

THE LEAST DEVELOPED COUNTRIES REPORT 2016

The path to graduation and beyond: Making the most of the process



The Contribution of International Support Measures to Graduation

A. Introduction

Over the years, the growing recognition by the international community of least developed countries' (LDCs) special needs has led to the establishment of a number of international support measures (ISMs) in their favour, beyond those available to other developing countries (ODCs). The continued relevance of the LDC category and of related ISMs has been reaffirmed repeatedly in the key international agreements of 2015, including the 2030 Agenda for Sustainable Development (2030 Agenda), the Addis Ababa Action Agenda of the Third International Conference on Financing for Development (Addis Ababa Action Agenda), the Sendai Framework for Disaster Risk Reduction and the Paris Agreement of the twenty-first session of the Conference of the Parties (COP21) to the United Nations Framework Convention on Climate Change (UNFCCC).

The effectiveness of such ISMs is gradually coming under closer scrutiny, reflecting a growing emphasis on the monitoring and evaluation of international support, notably in the context of the Midterm Review of the Implementation of the Programme of Action for the Least Developed Countries for the Decade 2011–2020 (Istanbul Programme of Action (IPoA))¹ and the biennial Global Reviews of Aid for Trade. The effectiveness of the ISMs should be assessed not only in terms of their direct outputs, but also, more fundamentally, against the rationale for the establishment of the LDC category. As noted in chapter 1, the ultimate purpose of LDC-specific ISMs is to enable LDCs to overcome the constraints and vicious circles that undermine their ability to benefit fully from participation in international markets.

In principle, graduation reflects the achievement of greater resilience and/or reduced exposure to the structural challenges that are the raison d'être of the LDC category.² This is the key to narrowing the gap between LDCs and ODCs. As argued in earlier chapters, addressing these handicaps to achieve "graduation with momentum" requires structural transformation. Thus the effectiveness of ISMs may be assessed in part on the basis of their contribution to the structural transformation, upgrading of production and export diversification that form the basis for graduation with momentum.

Three caveats should be highlighted at the outset. First, the multiplicity of ISMs — spanning areas as diverse as finance, trade, technology, climate change and technical assistance — makes analysis particularly complex and challenging, especially given the wide differences in the initial conditions of LDCs. Second, as noted in chapter 2, there are various possible paths towards graduation. Hence, even if an ISM has proved decisive in one case, this does not necessarily mean that it will play an important role elsewhere. Third, even using sophisticated econometric techniques, the attribution of an LDC's progress to one or more ISMs is unlikely to be definitive and is necessarily subject to qualifications.

Subject to these caveats, the present chapter seeks to shed some light on the effectiveness of LDC-specific ISMs in the context of graduation. It examines the extent to which ISMs contribute to transformative change in the LDCs and thus enhance their prospects for graduation, in line with the IPoA objectives. It begins with an overview of the key ISMs available to the LDCs (section B) before moving on to a brief assessment of their overall effectiveness in each of the main areas of finance, trade and technology (sections C–E). Section F discusses the contribution of ISMs to past graduation cases, and section G presents the findings of a survey of the views of LDCs on the developmental impact of ISMs, conducted for this Report. Finally, section H provides some conclusions from the foregoing discussion.

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ISMs should be assessed in part on the basis of their contribution to structural transformation.

B. International support measures -An overview

Over the years, the increasing recognition of LDC development needs has been mirrored in the establishment of a growing number of dedicated ISMs intended to support their development, beyond those available to developing countries generally. The Support Measures Portal for Least Developed Countries — established and maintained by the Committee for Development Policy (CDP) Secretariat³ — lists 136 such measures across the fields of development finance, trade, technology and technical assistance. Table 3.1 provides a schematic overview of the major ISMs in each of these four areas, which are discussed in greater detail in the following sections of the chapter.⁴

As table 3.1 demonstrates, despite their common objective, existing ISMs encompass widely different instruments in terms of their nature, focus and content. While some are clearly defined and directly implementable by the international community (for example, preferential market access and LDC-specific facilities such as the LDC Fund and the Enhanced Integrated Framework (EIF)), others require action by LDCs themselves, including many special and differential treatment (SDT) provisions. These ISMs thus depend on LDCs' institutional capacities, including legal and technical skills and/or effective interministerial coordination. Other ISMs are essentially indicative in nature, with no concrete mechanisms for mutual accountability or enforcement, resulting in limited implementation. This last case is epitomized by the commitment by donor countries, dating back to 1990 but still unfulfilled, to provide official development assistance (ODA) to LDCs equivalent to 0.15–0.20 per cent of their gross national income (GNI).

