chapter 5. Meanwhile, under the current graduation criteria, it is of the utmost importance that the States and organs influencing or deciding the cases of graduation (LDCs themselves, the CDP, ECOSOC and the General Assembly) continue to take due account of factors other than the statistical eligibility for graduation. As can be seen in table 2.1, this has been the practice in graduation cases to date.

It should be emphasized that the projections made here rely heavily on the methodology used and the assumptions made (box 2.1). Other projections, which apply different methodologies and assumptions, have obtained different results. Drabo and Guillaumont (2016) project that between 8 and 13 LDCs will meet the income-only graduation criterion in the 2021 review of the list of LDCs, depending on assumptions for the gross national income (GNI)/gross domestic product (GDP) growth rate. Kawamura (2014), in a paper published before the 2015 triennial review of the list of LDCs, projected that up to 11 countries would achieve full statistical eligibility for graduation by the 2021 triennial review.3
C. The role of geographical factors in graduation performance

1. The landlocked developing country factor

There is a significant relationship between LDC status and a landlocked geographical location: more than 40 per cent of the LDCs are landlocked (20 of 48); and these 20 LDCs represent almost two thirds of the 32 landlocked developing countries (LLDCs) (figure 2.1). There is also a relationship with graduation: although the first LDC to graduate in 1994 was an LLDC (Botswana), no LLDC has graduated since; and of the 16 countries projected to graduate by 2025, only four — all in Asia — are landlocked (Afghanistan, Bhutan, the Lao People’s Democratic Republic and Nepal) (table 2.2).

The Vienna Programme of Action for Landlocked Developing Countries for the Decade 2014–2024 highlights the special challenges faced by LLDCs, which (United Nations, 2014a, para. 1):

are associated with their lack of direct territorial access to the sea, remoteness and isolation from world markets. Their international trade depends on transit through other countries. Additional border crossings and the long distance from major markets, coupled with cumbersome transit procedures and inadequate infrastructure, substantially increase the total expenses for transport and other transaction costs, which erodes the competitive edge of landlocked developing countries, reduces economic growth and subsequently negatively affects their capacity to promote sustained economic development, human and social progress and environmental sustainability.
Figure 2.1. Country groups: LDCs, LLDCs, SIDS, and sub-Saharan African countries

Note: While sub-Saharan African is a geographical group, rather than a category recognized by the United Nations, it is singled out here because the vast majority of its countries belong to these categories (which is not the case for other regions).
Beyond the structural problems common to LDCs (such as those discussed in chapter 1), landlocked LDCs face some additional challenges, especially high trade transaction costs, lack of export competitiveness, overdependence on official development assistance (ODA), high external debt, inadequate foreign reserves, and reliance on migrants’ remittances. A further challenge specific to LLDCs is their dependence on the economic, political and environmental situation of neighbouring countries, particularly transit countries for their foreign trade. If these are large and dynamic economies, then they can provide a boost to the economic growth of LLDCs (Paudel, 2014). All four landlocked LDCs projected to graduate by 2024, as well as the one LLDC which has graduated to date (Botswana), share borders with large (non-LDC) developing economies, which in most cases have experienced relatively rapid growth.

The development of landlocked LDCs can, however, be hampered if their neighbouring countries suffer from poverty, slow economic growth, political instability and/or vulnerability to natural shocks. The dependence of LLDCs on, and their close economic ties with, their neighbours makes them vulnerable to external (economic and environmental) shocks and social and political instability affecting neighbouring countries, as well as those impacting them directly (UN-OHRLLS, 2014). The transit neighbours of African landlocked LDCs, in particular, in most cases have broadly similar economic structures and are beset by similar scarcity of resources to the landlocked LDCs themselves, seriously limiting the potential for exploitation of economic complementarities.

Most economic studies that have analysed the impact of a landlocked position on economic growth have found that lack of direct access to the sea represents a constraint to economic growth (Collier and Gunning, 1999; Dollar and Kraay, 2003; Friberg and Tinn, 2009). Controlling for other determinants, the growth rate of landlocked countries has on average been found to be at least 3½ percentage points below that of other countries; and this effect cannot be entirely offset even by domestic policies conducive to growth (Paudel, 2014).

Landlocked LDCs also perform less well than other subgroups of developing countries (including other LDCs) in terms of income and human capital development. Landlocked LDCs are poorer than other LDCs, with an average GNI per capita more than one quarter less than the LDC average and 37 per cent less than that of other (coastal and island) LDCs (figure 2.2). Landlocked LDCs on average also have a lower HAI than other LDCs (45.7 compared with 54.7), though by a smaller margin (figure 2.3).

The relative performance of landlocked LDCs is better in relation to the EVI. Their average of 39.3 compares with 42.6 for non-landlocked LDCs (figure 2.3) and 52.0 for SIDS LDCs (figure 2.4), but is well above the graduation threshold of 32.0 (a lower figure indicating lower vulnerability). However, this partly reflects the inclusion in the EVI of the share of population in low-lying coastal zones, which is by definition zero in LLDCs.

In light of the challenges outlined above, it is not surprising that graduation of landlocked LDCs is projected to remain limited for the foreseeable future. While four landlocked LDCs are projected to graduate by 2024, it should again be emphasized that all these countries share borders with relatively large and growing ODC economies.

### The Small Island Developing State Factor

Seven countries are currently classified as both LDCs and as SIDS: the Comoros, Kiribati, Sao Tome and Principe, Solomon Islands, Timor-Leste, Tuvalu and Vanuatu (figure 2.1). In contrast to landlocked LDCs, SIDS LDCs...
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Figure 2.2. Gross national income per capita of LDCs and subgroups, 2013–2015

<table>
<thead>
<tr>
<th></th>
<th>LDCs</th>
<th>SIDS LDCs</th>
<th>Non-SIDS LDCs</th>
<th>Landlocked LDCs</th>
<th>Non-landlocked LDCs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013–2015</td>
<td>955.0</td>
<td>2088.6</td>
<td>942.0</td>
<td>689.0</td>
<td>1087.9</td>
</tr>
</tbody>
</table>


Notes:
- Aggregates are weighted averages.
- Average 2012–2014 for the Comoros, Djibouti, Eritrea, the Gambia, Lesotho, Mauritania, Myanmar, Sao Tome and Principe, Somalia, Tuvalu, Vanuatu and Yemen.

Figure 2.3. Selected structural indicators of landlocked LDCs

Source: UNCTAD secretariat calculations, based on data from the CDP Secretariat prepared for the 2015 triennial revision of the list of LDCs.

Note: Aggregates are simple averages. EVI: economic vulnerability index; HAI: human assets index.
have performed remarkably well in terms of graduation, and are expected to continue to do so. Three of the four countries that have graduated to date are SIDS, as are the majority (6 of 10) of those projected to graduate by 2021. This means that all but one of the seven current island LDCs (the Comoros) are expected to graduate by that date.

Despite their good graduation performance, however, SIDS LDCs are faced with an apparent “double structural handicap”, since they combine the challenges and vulnerabilities of LDCs and those of SIDS. The major challenges facing SIDS include their small size, their remoteness from large markets, the limited scope for economies of scale resulting from the interaction of these two features, and their particularly acute economic vulnerability to external economic and natural shocks.