Given this heterogeneity, and the very different circumstances of LDCs themselves, the relative importance of different ISMs in fostering progress towards graduation varies across LDCs, according to each country's structural characteristics and ability to leverage support in different areas. In general, however, access to development finance and trade preferences are regarded as the most significant and readily accessed ISMs.

While ISMs are undoubtedly helpful, especially in these two areas, their longterm development impact is typically circumscribed and their adequacy relative to LDCs' needs for productive-capacity development is at best questionable (UNCTAD, 2010). Moreover, as the following assessment highlights, the limitations and shortcomings of existing ISMs have been compounded by the ambitious targets agreed upon by the international community in the context of the IPoA and the 2030 Agenda.

C. Finance-related international support measures

Financial support and aid flows have historically received considerable emphasis in the policy discourse around LDCs (and developing countries more generally), particularly in the context of the global partnership for development. This partly reflects the fact that ODA remains the largest source of external finance for LDCs as a whole and a key source of public revenues, although its importance in both respects varies widely between individual countries.⁵ However, the high visibility of the issue and the major financial and development role of ODA contrasts markedly with the limited number of financial ISMs for

There are 136 LDC-specific ISMs, which vary widely in nature, focus and content.

Development finance and trade preferences are regarded as the most readily accessed ISMs.

There are a limited number of financial ISMs for LDCs.

| | | Table 3.1. Main international support measures in favour of LDCs | 3 | | |
|---------|---|---|--|--|--|
| | International support measure | Observations | Legal sources | | |
| | ODA target 0.15-0.20 per cent of donor countries GNI | Some targeted budget/funds available by some multilateral organizations (UNDP, UNICEF, WFP, GEF-LDCF, UNCDF, etc.) | Paris Programme of Action for the LDCs (1990) | | |
| | Aid modalities: untied aid | The DAC recommendation explicitly aims at (i) untying ODA to the LDCs to the greatest extent possible; (ii) promoting and ensuring adequate ODA flows; and (iii) achieving balanced efforts among DAC members in untying aid | Recommendation of DAC High Level Meeting (2001) | | |
| Finance | Aid modalities: grant element | The recommendation stipulates that the average grant element of all committments should be a minimum of 90% for all LDCs (on a given year) or at least 86% to each LDC (over 3 years) | Recommendation on terms and conditions of aid (1978) | | |
| | LDC Fund | Established by the United Nations Framework Convention on Climate Change (UNFCCC) to assist LDCs to carry out the preparation and implementation of national adaptation programmes of action | | | |
| | Cap to contributions to United Nations regular budget and peacekeeping operations | LDC contributions to the regular budget of the United Nations are capped at 0.01 per cent of the total United Nations budget (in 2015 six LDCs benefitted from the cap, namely Angola, Bangladesh, Equatorial Guinea, Myanmar, the Sudan and Yemen) | | | |
| | General support measures | LDC officials receive travel support to attend meetings of the General Assembly and other UN-related meetings and conventions | | | |
| | LDC accession to WTO | Guidelines aim at streamlining and facilitating LDCs' accession to the WTO, keeping in mind that WTO members should exercise restraint in seeking concessions from acceding LDCs. | Decision of the Sub-committee on LDCs of the WTO WT/ COMTD/LDC/21 (2012), WT/L/508 | | |
| | Preferential market access | Preferential schemes are typically unilateral and non-reciprocal (as exceptions to the MFN principle), and provide variable extents of preference margins. Some but not necessarily all of them are LDC- specific; for instance, most GSP schemes encompass some LDC- specific sub-schemes. | GATT enabling clause (1979), General Council Decision WT/L/304 (1999) and WT/L/759 (2009), Hong Kong ministerial declaration WT/MIN(05)/DEC (2005). In addition, unilateral decisions by preference- granting countries | | |
| | Preferential rules of origin for LDCs | Best endeavour calling for more flexible rules of origin applied to LDC- originating exports; implementation requires LDCs to negotiate with trading partners | Annex F of the Hong Kong Ministerial Declaration WT/ MIN(05)/DEC (2005); Ministerial Decisions WT/MIN(13)/42, WT/L/917 (2013) and WT/ MIN(15)/47 — WT/L/917 (2015) | | |
| Trade | SDT in GATS | Special priority is given to LDCs with a view to increase their participation to services trade (art. IV.3), including through special treatment (art. XIX.3) and cooperation on telecommunications provision (annex on Telecommunications) | General Agreement on Trade in Services (1995) | | |
| | Services waiver | Waiver from MFN treatment (under GATS) for LDC services and service providers. Operationalization is still on-going, and full implementation requires LDCs to negotiate with trading partners | WTO Ministerial Declarations WT/L/847 (2011), WT/L/982 (2015) | | |
| | SDT in Trade Facilitation Agreement* | LDCs are granted more flexible terms for the categorization of various measures and their implementation. Other developing countries are also granted SDT, though on less flexible terms | Part II of the Trade Facilitation Agreement WT/MIN(13)/36, WT/L/911 (2013) | | |
| | Agreement on Agriculture | Under article 15.2, LDCs are not required to commit to reduce tariffs or subsidies. Under article 16, besides, developed countries shall take action according to the Decision on Measures Concerning the Possible Negative Effects of the Reform Programme on Least-Developed and Net Food-Importing Developing Countries; and the Committee on Agriculture shall monitor, as appropriate | Agreement on Agriculture (1994) Decision on Measures Concerning the Possible Negative Effects of the Reform Programme on Least-Developed and Net Food-Importing Developing Countries (1994) | | |
| | Agreement on Trade- Related Investment Measures (TRIMs) | Under art. 5.2 and 5.3 LDCs are granted a 7-year transitional period (potentially renewable) to eliminate investment measures inconsistent with the provisions of the TRIMS Agreement. So far only Uganda notified TRIMs to the WTO | Agreement on Trade-Related Investment Measures (1994) Annex F of the Hong Kong Ministerial Declaration WT/ MIN(05)/DEC (2005). | | |
| | Subsidies and countervailing measures | Under art. 27.2 and Annex VII, LDCs are exempted from the prohibition of subsidies contingent upon export performance | Agreement on Subsidies and Countervailing Measures (1994) | | |
| | Dispute settlement | Under art. 24 WTO members should exercise due restraint in raising matters involving LDCs (to date no LDC participation as defendant), and LDCs could request good offices of Director General in settling a dispute | Rules and Procedures Governing the Settlement of Disputes - annex 2 of the WTO Agreement (1994) | | |

Table 3.1 (contd.)

| | International support measure | Observations | Legal sources | | |
|--------------------------------|---|--|---|--|--|
| Technical assistance | Enhanced Integrated Framework (EIF) | The EIF is a multi-donor programme which supports LDCs to increase their participation in the international trade, focusing on: (i) mainstreaming trade into national development strategies; (ii) coordinating the delivery of trade-related technical assistance; and (iii) building trade capacities. Set up in 1997, it was subsequently reviewed in 2005, and its mandate has been extended until 2022 | | | |
| | TRIPS implementation: extension of the transition period | Transition period for LDCs (under article 66.1) extended until July 2021 | Decision of the Council for TRIPS of the WTO IP/C/64 (2013) | | |
| Technology | TRIPS agreement in relation to pharmaceutical products: extension of the transition period, and waiver from obligations under art. 70.8 and 70.9 | Transition period further extended until January 2033; waiver for obligations under art. 70.8 and 70.9 extended to the same date | WTO General Council Decision WT/I/971 and Decision of the Council for TRIPS IP/C/73 (2015) | | |
| 4 | TRIPS obligations on technology transfer | | | | |
| | Technology Bank | The Istanbul Programme of Action calls for the establishment of a Technology Bank and Science, Technology and Information supporting mechanism dedicated to LDCs. The Governing Council of the new institution met for the first time in July 2016, and full operationalization is stated to be undertaken | Istanbul Programme of Action (2011) | | |

Source: UNCTAD secretariat compilation, based on CDP (2010), UN (2011), and WTO (2016).

Notes: Most of the measures mentioned in the table are LDC-specific. However, some of them are also available to some ODCs.

EIF: Enhanced Integrated Framework, GATS: General Agreement on Trade in Services, GATT: General Agreement on Tariffs and Trade, GEF-LDCF: Global Environment Facility - LDC Fund, GSP: Generalized System of Preferences, MFN: Most-favoured nation, SDT: (special and differential treatment, TRIMs: Agreement on Trade-Related Investment Measures, TRIPS: Agreement on Trade-Related Aspects of Intellectual Property Rights, UNCDF: United Nations Capital Development Fund, UNDP: United Nations Development Programme, UNFCCC: United Nations Framework Convention on Climate Change, WFP: World Food Programme. * The Trade Facilitation Agreement had not yet entered into force at the time of writing this Report.

LDCs. As well as the widely cited target for ODA to LDCs as a proportion of donors' GNI, these include commitments to untie aid to LDCs and to ensure a minimum average grant element, as well as access to LDC-specific financial windows, notably in the context of climate finance.