The significant overlap between the development challenges faced by SIDS and those faced by LDCs are reflected in both the IPoA and the SIDS Accelerated Modalities of Action (SAMOA) Pathway. These include:

- Limited productive capacities, which in turn inhibit economic diversification, international competitiveness, diversification of trading partners and integration into the world economy;
- The threat of climate change, extreme weather events and natural disasters;
- Widespread and acute infrastructural deficits, notably in transportation, power generation (including sustainable energy), water, sanitation, and information and communications technology (ICT);
- Lack of food and nutritional security, often coupled with heavy dependence on food imports;
- Weak domestic resource mobilization and external debt sustainability.

As a result of their small economic size, SIDS economies also tend to be particularly dependent on international trade and financial flows, and thus more exposed to exogenous shocks.

Various models have been developed to explain the structure and dynamics of their economies, which condition the development strategies that are available to them (box 2.2).

Beyond the economic and environmental challenges common to all LDCs, SIDS LDCs have several distinguishing features. First, they have particularly acute economic vulnerability, with a higher EVI (52.0) than non-SIDS LDCs (39.6) (figure 2.4). Kiribati has the highest EVI score of the 145 countries for which the CDP has calculated this index. Of the 20 countries with the highest EVI scores, 13 are SIDS (4 of them LDCs), while 5 are non-SIDS LDCs and only 2 fall into neither category. This shows that vulnerability is particularly high in both SIDS and LDCs.

There are four major reasons for the particular vulnerability of SIDS LDCs.

- They are more remote from larger economies than other LDCs, scoring 71.2 on the remoteness index compared with 55.2 for non-SIDS LDCs (figure 2.4).
- Their domestic markets are much smaller, weakening their competitiveness by limiting the potential for economies of scale, while increasing their reliance on export markets, and thus intensifying their exposure to the vagaries of international markets and their vulnerability to global economic crises.
- Their economic structures are weaker than either other LDCs or other SIDS, with greater export concentration and less diversified markets, increasing
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The special economic needs and situations of small island economies started to be addressed in the social sciences literature in the 1960s. Some early island scholars, building on the work of authors such as Robinson (1960), emphasized the disadvantages of small island economies in terms of “a narrow production base, macroeconomic vulnerability to trade fluctuations, high administrative costs and a tendency towards monopolistic markets”. Others, such as Kuznets, by contrast, stressed the advantages of small island economies in terms of their rich social capital (solidarity, social cohesion and sense of community) and their ability to adjust painlessly and continuously to changing economic circumstances (Oberst and McElroy, 2007).

In the 1980s, Bertram and Watters (1985) developed the MIRAB model as a characterization of several island economies in the Pacific, also applicable to some other small island economies. MIRAB is an acronym for migration (M), remittances (R), foreign aid (A) and public bureaucracy (B). Essentially, the model posits that micro-States in the Pacific depend on these four elements to sustain the standard of living of their populations in the face of apparently limited domestic economic production and a small private sector characterized by slow growth (Oberst and McElroy, 2007; Tisdell, 2014).

The MIRAB model dominated the literature for almost two decades, until the development of the PROFIT and SITE models. The PROFIT model (Baldacchino, 2006) highlights development based on people (that is, emigration) (P), resources (R), overseas management (that is, diplomacy) (O), finance (F) and transport (T). What distinguishes PROFIT economies from MIRAB economies is their active use of domestic policy, the dynamism of their private sector and strategic orientation towards diversification (Oberst and McElroy, 2007:165). McElroy (2006) considered small (warm-water) island tourist economies (SITE), often linked with export processing zones and offshore banking centres, as a subcategory of the PROFIT genre. On this basis, Oberst and McElroy (2007) proposed a classification of small islands as either MIRAB or PROFIT-SITE types, shown for SIDS in box table 2.1.

According to their exercise, the seven current SIDS LDCs (the Comoros, Kiribati, Sao Tome and Principe, Solomon Islands, Timor-Leste, Tuvalu and Vanuatu) are all MIRAB economies, as are two of the three SIDS that have graduated from the LDC category (Cabo Verde and Samoa). The other SIDS graduate (Maldives) is classified as a PROFIT-SITE. However, the classification of some SIDS LDCs and SIDS graduates as MIRAB economies may be affected by recent changes in their economic circumstances: Cabo Verde, for example, is now clearly in the SITE category, given the extent of the relatively recent development of its tourism industry.

- SIDS LDCs are also particularly vulnerable environmentally. Overall, 34.3 per cent of their population lives in coastal zones with low elevation, compared with 20.4 per cent for non-LDC SIDS, and only 3.9 per cent for non-SIDS LDCs.
A second distinguishing feature of SIDS LDCs lies in their particularly heavy dependence on ODA and debt relief. Their external financing gaps need to be filled through a combination of ODA, borrowing and other external resources such as workers’ remittances. SIDS LDCs’ net ODA receipts per capita in 2014 ranged from $96 (in the Comoros) to $3,480 (in Tuvalu), compared with an LDC average of $47 per capita.

SIDS LDCs also have substantially better human asset endowments and higher per-capita incomes on average than do non-SIDS LDCs, a reflection of the so-called “island paradox”. On average, SIDS LDCs score 73.9 on the HAI, compared with only 47.7 for non-SIDS LDCs (figure 2.4). The average GNI per capita of SIDS LDCs was $2,088.6 in 2013–2015, more than double that of other LDCs ($942) (figure 2.2).

Because LDCs can graduate by reaching the threshold levels of GNI per capita and HAI alone, the advantages of island LDCs on these two indicators are sufficient to outweigh their multiple disadvantages in terms of vulnerability. All three of the historical cases of SIDS graduation were based on income per capita and the HAI (or its predecessor, the augmented physical quality of life index), as are five of the six cases projected up to 2024. The one exception, Timor-Leste, is projected to graduate on the basis of the income-only criterion.7 Thus, while several landlocked LDCs are prevented from graduating in the medium term by low incomes and relatively weak HAIs, the higher income per capita and HAI characteristic of most SIDS LDCs allows them to graduate more readily than other LDCs, despite their much greater vulnerability as measured by the EVI.
D. National processes leading to graduation

Notwithstanding the underdevelopment “traps” outlined in chapter 1 and the geographical challenges described in section C above, the success of some LDCs in graduating, and the progress of many others towards graduation, demonstrates that these do not represent insurmountable obstacles to graduation. Overcoming (or at least mitigating) these obstacles is a defining objective of ISMs; but national policies, strategies, mechanisms and measures are also critical, to overcome these structural handicaps and unlock LDCs’ development potential. This section discusses the national strategies that enabled those countries that have graduated to date to do so, and the graduation strategies of the current LDCs.

1. Strategies of the graduates to date

One of the commonalities of the strategies that led Botswana, Cabo Verde, Maldives and Samoa to graduation from the LDC category is that none of them had articulated policies specifically aimed at graduation. Rather, each Government pursued national, regional and international policies directed towards broader development objectives, and graduation occurred as an indirect result. Elements that contributed to their success included, in varying degrees, macroeconomic stability; support to productive investment; good governance; investment in health and education; and strategic use of each country’s endowments, advantages and opportunities to support a broadly based development process.

(a) Botswana

A critical factor in the success of Botswana’s development policies has been the quality and nature of its governance, based on a mixture of Tswana traditions and customs with the Romano-Dutch and British system adopted at independence. During the 23 years that Botswana remained an LDC, the following national policies made an important contribution to its graduation from the category in 1994 (Mogae, 2016).

**Economic and social planning:** Ever since its independence in 1966, the Government of Botswana has issued five-year National Development Plans (NDP). These were, in effect, rolling plans, overlapping if circumstances required them to be modified. Since the beginning of NDP 1, which ran from 1968 until 1973, the Government has focused its development efforts on raising the standard of living of all Botswanans. Poverty alleviation and the provision of basic infrastructure and social services have thus served as the bedrock of development policy. Each plan included both economic and social goals, which were considered to be inseparable. The planning process was designed to ensure the maximum possible gain from the limited financial resources available to the Government through prioritization of policies, programmes and projects. It also allowed the Government to set goals and objectives against which its performance could be objectively evaluated. The Government also engaged proactively in aid management and donor coordination, requiring development partners to direct their funds to those projects classified as national priorities in the plan.

Between 1966 and 1974, Botswana was one of the fastest growing economies in the world. Real GDP growth averaged 16 per cent between 1970 and 1974, and remained in high single figures until 1989. Following the discovery of diamonds in 1967, and the subsequent adoption of an explicit...
industrial policy to promote private-sector-oriented development of the mineral sector, mining became (as it remains) the leading economic sector of Botswana, surpassing agriculture since 1977/78. The ratio of government revenue to GDP averaged 50 per cent (peaking at some 64 per cent in 1988), allowing a fiscal surplus. Domestic savings started to exceed investment and the trade account also generated a surplus.

Harnessing mineral resources for development: Ever since independence, mineral rights have been vested in the central Government, allowing the Government effective control when diamonds were discovered. This was critical to the establishment of the authority of the State and provided a guaranteed source of government revenue. An effective mineral taxation policy was put in place under which the State charged a modest fixed royalty rate and took an equity stake in the mining company, ensuring a share of the future profits of mining operations. When De Beers discovered diamonds, the Government initially took a 15 per cent stake in the diamond mines, but renegotiated the contract as the true scale and value of the diamond deposits became apparent (Hazleton, 2002). The De Beers Botswana Mining Company (Proprietary) Limited was created and now (renamed Debswana), is jointly owned by De Beers and the Government of Botswana as equal partners. The creation of a sovereign wealth fund (the Pula Fund) in 1994 has allowed the Government both to save a portion of the income from diamond exports for future generations and to use the resources generated to fund promotion of economic diversification.

Developing transport corridors and good infrastructure: As a landlocked country, Botswana is critically dependent on its transit neighbours’ transport infrastructure to move goods to and from ports. Diamond exports provided an important advantage in this respect, as their high value-to-volume ratio allows them to be transported economically by air. The creation of an efficient transport corridor through South Africa has further reduced the impact of Botswana’s landlocked position by reducing trade costs for other goods; and the Government has invested in other regional corridors, notably with Namibia and Mozambique. It has also focused on improving its domestic infrastructure, particularly for road and air transport, to facilitate trade and attract investors.

Improving education: To achieve basic education for all and address skilled labour and human capital shortages, Botswana devoted an increasing share of its budget to education, raising it from 15 per cent in the 1970s to more than 20 per cent in the 1990s. School fees were abolished; and school enrolment rates have risen considerably at all levels. To facilitate the transfer of skills, knowledge and experience, localization exercises were implemented in both the public and private sectors, through which expatriates mentored suitably qualified Botswana counterparts to ensure adequate training.

(b) Cabo Verde

Like Botswana, Cabo Verde has enjoyed peace and political stability since its independence in 1975, with a vibrant multiparty democracy, credible institutions and relatively good governance. Its development strategies have emphasized the following features (Resende dos Santos, 2016).

Prudent and forward-looking macropconomic management: Lacking both exploitable mineral resources and an adequate size for economic self-sufficiency, Cabo Verde has ably managed its vulnerability, while maximizing the developmental impact of external resources (primarily ODA and remittances). State modernization, especially in the area of public financial management, has substantially strengthened the country’s macroeconomic management capacity; and the introduction of an integrated system for budget and financial management in 2002 contributed to improvements in both revenue
collection and national planning. The Government also introduced a forward-looking strategy to improve rural infrastructure, financing labour-intensive rural development projects with the proceeds of domestic sales of food aid, thereby also generating employment and reducing rural poverty.

State-driven policies with private support: The Government also invested in major social infrastructure projects, including water supply, sanitation, public health systems and schools, as well as in economic infrastructure, which has made a major contribution to growth and employment creation. About 90 per cent of all public investment has been financed by ODA (including concessional borrowing) since the 1980s, when it represented the largest share of domestic expenditure. Combined with a reduction in the rate of corporate taxation, these investments also encouraged foreign direct investment (FDI) inflows. Opening the economy to the private sector, including through the privatization of State enterprises in telecommunications, water, energy, and banking, also contributed to growth. The creation of special emigrant savings accounts in the national banking system helped to increase private investment and domestic credit, allowing remittances to become an important source of domestic private investment and spurring growth in various industries and construction activities. By 1996, these measures had increased the share of the private sector in total investment to more than 50 per cent.

Developing tourism: With limited scope for either agricultural or industrial development, Cabo Verde has been a services-based economy. The tertiary sector has generated most of the economic growth experienced since 1990, essentially due to the strong performance of tourism, which has also fuelled the growth of transport, construction, banking and insurance.

Improving education and health: The Government devoted substantial resources, amounting to around 10 per cent of GDP, to healthcare and education. This has allowed the achievement of free, universal and compulsory schooling for at least six years.

(c) Maldives

Strategies adopted by the Government of Maldives that contributed to the country’s graduation from the LDC category in 2011 include the following (Lui, 2016).

Developing tourism-led growth: During the 1980s and 1990s, the Government invested heavily in tourism-related construction, transport and communication, and attracted investments in resort development. This led to employment creation and high GDP growth rates, resulting in tourism overtaking fisheries as the largest sector in 1985 and contributing more than two thirds of GDP by 2013. The growth of tourism has been driven in part by the foreign private sector, with the support of government incentives and strategies, and facilitated by the absence of taxes and low rents. In 1983, the First Tourism Master Plan laid the foundations for the sustainable development of tourism and its integration into the social and economic development of the country, including the establishment of regulations governing the quality of services and facilities provided to tourists (Kundur, 2012). However, the narrow economic base arising from this heavy concentration on tourism leaves the economy vulnerable to external shocks, particularly the vagaries of international travel trends.

Reviving the fisheries sector: Fisheries have been the traditional mainstay of the Maldivian economy. The Government has modernized the previously informal fishing sector to include more advanced and efficient techniques. The Marine Zones of Maldives Act No. 6/96, which took effect on 27 June 1996, specified a 12-mile territorial sea, a 24-mile contiguous zone and a 200-mile...
exclusive economic zone (United States Department of State, 2005). The number of vessels operating in the exclusive economic zone was subsequently increased by opening it to foreign as well as domestic investors.

**Prudent macroeconomic and fiscal policy:** The Maldives’ economic growth was at times sustained by proactive use of macroeconomic policies. During the early 1990s, for example, economic growth slowed partly as a result of the sharp decline in tourist arrivals due to a recession in Europe and the Gulf War, and partly as a result of reduced world tuna prices. This led to severe macroeconomic imbalances, including large fiscal deficits and strong pressure on the balance of payments. However, the increase in fiscal deficits was reversed by measures to enhance revenue and reduce expenditure (including on wages and salaries), cutting the deficit from around 10 per cent of GDP between 1990 and 1993 to less than 5 per cent from the late 1990s until 2004. This allowed Maldives’ strong growth performance of the 1980s to be maintained during the 1990s.