Aid-related issues have been addressed in several previous editions of *The Least Developed Countries Report* (UNCTAD, 2006, 2009, 2010, 2014a). These reports have consistently emphasized the importance to LDCs' sustainable development of adequate ODA to support the expansion of productive capacities, and the role of ODA as a complement to LDCs' domestic resource mobilization, which plays a key role in limiting aid dependency. They have also highlighted several key issues in the traditional aid architecture:

- The inadequacy of ODA flows relative to LDCs' needs, notably in terms of infrastructural and technological gaps, and shortfalls from the long-standing international targets enshrined in Millennium Development Goal 8 and reaffirmed in Sustainable Development Goal 17;
- The tendency of the sectoral allocation of ODA to privilege social sectors at the expense of the productive sectors and social overhead capital (the systems and services on which production in all sectors depends);
- The need to leverage development cooperation more effectively for the consolidation of LDCs' domestic resource mobilization (notably by supporting tax revenue collection and management systems);
- The limited alignment of ODA with recipient countries' own development strategies, undermining their ownership of the development agenda;

Past LDC Reports have emphasized the importance of adequate ODA to support the expansion of productive capacities,

- Uneven progress on the aid effectiveness agenda, and the consequent persistence of unpredictability, proliferation of aid channels, fragmentation and lack of harmonization of administrative requirements, all of which unnecessarily overstretch the institutional capacities of recipient countries;
- The importance of building on synergies and complementarities between development cooperation with traditional donors and with Southern development partners, taking account of their different priorities and operational approaches.

Many of these concerns are reflected to varying degrees in the IPoA (notably paras. 113–116). While these sections of the IPoA refer to aid from a more general perspective, based on the ample (and often controversial) literature on its developmental impact, they provide a useful starting point for an assessment of the contribution of financial ISMs to graduation with momentum.

Notwithstanding the critical role ODA has traditionally played in most LDCs, the significance and effectiveness of LDC-specific financial ISMs is debatable, not least because of the lack of mutual accountability in their delivery. While LDC graduates have benefited from substantial financial support from international donors and development partners, it is open to question to what extent this has been driven by their LDC status and access to financial ISMs rather than by geopolitical considerations. Moreover, while past LDC graduates have been able to harness aid resources for productive-capacity development, this may not be the case for all current LDCs, especially those in conflict or post-conflict situations or with weak institutional frameworks.

1. VOLUME OF OFFICIAL DEVELOPMENT ASSISTANCE

The Report of the Secretary-General of the United Nations Conference on the Least Developed Countries to the first such conference in 1981 (United Nations, 1983a) called for the establishment of a specific target for ODA to LDCs of 0.15 per cent of donors' gross national product (GNP) by the first half of the 1980s, rising to 0.20 per cent during the second half of that decade. This proposal was reflected in the Substantial New Programme of Action for the LDCs adopted at the same conference, and reiterated in various forms in subsequent Programmes of Action for the LDCs (United Nations, 1983b). Accordingly, in 2011 the IPoA stated that (United Nations, 2011: para. 116.2):

- (a) Donor countries will implement the following actions ... as soon as possible:
 - Donor countries providing more than 0.20 per cent of their GNP as ODA to least developed countries: continue to do so and maximize their efforts to further increase ODA to least developed countries;
 - (ii) Other donor countries which have met the 0.15 per cent target: undertake to reach 0.20 per cent expeditiously;
 - (iii) All other donor countries which have committed themselves to the 0.15 per cent target: reaffirm their commitment and undertake either to achieve the target by 2015 or to make their best efforts to accelerate their endeavours to reach the target;
 - (iv) During the period of the Programme of Action, the other donor countries: exercise individual best efforts to increase ODA to least developed countries with the effect that collectively their assistance to least developed countries will significantly increase;

While this quantitative target was intended to provide LDCs with some degree of priority in terms of ODA allocation, there is little evidence suggesting that LDC status in fact plays a significant role in this respect. Only a few bilateral donors have established LDC-specific programmes; and, while multilateral institutions

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The significance and effectiveness of LDC-specific financial ISMs is debatable. have some financing windows earmarked for LDCs, these do not play a major role in terms of overall disbursements.

Overall, more than 35 years after the above commitments were first agreed, progress towards stepping up development assistance to the LDCs remains far short of fulfilling them (United Nations, 2015). While net ODA disbursements to LDCs doubled in real terms during the early and mid-2000s, this upward trend ceased following the 2008–2009 financial and economic crisis. Since then, net ODA disbursements to LDCs have stagnated at approximately \$45 billion per year at constant 2014 prices (figure 3.1). Relative to recipients' GNI, LDCs' net receipts of ODA fell by more than half between 1992–1994 and 2012–2014, from 12.3 per cent to 5.5 per cent (figure 3.2). Unpredictability and year-to-year fluctuations also continue to be an issue, net disbursements amounting to some 85 per cent of commitments (95 per cent including debt relief).