**Strengthening education and health services:** The Government devoted considerable effort to meeting the learning needs of both children and adults. Its educational strategies were designed to facilitate access to employment and self-employment opportunities, and proved very effective in achieving universal access to basic education. Health outcomes were also improved considerably as a result of devoting 10 per cent of the government budget to health, including improvements to services and infrastructure. Child mortality fell from 48 per 1,000 live births in 1990 to 13 per 1,000 live births in 2010, while life expectancy at birth has increased from 63.5 years to 72.6 years for males and 74.4 years for females.

**Labour policy and migrant labour:** To help meet the needs of investors, the Government has allowed foreign labour to supplement the domestic labour force in sectors such as tourism. During Maldives’ third phase of tourism development, between 1989 and 1997, the Government addressed the local labour shortages faced by the tourist industry by allowing immigration of foreign workers and exercising flexibility in the application of domestic regulations. By the end of 2006, 11,095 of the 22,000 jobs in the tourism sector were filled by expatriates, despite a limit of 50 per cent on the proportion of expatriates among total employees in tourist resorts (Kundur, 2012).

**In Samoa, agricultural diversification and upgrading played an important role, as did tourism.**

**Policies were aimed at creating an enabling environment, promoting health and education, and improving disaster preparedness.**

(d) **Samoa**

Samoa’s graduation from the LDC category in 2014 was achieved through the Strategies for the Development of Samoa (2002–2004, 2005–2007, 2008–2012), which were based on the following key pillars (Enari, 2016).

**Agricultural upgrading and diversification:** Two thirds of households are engaged in agriculture, which remains the backbone of the Samoan economy. An agricultural diversification strategy sought to combine production for local consumption, to improve food security, with commercial investment (including investment large-scale farming) to improve crop production, fisheries, livestock and forestry development. Investment was promoted in new high-value crops (vanilla, pepper and nonu), as were the processing of existing products and diversification into niche markets, notably organic production (for example, of virgin coconut oil, bananas and nonu products). Government measures to support diversification included strengthening research and extension services for product development, a Tuna Management Plan, and investment in supportive infrastructure, such as cooling facilities.

**Promoting tourism:** The Government also stimulated tourism development, in particular through the development of the necessary infrastructure and proactive marketing of Samoa as a destination, emphasizing Samoan culture and
trditions. FDI and domestic investment were encouraged in hotel development, and a Land Leasing Committee for tourism investment was created to negotiate with landowners and investors to maximize their benefits, reflecting the scarcity and high value of land.

**Strengthening the private sector:** The Government sought to create an enabling environment for private sector development, and promoted investment in areas where Samoa had a comparative advantage. Investment policy was supported by an accommodative fiscal policy stance and improvements to utility services and infrastructure, notably electricity and water supply, information and communication technologies (ICTs) and transport. Investment promotion policies were implemented to reduce transaction costs, rationalize charges, and provide financial and other incentives for the development of small businesses in rural areas. The Government also implemented a number of initiatives to facilitate the supply of credit.

**Improving education and health services:** An important objective has been the improvement of educational levels and health provision for the average Samoan, in part by strengthening the role of communities in supporting education. The Government has also acted to improve health through preventive health programmes and improvements to health facilities.

**Disaster preparedness and environmental sustainability:** Environmental considerations, including climate change and disaster management, have featured prominently as a cross-cutting consideration in all planning activities. The Government has also increased expenditure for recovery and reconstruction following external shocks such as tsunamis, cyclones and financial crises.

Emigration has also played a significant role in Samoa’s development and graduation, both by easing pressure on domestic employment, education and health services, and by generating remittances, which represented 20 per cent of GDP in 2015.

### 2. Strategies, plans and policies of current least developed countries

This section provides a non-exhaustive review of national strategies and priorities in LDCs, from a perspective of the structural transformation required to achieve graduation with momentum. In terms of the graduation criteria, the primary focus of national governments is typically economic growth, which impacts the income criterion directly, while having secondary effects on the EVI (especially in terms of export instability and the structure of GDP) and the HAI.

**a) National goals: Graduation versus income classification**

Most of the countries whose graduation is expected by 2024 have included graduation as an explicit goal in their development plans and programmes, and five of these countries (Bangladesh, Bhutan, the Lao People’s Democratic Republic, Myanmar and Nepal) have set explicit timetables (United Nations, 2015b). Bhutan’s eleventh Five Year Plan (2013–2018), for example, establishes graduation by 2020 as a top priority, while Nepal’s Thirteenth Plan includes a target of graduation by 2022 (brought forward from 2030 in the Twelfth Plan in light of the IPoA graduation target).

In some cases, this includes an explicit focus on attainment of the graduation criteria themselves. In Nepal, the National Planning Commission’s approach paper on graduation by 2022 includes “strategic directions and actions” for each of the three criteria as well as for monitoring and evaluation.
National Planning Commission, 2014). Bangladesh is focusing primarily on the HAI criterion, as it has already fulfilled the EVI criterion and remains far below the graduation threshold for GNI. Here, civil society has been active in discussing the prospects for and policies towards graduation, led by the Centre for Policy Dialogue, a local think tank.

Some of the countries approaching graduation have also established institutions to support and oversee the process. Myanmar, for example, has established a high-level committee on graduation headed by the Vice-President, and specific subcommittees for each of the graduation criteria. The Government of Angola (scheduled to graduate in 2021) has also set up a high-level committee to oversee the graduation process.

Most LDCs that are not expected to graduate until after 2024, by contrast, emphasize goals related to income classifications, rather than graduation from LDC status. Such aspirations are expressed, for example, in the national development plans of Ethiopia, Rwanda, Uganda, the United Republic of Tanzania and Zambia. The aim of Ethiopia’s Growth and Transformation Plan is to take the country to middle-income status\textsuperscript{10} between 2020 and 2025; Zambia’s National Vision is to become “a prosperous middle-income nation by 2030”; and both Rwanda’s Second Economic Development and Poverty Reduction Strategy and Uganda’s Second National Development Plan set a goal of achieving middle-income status by 2020. For Senegal, the Plan Sénégal Emergent aims to make Senegal an “emerging” country by 2035, while Cambodia’s Rectangular Strategy Phase Three aims “at graduating from a low-income country to a lower-middle-income status in the very near future and further to become an upper-middle income country by 2030”.

(b) Laying the foundations for structural transformation

Structural transformation of the economy entails increasing productivity within sectors, and shifting productive resources from lower- to higher-productivity sectors and activities. The poverty-oriented structural transformation needed to attain the Sustainable Development Goals requires increasing labour productivity to be accompanied by increasing employment, particularly in a context of high underemployment and a rapidly expanding workforce due to past reductions in child mortality rates outpacing reductions in birth rates (UNCTAD, 2015a). LDCs have adopted a series of sectoral and industrial policies directed towards these ends, some of which are reviewed below.

The energy sector is of particular importance to structural transformation, particularly where access to modern energy sources is limited. In African LDCs particularly, falling costs for small-scale renewable energy offer a major opportunity for the transformation of rural economies (UNCTAD, 2014: box 5). A number of LDCs report new and ongoing energy projects to exploit renewable energy potential, though mostly on a larger scale. For example, completion of the Grand Renaissance Dam on the Nile in 2017 is expected to quadruple Ethiopia’s power generation capacity, while the Democratic Republic of the Congo has a number of hydropower initiatives and is considering solar and wind alternatives (UNECA, 2016). A new utility-scale solar energy project in Zambia has the lowest price yet recorded for such a project in Africa (Pothecary, 2016). Outside the renewables sector, the Hongsa Power Company lignite power plant located in the Lao People’s Democratic Republic is aimed at removing domestic bottlenecks in energy supply, as well as generating export revenues through sales to Thailand.