Though somewhat improved relative to earlier decades, ODA to LDCs from Development Assistance Committee (DAC) donors was 0.09 per cent of their GNI during the 2012–2014 period, including both bilateral aid and their imputed shares of multilateral aid.⁶ This is only half of the 0.15–0.20 per cent target, which, under the 1981 Substantial New Programme of Action, donors were to achieve at the end of the 1980s. Only seven DAC donors (Denmark, Finland, Ireland, Norway, Luxembourg, Sweden and the United Kingdom of Great Britain and Northern Ireland) met the targets over the 2012–2014 period (figure 3.3). This translates into an annual delivery gap of between \$26 billion and \$50 billion at constant 2014 prices, a shortfall that has been increasing since 2010 (figure 3.4). Moreover, a preliminary assessment by the Organisation for Economic Co-operation and Development (OECD), based on country programmable aid (OECD, 2015), indicates a bleak outlook for aid globally until 2018.

Given the overall shortfall of ODA to LDCs, its concentration in a few countries also raises potential concerns, especially as beneficiary countries' needs are not





Source: UNCTAD secretariat calculations, based on data from the OECD, International Development Statistics database (https://www.oecd. org/development/stats/idsonline.htm) (accessed September 2016).



Figure 3.2. Net ODA received as share of recipient country's GNI

Source: UNCTAD secretariat calculations, based on data from World Bank, World Development Indicators database (http://databank. worldbank.org/data/reports.aspx?source=world-development-indicators) (accessed September 2016).

always the decisive factor in explaining aid allocations (Alesina and Dollar, 2000; Dollar and Levin, 2006; Mishra et al., 2012). Around half of all ODA to LDCs goes to just eight countries: Afghanistan, Bangladesh, the Democratic Republic of the Congo, Ethiopia, Mozambique, Myanmar, Uganda and the United Republic of Tanzania.





The effectiveness of ODA in promoting structural transformation and productive capacities has also been weakened in recent years by a shift in allocations from economic infrastructure and productive sectors towards social sectors, notably health and education. It is noteworthy in this context that the proportion of ODA allocated to economic infrastructure and productive sectors has been substantially above the average for LDCs in all three of the most recent graduates (Cabo Verde, Maldives and Samoa), but is lower than the average in comparable small-island LDCs such as the Comoros, Sao Tome and Principe, and Solomon Islands (box 3.1).

Eight countries account for half of all ODA to LDCs.

Box 3.1. Sectoral aid allocation in LDC graduates

The governments of the countries that have graduated to date have proactively engaged development partners, not only to mobilize financial support, but also to ensure that ODA is closely aligned with their development priorities, thereby retaining ownership of their development agenda (section F). In all four cases, development of productive capacities has also played a fundamental role in their development strategies.

In the case of the three most recent graduates (Cabo Verde, Maldives and Samoa), this can be seen in the sectoral allocation of their ODA receipts prior to their graduation (box figure 3.1). (Data for Botswana are unavailable for the relevant period.) To smooth out yearly fluctuations, sectoral allocations are averaged over the three years preceding each country's graduation.

In all three of these countries, ODA disbursements for economic infrastructure and productive sectors accounted for between 34.5 per cent and 37.4 per cent in the three years preceding their graduation, substantially higher than the figure for LDCs as a whole (27.4 per cent in 2012–2014, the latest period for which data are available). The proportion is typically still lower in comparable SIDS LDCs such as the Comoros, Sao Tome and Principe and Solomon Islands. While such a comparison can only be illustrative, it corroborates the finding of the country case studies conducted for this Report (Enari 2016; Lui 2016; Mogae 2016; Resende dos Santos 2016) that development of productive capacities represented a major pillar of these countries' paths towards graduation.





Source: UNCTAD secretariat calculation, based on data from the OECD, International Development Statistics database (https://www.oecd. org/development/stats/idsonline.htm) (accessed September 2016).

2. OFFICIAL DEVELOPMENT ASSISTANCE MODALITIES

Two further finance-related ISMs pertain to the modalities of aid rather than its magnitude. In 1978, the OECD's Recommendation on Terms and Conditions of Aid stipulated that ODA to LDCs "should be essentially in the form of grants and, as a minimum, the average grant element of all commitments from a given donor should either be at least 86 per cent to each least developed country over a period of three years, or at least 90 per cent annually for the least developed countries as a group" (OECD, 1978: para. 8).

While a full assessment of the fulfilment of this commitment is beyond the scope of this Report, as it would be both complex and data-intensive,⁷ a broader assessment indicates some progress between the 1990s and the early 2000s, when the proportion of grants in ODA commitments increased from around 80 per cent to more than 95 per cent. However, the last two years for which data are available have witnessed a partial reversal of this improvement, grants falling back to 85 per cent of the total (figure 3.5).