Improved transportation also contributes to structural transformation, notably by reducing costs along the supply chain. In Ethiopia, the road network doubled between 1997 and 2011. Road rehabilitation can also have a major impact on
transport costs, for example reducing transport costs over a 17–20 kilometre route in Rwanda by two thirds between 1999–2000 and 2009–2010 (Lunogelo and Baregu, 2014).

Regional initiatives are particularly important in transportation, especially for LLDCs. The Lao People’s Democratic Republic and Nepal aspire to become “landlinked” rather than “landlocked” by addressing their transportation problems. An initiative to build a new East Africa railway connecting Burundi, Kenya, Rwanda, South Sudan and Uganda was launched in 2014. Other new initiatives include railways connecting Ethiopia and Djibouti, and linking Bhutan and Nepal with China and India. The Benguela railway, connecting Angola, the Democratic Republic of the Congo and Zambia, has already been completed (United Nations, 2015a).

An essential underpinning to structural transformation is the mobilization of domestic resources for sustainable development, which has been stressed by the Addis Ababa Action Agenda of the Third International Conference on Financing for Development and the 2030 Agenda for Sustainable Development (2030 Agenda) (both adopted in 2015). LDCs face a very considerable financing gap, due to a combination of low income levels, narrow tax bases, weak tax collection and management systems, and various forms of illicit financial flows (Bhattacharya and Akbar, 2014; Langford and Ohlenburg, 2015; UNCTAD, 2016a). This affects both economic performance and the attainment of social goals by limiting public sector investments and other government expenditures, notably on health and education. Tax reforms aimed at improving government revenues by simplifying and modernizing tax collection and expanding the tax base have been implemented by several LDCs in recent years, including Angola, Bangladesh, Burundi, Ethiopia, Guinea-Bissau, Liberia, Mauritania, Mali, Myanmar, Senegal and Uganda (IMF, 2011).

Several natural-resource-rich LDCs are acting to strengthen tax collection and management, as a means of redirecting resources towards fostering sustainable development. In this regard, transparency in public resource use can help to promote effective use of public revenues. A large number of LDCs have embraced the principles of the Extractive Industries Transparency Initiative (EITI), which promotes revenue transparency and accountability in extractive industries, and which is explicitly mentioned in the IPoA. Currently, 13 LDCs are EITI-compliant (Chad, the Democratic Republic of the Congo, Guinea, Liberia, Mauritania, Mozambique, Mali, the Niger, Sierra Leone, Timor-Leste, Togo, the United Republic of Tanzania and Zambia); 9 are candidates for EITI membership (Afghanistan, Burkina Faso, Ethiopia, Madagascar, Malawi, Myanmar, Sao Tome and Principe, Senegal and Solomon Islands); and 2 are suspended (the Central African Republic and Yemen). The fact that most of the current candidates have joined the list since 2013 is suggestive of increasing attention to the issue of transparency among LDCs. A positive example of management of resources rents is Timor-Leste, whose oil fund has been a successful example of directing resource rents to sustainable development, in contrast with the experiences of some other natural-resource-rich LDCs (Cornia and Scognamillo, 2016).

Another key aspect of structural transformation is the development of human capital through education and training. As well as increasing labour productivity directly, this provides the human resource base needed for the development of more sophisticated production sectors and the development and adoption of better technologies. Most LDCs have made substantial advances in education in recent years, most notably at the primary level, although the Millennium Development Goal target of universal primary enrolment has not generally been achieved (UNCTAD, 2014). Several LDCs have introduced programmes designed to increase school attendance, including conditional cash or in-kind transfer programmes, such as the Education Sector Support Programme in...
Cambodia and the Nationwide Female Stipend Programme in Bangladesh. Nepal has also enacted several cash transfer programmes in the areas of pensions, child grants and single women’s allowances.

(c) Sectoral priorities

Traditionally, development strategies have tended to focus on industrialization, and particularly the development of manufacturing production (UNCTAD, 2016b). In the current phase of globalization, this is often initiated by joining a global value chain (GVC). However, the developmental benefits of a country’s insertion into GVCs depend on its nature, and are subject to important caveats (UNCTAD 2007, 2015b). Analysis of GVC participation in Asian LDCs indicates that the local private sectors in Bangladesh and Cambodia have been effective both in diversifying their production and in entering high-technology GVCs (DiCaprio and Suvannaphakdy, 2015). In Bangladesh, particularly, backward linkages from the garments sector have played an important role. In the Lao People’s Democratic Republic, Myanmar and Nepal, however, it has been FDI rather than the domestic private sector that has taken the lead, giving rise to weaker incentives for the development of backward linkages.

Ethiopia has adopted an active industrial policy (UNCTAD, 2016b): the Growth and Transformation Plan (2010–2015) designated priority manufacturing industries, selected on the basis of resource availability, labour intensity, linkages to agriculture, export potential, and (relatively) low technological entry barriers. Priority sectors include garments and textiles, agro-processing, meat processing, leather and leather products, and construction. For each of these industries, supporting institutes were established to coordinate value chains and assist firms with technological upgrading. The Growth and Transformation Plan 2 (2015–2020) accords the highest priority to the leather products sector and the textile and garments sector. This active industrial policy has contributed to rapid growth in manufacturing value added and exports in recent years, though from a relatively low base, spurred in part by FDI inflows.

In many LDCs, growth has been led by construction and services rather than by manufacturing. In Rwanda, for example, the main drivers of growth have been tourism (supported by the establishment of the Rwanda Tourism University College in 2006) and ICT-related services. In Mali, growth has been led by telecommunications and transport activities, and to a lesser extent by trade and financial services. Senegal has experienced a relatively diversified growth path, services contributing more than one third of economic growth, compared with a quarter for industry. In the Lao People’s Democratic Republic, construction and services have played a significant complementary role to natural resources (primarily water, minerals and forests).

As highlighted in UNCTAD (2015a), rural development, combining agricultural upgrading and parallel diversification into non-farm activities, plays a central role in structural transformation in LDCs. Key aspects of agricultural upgrading are increasing productivity in the sector and diversification, particularly towards higher-value crops. An important instrument for both is research and development, to develop and adapt inputs and production methods appropriate to local conditions, and to promote their uptake by producers. Research and development expenditures in agriculture have been increasing recently, in particular in Burundi, Madagascar, the Sudan, the United Republic of Tanzania and Uganda.

Ethiopia provides a good example of combining agricultural diversification and the development of high-value crops with increasing food production. Under its Agriculture Development-Led Industrialization Strategy, food production per capita increased by 70 per cent between 2001 and 2012 (Cornia
and Scognamillo, 2016), while cut flower exports increased from just 3 tons in 2003–2004 to more than 50,000 tons in 2011–2012, and export earnings from $0.32 million to about $200 million, creating employment both directly and indirectly through forward and backward linkages. While production was initiated by Ethiopian firms, foreign firms have increased their investment in the sector, accounting for 63 per cent of all firms operating in it in 2012, and have contributed significantly to technological development and marketing (UNECA, 2016).

Several LDCs have adopted a value chain approach to agricultural development. Burkina Faso's Agricultural Development Programme (2004–2015), for example, is aimed in part at “analysing and eliminating bottlenecks at every stage in the agricultural production chain”, and the concept of value chains provides a policy framework for cereals, dairy products, ginger and coffee in Nepal. It also underpins the United Nations Development Assistance Framework for the Republic of Yemen 2012–2015 and Rwanda's Third Rural Sector Support Project. The African Cashew Initiative of the German Federal Ministry for Economic Cooperation and Development and the Bill and Melinda Gates Foundation, implemented in Benin, Burkina Faso and Mozambique (as well as in two non-LDCs, Côte d’Ivoire and Ghana) provides an interesting example of organizational assistance based on a sectoral supply chain.