This increase in the proportion of grants in total ODA commitments remains when non-DAC donors (which do not necessarily abide by OECD recommendations) are included, although this also reduces the share of grants throughout the period, reflecting the greater use of loans by other donors, notably multilateral agencies.

The second finance-related ISM pertaining to ODA modalities stems from the 2001 DAC Recommendation on Untying Official Development Assistance to the Least Developed Countries, and was also enshrined in the 2005 Paris Declaration on Aid Effectiveness (Paris Declaration) (OECD, 2008: para. 31). Like other aid effectiveness commitments, however, progress in this regard has been uneven. At the global level, only one of the 13 targets established for 2010, that for coordination of technical cooperation, was met, and only by a narrow margin (OECD, 2012). Between the 1990s and the early 2000s the proportion of grants in ODA commitments increased from around 80 per cent to more than 95 per cent.

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Source: UNCTAD secretariat calculations, based on data from the OECD, International Development Statistics database (https://www.oecd. org/development/stats/idsonline.htm) (accessed September 2016).

The UNFCCC recognizes LDCs' need for financial and technological support for climate change adaptation.

LDCs' access to climate finance remains limited.

The modest aspiration of the Paris Declaration "to continue to make progress" (OECD, 2008: para. 31) in untying ODA to LDCs is no exception to this limited progress: between 2010 and 2012, the proportion of ODA that was untied rose in only 12 of 21 LDCs for which data are available, while falling in nine. The proportion of untied aid in 2012 was below 90 per cent in nine of the LDCs for which data are available (Bangladesh, Cambodia, the Democratic Republic of the Congo, Ethiopia, Madagascar, Mozambique, Senegal, the Sudan and the United Republic of Tanzania), and as low as 76 per cent in Bangladesh (table 3.2).

3. CLIMATE FINANCE

Climate change is a critical development challenge for developing countries, and especially LDCs. It can impose major economic, environmental and social costs, including on production and trade, particularly in a context of limited adaptive capacities. It is therefore essential to mainstream climate change adaptation and mitigation⁸ fully in development strategies.

Adequate international financial support is essential to meeting this challenge. The necessity of financial and technological support to LDCs to adapt to climate change was recognized under para. 9 of article 4 of the UNFCCC, which mandates Parties to the Convention to "take full account of the specific needs and special situations of the least developed countries in their actions with regard to funding and transfer of technology". However, while various funds have been established to provide finance for climate adaptation, accessing them remains time-consuming and complicated even for ODCs (Uprety, 2015). For LDCs, access is further impaired by their limited technical and administrative capacities.

This is partly a result of the proliferation of funds and mechanisms devoted to climate finance. The OECD Accra Agenda for Action included a clear undertaking that "As new global challenges emerge, donors will ensure that existing channels for aid delivery are used and, if necessary, strengthened before creating separate

| | Total bilateral aid as | Untied aid, | 2005 | 2010 | | | |
|----------------------------------|-------------------------------|-------------|----------------------------|--------------------|------|--|--|
| | reported to the DAC, 2012* | 2012 | (for reference**) | (for reference) | 2012 | | |
| | (Million do | llars) | (Percentage of untied aid) | | | | |
| Bangladesh | 1 207.2 | 917.1 | 89 | 80 | 76 | | |
| Benin | 365.6 | 327.7 | 80 | 91 | 90 | | |
| Burkina Faso | 740.5 | 680.9 | 89 | 90 | 92 | | |
| Burundi | 303.4 | 275.2 | 90 | 93 | 91 | | |
| Cambodia | 596.8 | 478.2 | 85 | 82 | 80 | | |
| Democratic Republic of the Congo | 1 765.2 | 1 558.2 | 92 | 81 | 88 | | |
| Ethiopia | 1 935.2 | 1 681.5 | 66 | 70 | 87 | | |
| Kiribati | 59.5 | 57.3 | | 91 | 96 | | |
| Lesotho | 75.7 | 70.1 | | 98 | 93 | | |
| Madagascar | 402.4 | 333.8 | | 78 | 83 | | |
| Malawi | 897.9 | 840.7 | 97 | 92 | 94 | | |
| Mali | 542.6 | 513.8 | 97 | 87 | 95 | | |
| Mozambique | 1 357.7 | 1 172.8 | 95 | 84 | 86 | | |
| Nepal | 750.5 | 696.1 | | 89 | 93 | | |
| Niger | 629.3 | 589.1 | 85 | 71 | 94 | | |
| Rwanda | 442.7 | 399.2 | 85 | 92 | 90 | | |
| Senegal | 719.1 | 634.6 | 94 | 89 | 88 | | |
| Sudan | 578.8 | 517.7 | | 78 | 89 | | |
| Timor-Leste | 311.2 | 288.6 | | 83 | 93 | | |
| Годо | 233.3 | 210.1 | | 96 | 90 | | |
| United Republic of Tanzania | 1 483.3 | 1 312.6 | 97 | 91 | 88 | | |

Sources:UNCTAD secretariat, based on OECD (2012, 2014), table A.8 and table A.10, respectively. Notes: * Excludes donor administrative costs and in-donor refugee costs; ** data are taken from OECD (2012).

new channels that risk further fragmentation and complicate coordination at country level" (OECD, 2008: para. 19(c)). In practice, however, the emphasis has been strongly on the creation of new channels and institutions (LDC-specific or otherwise), resulting in further fragmentation. This has been particularly conspicuous in the field of climate finance, which is now characterized by an immensely complex architecture encompassing 29 implementing agencies, 21 multilateral funds and initiatives, and 7 bilateral funds and initiatives (figure 3.6).

Such complexity adds considerably to the burdens on the limited administrative and technical capacities of LDCs, thereby also limiting and slowing access to the available funding. Such administrative burdens are further increased by often onerous application processes and the very limited progress by donors in fulfilling their commitments under the Paris Declaration to "Implement, where feasible, common arrangements at country level for planning, funding ... disbursement, monitoring, evaluating and reporting to government on donor activities and aid flows" (OECD, 2008: para. 32).

This may be a particular obstacle where LDCs must compete for funding with ODCs, which typically face less serious capacity constraints, particularly as a growing number of recipient countries have established dedicated national climate change funds to coordinate funding from multiple sources and align donor interests with national priorities (for instance, Brazil's Amazon Fund and Indonesia's Climate Change Trust Fund).

Multilateral climate funds have broken new ground in helping countries to confront the implications of climate change for development. However, a recent review of their effectiveness (ODI, 2014) found considerable scope for improvement, to increase their flexibility, reduce risk aversion, increase The complexity and fragmentation of the climate finance architecture adds to the burdens on LDCs' limited capacities.



Figure 3.6. Global climate finance architecture diagram

Source: UNCTAD secretariat, based on Nakhooda et al. (2015).

transparency in the reporting of their results and impact, lower transaction costs, increase the efficiency of decision-making processes, and strengthen support to the development of national capacity. The review also proposed that funds should allow support to a wider range of stakeholders within countries, and place greater emphasis on appropriate approaches to engage private businesses and investors, as well as developing innovative relationships with financial institutions active in climate-relevant sectors, notably infrastructure.

Of the \$7.6 billion approved through climate funds by 2014, half was concentrated in just ten countries, none of which was an LDC, largely reflecting the focus of the Clean Technology Fund on countries with rapidly growing emissions. The pool of funds available for adaptation is more focused on LDCs, but also much smaller. Multilateral funds have approved \$1.33 billion of adaptation finance, of which 69 per cent has been for LDCs. Allocations are again concentrated, 43 per cent accruing to the ten largest recipient countries, seven of which are LDCs (Bangladesh, Cambodia, Mozambique, Nepal, the Niger, Yemen and Zambia) while one (Samoa) is a recent graduate from the LDC category. While Bangladesh, Nepal and the Niger have each received more than \$110 million to invest in early warning systems and other resilience-enhancing activities, overall climate funding to LDCs remains modest in absolute terms due to the small size of the funds, and not all LDCs have received adaptation finance. Globally, the climate funds need to mobilize financing on a much larger scale, and to focus more on strengthening the underlying policy, regulatory and enabling environments in recipient countries alongside investment activities (ODI, 2014).

An LDC Fund (LDCF),⁹ was established in 2001 under the administration of the Global Environmental Facility (GEF) to meet the particularly acute adaptation needs of LDCs, and to finance the preparation and implementation of countrydriven national adaptation programmes of action (NAPAs) identifying priority activities to address their urgent and immediate adaptation needs. In all the LDCs except South Sudan, NAPAs have been prepared and implementation of up to three priority adaptation projects has been started. In 2010, in Cancun, Mexico, Parties to the UNFCCC decided to establish a process to enable LDCs to formulate and implement national adaptation plans — broader and longerterm strategies to identify and address medium and long-term adaptation needs more comprehensively. The national adaptation plan process is intended to be a continuous, progressive and iterative process that follows a country-driven, gender-sensitive, participatory and fully transparent approach (UNFCCC, 2011; Uprety, 2015).