**Reducing vulnerability: Peace, security and disaster preparedness**

Though not included explicitly in the graduation criteria, peace and security are a critical foundation for development and progress towards graduation, given the often considerable negative effect of conflict and insecurity on trade, investment and development (Ikejiaku, 2009). Countries that experienced major violence between 1981 and 2005 had average poverty rates 21 percentage points higher than those that experienced no violence (World Bank, 2011). The negative externalities of conflicts also spill over to other countries; for example, 75 per cent of refugees are hosted by neighbouring countries. Moreover, while inter-State conflicts have declined, they have given way to new security risks, notably terrorism (Dahlman and Mealy, 2016). This highlights the importance of building State capacities to ensure peace and security, as well as to design and implement effective development policies.

However, several post-conflict States have been able to improve their security situations. Timor-Leste, for example, has emerged successfully from conflict, while the restoration of peace and security has contributed to rapid economic growth in Cambodia. In the Comoros, constitutional reforms adopted in 2009 transformed relations between the islands, significantly reducing tensions (World Bank, 2016).

Given the vulnerability of most LDCs to natural disasters, extreme weather events and climate change impacts, disaster preparedness is a critical issue for development. LDCs are increasingly adopting a preventive approach rather than relying on ex-post disaster response, and many have recently implemented institutional changes related to disaster reduction management. Eight LDCs (Burkina Faso, Ethiopia, the Lao People's Democratic Republic, Mauritania, Nepal, Solomon Islands, Vanuatu and Zambia) were among the 34 countries that reported integrating disaster risk reduction into their national development plans under the Hyogo Framework for Action 2005–2015: Building the Resilience of Nations and Communities to Disasters (United Nations, 2015a).

International support can play an important role in disaster preparedness in LDCs. In Eritrea, the Drought Resilience and Sustainable Livelihoods Programme 2015–2021, supported by the African Development Bank, provides...
resources to mitigate the effects of recurrent droughts. In Kiribati, an LDC Fund project, Enhancing Food Security in the Context of Climate Change, is aimed at increasing resilience to climate change impacts through agricultural training, support to outer-island fisheries development initiatives, support for the establishment of community-based gardening and school gardening, and assistance with marketing of agricultural products.

**E. The least developed countries group in 2025: Implications of the UNCTAD projections**

Overall, the UNCTAD projections reported in section B above imply a reduction in the total number of LDCs from 48 at the time of writing to 32 in 2025 (table 2.3). Although this represents a reduction of only one third in the number of LDCs, it has the potential to alter the composition of the LDC group disproportionately, in terms of its geographical composition, structural characteristics, income level, poverty and social features. It will also affect the economics and geopolitics of the group, as well as its collective negotiating power in international forums, and has potentially important implications for the ISMs needed by LDCs from 2025 onwards. While the group is projected to shrink, its development challenges are expected to become greater, highlighting the need for increased support from the international community.

This section seeks to provide an indication of some of the likely features of the LDC group in 2025, based on the results of these projections. In interpreting these results, the caveats regarding the projections themselves (as outlined in section B) should be borne in mind, particularly the potential effects of extraneous factors such as prolonged conflict. It should also be emphasized that the analysis is based on the current characteristics of each country rather than their projected characteristics in 2025, as it is not feasible within the scope of this exercise to project the socioeconomic characteristics of each LDC some 10 years into the future. The analysis also highlights differences between those LDCs expected to achieve graduation based on two criteria (including those that are progressing towards graduation with momentum) and those graduating via the income-only route.

**1. Geographical features**

If graduation were to take place as projected in table 2.2, by the mid-2020s 30 of the 32 LDCs would be in Africa, the sole exceptions being Cambodia and Haiti. Only one SIDS LDC would remain (the Comoros, which is also located in Africa). Since all but one of the current small island LDCs are expected to graduate by 2024, virtually all the remaining LDCs would be either LLDCs or coastal countries. Coastal countries would constitute the majority of the group, but the balance between coastal and landlocked countries would remain virtually unchanged (figure 2.5).

**2. Output structure and income**

As a result of the less advanced stage of structural transformation in the countries not expected to have graduated by 2024, the LDC group is projected to be more rural and agriculturally based than at present. In the 32 countries projected to be LDCs in 2025, the sector generates 29.5 per cent of GDP, double the proportion in the 16 countries projected to graduate in 2017–2024. Even in the latter group, however, this figure is much higher than in ODCs (table 2.3). These different levels of structural transformation are reflected in the income...
CHAPTER 2. The National Dynamics of Graduation

**Figure 2.5. Geographical features of the present and projected group of LDCs**

**Table 2.3. Structural indicators of LDCs and ODCs, 2010–2015**

<table>
<thead>
<tr>
<th></th>
<th>Output structure (Share of gross value added, per cent)</th>
<th>Population (Per cent)</th>
<th>Productivity and poverty</th>
<th>Financing for development (Per cent of GDP)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Agriculture</td>
<td>Mining and utilities</td>
<td>Manuf. factories</td>
<td>Services</td>
</tr>
<tr>
<td>Present group of LDCs (48 countries)</td>
<td>21.8</td>
<td>16.1</td>
<td>10.1</td>
<td>44.7</td>
</tr>
<tr>
<td>Expected to graduate in 2017–2024 (16)</td>
<td>15.1</td>
<td>22.2</td>
<td>11.0</td>
<td>44.3</td>
</tr>
<tr>
<td>Expected to graduate based on two criteria</td>
<td>21.1</td>
<td>7.0</td>
<td>15.3</td>
<td>50.2</td>
</tr>
<tr>
<td>Expected to graduate based on income only</td>
<td>4.7</td>
<td>48.9</td>
<td>3.4</td>
<td>33.8</td>
</tr>
<tr>
<td>Projected group of LDCs by 2025 (32)</td>
<td>29.5</td>
<td>9.1</td>
<td>9.1</td>
<td>45.2</td>
</tr>
<tr>
<td>Other developing countries</td>
<td>8.6</td>
<td>11.5</td>
<td>20.7</td>
<td>52.6</td>
</tr>
</tbody>
</table>

Sources: UNCTAD secretariat calculations, based on data from UNCTAD, UNCTADstat database (accessed August 2016); International Labour Organization, World Employment and Social Outlook, Trends 2016 database (accessed August 2016); and World Bank, World Development Indicators database (accessed August 2016).

Notes:

- **a**: 2012–2014.
- **b**: 2013–2015.
- **c**: Data on employment are missing for the following countries: Djibouti, Kiribati, Sao Tome and Principe, Tuvalu and Vanuatu.
- **d**: 2010–2011. The $1.25/day poverty line is used because at the time of writing poverty data based on the revised $1.9/day poverty line were not available for several LDCs.
- **e**: Data on remittances are missing for the following countries: the Central African Republic, Chad, Equatorial Guinea, Eritrea, Mauritania, Somalia and South Sudan.
- **f**: Countries expected to graduate based on two criteria: Afghanistan, Bangladesh, Bhutan, Djibouti, Kiribati, the Lao People’s Democratic Republic, Myanmar, Nepal, Sao Tome and Principe, Solomon Islands, Tuvalu, Vanuatu and Yemen.
- **g**: Countries expected to graduate based on income only: Angola, Equatorial Guinea and Timor-Leste.
- **h**: Projected group of LDCs by 2025: Benin, Burkina Faso, Burundi, Cambodia, the Central African Republic, Chad, the Comoros, the Democratic Republic of the Congo, Eritrea, Ethiopia, the Gambia, Guinea, Guinea-Bissau, Haiti, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mozambique, the Niger, Rwanda, Senegal, Sierra Leone, Somalia, South Sudan, the Sudan, Togo, Uganda, the United Republic of Tanzania and Zambia.
levels of the two subgroups of LDCs. In 2014, the average GNI per capita of the projected graduates of 2017–2024 was $1,377, nearly double that of the LDCs projected to graduate later ($731). Thus the LDC group in 2025 will be much poorer than the current group.

Among the countries projected to graduate in 2017–2024, there is a sharp contrast between those projected to graduate based on two criteria and the three income-only graduates. Since the latter rely heavily on extractive industries, the mining sector contributes almost half of their output, compared with just 7 per cent in the former group. Conversely, manufacturing contributes 15.3 per cent of total output in the countries graduating on the basis of two criteria compared with only 3.4 per cent in the income-only countries, reflecting the much greater degree of structural transformation in the former group. The contribution of services to total economic activity in the 2017–2024 graduates is approximately half, similar to ODCs (table 2.3).

3. Urbanization and the rural economy

Differences in the extent of structural transformation are also reflected to some extent in relative levels of urbanization. In the countries projected to graduate in 2017–2024, 67.9 per cent of the population lives in rural areas, slightly below the current LDC average of 69.4 per cent. Hence, their graduation is projected to increase the rural population of the group to 70.4 per cent in 2025. The contrast is much sharper in the case of agricultural employment, which accounts for 46.6 per cent of total employment in the next wave of graduates, but 68.1 per cent in the post-2025 group. The projected graduations will thus increase the agricultural share of employment substantially, from 59.7 per cent in the current LDC group to 68.1 per cent in 2025. In all cases, the contribution of agriculture to employment is still much higher than in ODCs (30.3 per cent) (table 2.3).

Thus, the graduations from the group projected up to 2025 will increase the critical importance of rural development still further. The much greater differences observed between pre- and post-2025 graduates in agricultural employment than in rural population underlines the key role of rural economic diversification and the development of non-farm rural activities in structural transformation (UNCTAD, 2015a).

4. Productivity and poverty

Differences in the sectoral composition of employment and output have major implications for the level of labour productivity, which is almost three times as high in the countries projected to graduate in 2017–2024 as in the post-2025 LDC group. However, even in the former group, labour productivity is only a quarter of that in ODCs (table 2.3).¹³

Poverty is significantly less prevalent in the LDCs projected to graduate in 2017–2024 than in the post-2015 graduates, with a headcount ratio of 35.5 per cent as compared with 50.3 per cent (table 2.3). The former group have also achieved greater progress in poverty reduction than the latter. Among the 2017–2024 graduates, poverty is significantly lower in those expected to graduate based on two criteria (34.8 per cent) than in the income-only graduates (42.4 per cent), reflecting the limited potential of extractive industries to generate inclusive economic growth. Poverty rates are much higher in all the country groups identified in table 2.3 than in ODCs, demonstrating the very considerable further improvement required to eradicate extreme poverty (Sustainable Development Goal 1).
5. Financing for Development

Patterns of external financing are also significantly different between the two subgroups of LDCs. In the countries projected to graduate in 2017–2024, ODA is equivalent to 3 per cent of GDP (compared with 0.2 per cent for ODCs) (table 2.3). For the post-2025 graduates, aid dependence is much greater, with ODA equivalent to 7.8 per cent of GDP, leaving these countries particularly prone to the negative aspects of aid dependency (as discussed in chapter 3 of this Report).

Remittances have become an increasingly important financial inflow for many LDCs since the 1990s, and are of particular significance in the LDCs projected to graduate in 2017–2024, where they are equivalent to 5.8 per cent of GDP. They are especially important to Bangladesh, Kiribati, Nepal, Tuvalu and Yemen, helping to lower poverty and, in some cases, to finance productive investment (UNCTAD, 2012). Remittances to the projected group of LDCs in 2025 are much more limited, equivalent to just 2.8 per cent of GDP. They are nonetheless important to some of the countries that are making faster progress towards graduation in this group, such as Lesotho and Senegal. This confirms the potential role of remittances, with appropriate policies, not only in boosting household incomes, but also in supporting productive investment and structural transformation.

6. Major Exports

Extractive industries will remain a major source of foreign exchange earnings for the LDC group in 2025, as well as a major driver of the domestic economic change. None of the current exporters of minerals, ores and metals is projected to graduate by 2024; and two of the five current fuel exporters are also projected to be unable to graduate in this period (Chad and South Sudan). The largest group of exporters in the 2025 LDC Group is mixed exporters, representing 12 of the remaining 32 LDCs (figure 2.6). However, this would be a very heterogeneous group, ranging from countries still relying on extractive industries for the bulk of foreign exchange earnings, but without either fuels or minerals predominating (Burkina Faso, Mozambique, the Niger and the Sudan), to countries that have diversified their productive structures substantially (for example, Ethiopia and Senegal). The relatively weak graduation prospects of the former group, in particular, reflects the difficulties encountered by most LDCs in
transforming their extractive industries into growth poles that generate spillovers of income, employment, productivity and technology to other economic sectors.

The group of LDC services exporters in 2025 would also be quite heterogeneous, encompassing both countries with limited productive capacities (for example, the Central African Republic, the Comoros and Eritrea) and others that have been more successful in diversifying their economies and developing their productive capacities (for example, Rwanda and Uganda).

At first sight, it might seem surprising that not all manufactures exporters are expected to have graduated by 2025. In principle, diversification towards manufactures is a major sign of structural transformation, as it provides a means of increasing overall labour productivity and diffusing technological innovation into the wider economy. However, even among manufactures exporters, the extent to which these processes occur varies considerably. Nonetheless, while only two manufactures exporters (Bangladesh and Bhutan) are projected to graduate by 2025, two others are expected to be close to graduation: Cambodia is projected to satisfy all three graduation criteria by 2021, and Lesotho to be close to all three graduation thresholds. The one exception to this favourable performance is Haiti, which is projected to remain some way from graduation thresholds, particularly for income per capita and the HAI.

Among the exporters of food and agricultural goods, the only SIDS in the group (Solomon Islands) is projected to graduate by 2024, while the other three countries (Guinea-Bissau, Malawi and Somalia) remain in the initial stages of structural transformation and will therefore require more time to develop their productive capacities and reach graduation thresholds.

7. Export Concentration

There is a very marked differentiation between the LDC subgroups based on graduation status in terms of export concentration. The countries projected to graduate on the basis of two criteria before 2024 have achieved significant export diversification since the mid-1990s, reducing their export concentration from 0.46 in 1995 (where 1 represents absolute concentration) to 0.38 in 2014, significantly below the figure for the post-2025 graduates (0.42). By contrast, those projected to graduate via the income-only route have maintained an extremely concentrated export structure, reflecting their heavy dependence on energy exports: their average export concentration was 0.91 in 2014, having increased from an already high level of 0.88 in the mid-1990s, particularly during the so-called commodity super-cycle of 2003–2011 (table 2.4). This further underlines the potential for LDCs to graduate without having undergone significant structural transformation of their economy, particularly (though not exclusively) in the case of those graduating on the basis of the income-only criterion.

| Table 2.4. Export concentration index of LDCs and ODCs, 1995–2014, selected years |
|-----------------------------------|--------|--------|--------|--------|
| Present group of LDCs (48 countries) |
| 0.55 | 0.57 | 0.65 | 0.58 |
| Expected to graduate in 2017–2024 |
| 0.60 | 0.65 | 0.74 | 0.68 |
| Expected to graduate based on two criteria |
| 0.46 | 0.46 | 0.43 | 0.38 |
| Expected to graduate based on income only |
| 0.88 | 0.90 | 0.92 | 0.91 |
| Projected group of LDCs by 2025 |
| 0.51 | 0.44 | 0.51 | 0.42 |
| Other developing countries |
| 0.21 | 0.22 | 0.26 | 0.24 |

Source: UNCTAD secretariat calculations, based on data from UNCTAD, UNCTADstat database (accessed June 2016).

Note: For the composition of groups, see notes to table 2.2.
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Just as there is differentiation among the pre-2025 graduates, so there are significant differences among the countries projected to remain in the group in 2025 in terms of export concentration. Benin, Ethiopia, the Gambia, Liberia, Rwanda and Uganda, in particular, have all made considerable progress in export diversification, reducing their concentration indices by at least 0.2 between 1995–1996 and 2013–2014. This is indicative of the different rates of progress towards diversification and structural transformation among this group.

8. Conclusions

Three key points emerge from the above analysis. First, the graduation projections imply significant changes in the nature of the LDC group by 2025. In particular, it will be poorer and exhibit more features associated with earlier stages of development (for example, larger shares of agriculture in output and employment, more limited urbanization, higher export concentration, greater aid dependency and lower access to social services) than in 2016. Without decisive and efficient measures, nationally and internationally, to promote accelerated development in the 32 countries projected to remain in the group, the projected graduations would thus widen the gap between the LDC group and the ODCs still further.15 As discussed in chapter 5, averting this outcome would require heightened attention from both national authorities and the international community.

Second, there are substantial differences among the countries on the economic trajectory leading to graduation; and the different paths, patterns and motors of the graduation process have crucial implications for the development process in the post-graduation phase. There is a particular distinction between those countries graduating via the income-only route, which tend to achieve limited structural transformation, and those that graduate on the basis of two criteria, many of which experience a more broadly based process of economic and social development, including some degree of structural transformation and economic diversification. The latter course corresponds more closely with the concept of “graduation with momentum”, providing a more solid foundation for development in the post-graduation phase. By contrast, while more narrowly based economic growth (for example, associated with enclave sectors) may well increase income per capita, it is unlikely to lead to social and economic inclusion or to provide a basis for sustainable development progress, unless effective policies and strategies are put in place to reinvest resource rents in productive capacity development in other sectors.

Third, while the LDC group in 2025 is expected to be more homogeneous geographically – with only two countries outside Africa, and only one SIDS – it will in other respects be quite differentiated. Some of the countries projected to remain in the group are achieving visible progress in the development of productive capacities, economic diversification and the development of higher-value-added sectors and products; but others remain in the initial stages of these processes.

F. Summary

- Only 16 countries are projected to achieve graduation by 2024, well short of the graduation target established by the IPoA.
- While some of these countries are expected to graduate through a broadly based process of development, this is by no means always the case, particularly among countries graduating via the income-only route.

The projected graduations will widen the gap between the remaining LDCs and ODCs still further.

Countries projected to graduate on the basis of two criteria are closer to the "graduation with momentum" model than income-only graduates.

While the 2025 LDC group will be more homogeneous geographically, there will be marked differences in productive capacities.
• While LLDCs have experienced some difficulty in attaining graduation, SIDS perform very well, as the design of the graduation criteria means that their relatively high incomes and human development offset their particularly acute vulnerability.

• None of the four countries that have graduated to date pursued policies explicitly aimed at graduation; but most of those now close to graduation have adopted graduation as a specific goal.

• The four countries that have graduated to date have done so in part by virtue of quality of governance, peace and social stability, economic and social planning, good infrastructure, emphasis on education, and prudential and forward-looking macroeconomic management.

• In the current LDCs, national strategies and domestic policies that could contribute to graduation include those aimed at laying the foundations of structural transformation through infrastructure investment, domestic resource mobilization, economic diversification and education.

• Almost all of the Asian and island LDCs are projected to graduate by 2024, implying that the 32 countries comprising the LDC group in 2025 would include only one SIDS, and only two countries outside Africa.

• By 2025, the LDC group is also projected to exhibit more features associated with earlier stages of development: lower income, higher poverty, larger shares of agriculture in output and employment, more limited urbanization, higher export concentration and greater aid dependency.

• This implies a wider development gap between the remaining LDCs and ODCs than at present, unless effective national and international action is taken to address their needs.
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Notes

1 Timor-Leste is classified in this Report as a services exporter because a large part of its fuel exports are accounted as service exports. Therefore, the basis of the country’s services exports is fuel extraction.

2 See notes to table 2.2 for caveats on the graduation prospects of this country.

3 This does not include the three countries that at the time of writing of that document had already been scheduled to graduate or found eligible for graduation (Equatorial Guinea, Tuvalu and Vanuatu).


5 The UNCTAD list of SIDS is based on the following three criteria: (a) islandness: only “genuine” islands are considered; (b) Stateness: only self-governing island States are taken into account; (c) smallness: a population not exceeding 5 million (except for Papua New Guinea, whose population was within the bounds when the list was established). Only island States with a clear developing status, in terms of socioeconomic characteristics (national income and/or income distribution) are considered (UNCTAD, 2004). The list is composed of 29 countries, as shown in figure 2.1.

6 The SAMOA Pathway (United Nations, 2014b) was adopted by the Third International Conference on Small Island Developing States, held on 1–4 September 2014 in Apia.

7 As mentioned previously in this chapter, the basis for the graduation of Timor-Leste is fuel extraction.


9 For the structure and composition of the EVI, see box figure 1.1 in chapter 1.

10 In development policy discourse a shortcut is often taken, which states that upon graduation countries stop being LDCs and become middle-income countries. This is not precise. Upon graduation, countries stop being LDCs and become non-LDC developing countries (which this Report series calls “other developing countries”). Typically, they have already become middle-income countries prior to graduation and in exceptional cases have even reached the group of high-income countries.

11 According to the projections, in 2025 the following countries would be LDCs: Benin, Burkina Faso, Burundi, Cambodia, the Central African Republic, Chad, the Comoros, the Democratic Republic of the Congo, Eritrea, Ethiopia, the Gambia, Guinea, Guinea-Bissau, Haiti, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mozambique, the Niger, Rwanda, Senegal, Sierra Leone, Somalia, South Sudan, the Sudan, Togo, Uganda, the United Republic of Tanzania and Zambia.

12 These figures refer to the share of mining and utilities (such as water and electricity services).

13 The very high labour productivity achieved by the countries bound to graduate based on income-only (table 2.2) is the result of the combination of very high capital intensity of the extractive industries on which their economies are based with relatively small populations.

14 South Sudan has not been formally classified according to export specialization for this Report due to the absence of reliable trade figures, and hence it is excluded from the statistical aggregates built according to this criterion presented elsewhere. However, for the projections of the expected features of the LDC group by 2025, we have supposed that the country is and will remain mainly a fuel exporter.

15 The economic and social gap between the present group of LDCs and ODCs is analysed in chapter 1.
References


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