Despite this substantial progress, however, the LDCF continues to have several shortcomings. In particular, its financing remains both inadequate and insecure, reflecting its dependence on voluntary contributions from developed countries. This lack of resources has resulted in the scope of NAPA processes being narrowed from a wide set of priority actions to a handful of the most critical projects (UNCTAD, 2010). Even so, the contributions to the LDCF in the 14 years from its inception to 2015 — estimated at \$962 million from 25 countries — are less than one fifth of the estimated cost of implementing even these relatively limited NAPAs across all LDCs (Tenzing et al., 2015). The funding gap faced by the LDCF has become so severe that in October 2014 the GEF declared the LDCF "empty". While \$1.5 billion of further pledges were made to climate funds, including the LDCF, at the COP21 in Paris, it remains to be seen to what extent these pledges will be fulfilled.

A further problem is the weak integration of the LDCF's project-based approach into national development processes, which further limits the potential for more systematic and comprehensive solutions to the LDCs' adaptation and mitigation needs. The LDCF's governance structure also affords limited accountability to LDCs and gives them little control over its resources, limiting their negotiating power vis-à-vis the GEF agencies (UNCTAD, 2010). While the LDC Group has called for direct access to LDCF resources, akin to the modality used by the Adaptation Fund under the Kyoto Protocol, this has yet to be fully taken on board by the Parties to the Convention (Tenzing et al., 2015).

In addition to the LDCF, LDCs also in principle have access to the Green Climate Fund (GCF), the Adaptation Fund and the Special Climate Change

There is considerable scope for improvement of multilateral climate funds, which are currently concentrated in a small number of ODCs.

Though more focused on LDCs, finance for adaptation is limited, and much more is needed.

LDC Fund financing remains inadequate, insecure and weakly integrated into national development processes. Fund. About 50 per cent of the resources of the GCF are to be allocated for adaptation in LDCs, SIDS and African countries. However, many of these pledge-based funds remain seriously underfinanced. There are also obstacles to LDCs accessing funding from these and other sources, including lack of the capabilities required to meet the rigorous multi-tiered accreditation processes necessary to secure direct access to funds such as the GCF and the Adaptation Fund, and the need to secure co-financing (as mandated by the UNFCCC) in order to benefit from GEF funding.

While many LDCs have secured funding to implement some of their NAPAprioritized actions, this has so far remained limited to \$900 million (including LDCF funding), compared with an estimated cost of \$5 billion for implementing NAPAs in all the LDCs (Uprety, 2015). Moreover, "These costs are also expected to increase as more time passes between the completion of NAPAs and their actual implementation, as well as with the advent of new information on adaptation costs and needs and the identification of new and additional challenges" (Tenzing et al., 2015:2).

As well as issues regarding the scale, availability and predictability of resources, the LDC Group has raised numerous other concerns in relation to the functioning of the LDCF and other climate funds (Tenzing et al., 2015), including:

- The complexity of LDCF procedures, especially in relation to co-financing requirements and identification of baseline (business as usual) and additional (adaptation) costs;
- The constraint imposed by LDCs' limited human and institutional capacities on their ability to access and absorb resources from the GCF, where they need to compete against ODCs;
- Weaknesses in the LDCF's approach to gauging "country ownership" in project proposals;
- Limited LDC negotiating power vis-à-vis GEF agencies;
- The use by GEF agencies of international rather than local consultants;
- The time-consuming process taken to obtain resources for NAPA actions.

A possible approach to addressing these issues, both in the context of climate financing and in development finance more broadly, is outlined in chapter 5. In the longer term, however, major reforms are clearly needed in climate finance to mobilize financing commensurate with the adaptation and mitigation needs of LDCs, to enhance their access to the existing funds, and to increase the effectiveness of delivery.

Multiple shortcomings in traderelated ISMs mean they are inadequate to double LDCs' share of global exports by 2020.

D. Trade-related international support measures

Trade-related ISMs in favour of the LDCs encompass four major areas: support for accession to the World Trade Organization (WTO), preferential market access, other SDT provisions, and trade-related technical assistance. These areas are discussed in turn in the following four subsections, which provide a brief description of the main existing ISMs and a critical assessment of their effectiveness.

Overall, while some trade-related ISMs (especially preferential market access) provide significant benefits to LDCs, their overall impact remains inadequate visà-vis the Sustainable Development Goal target 17.11 of doubling LDCs' share of global exports by 2020. Their effectiveness is undermined by several factors, including the narrow scope, vague formulation and non-binding nature of many

Other pledge-based funds such as the GCF and the SCCF remain seriously under-financed.

Funding for priority actions in LDCs has been \$900 million, compared with estimated needs of \$5 billion.

existing ISMs (notably best-endeavours clauses in SDT provisions); inadequate commitment by the international community (notably in relation to technical assistance); slow operationalization of new ISMs (as in the case of the services waiver); and other developments in the international trade environment, most importantly tariff reductions leading to preference erosion and the increasing relevance of non-tariff barriers (NTBs) to trade relative to traditional tariff barriers.

1. Accession to the World Trade Organization

The process of WTO accession for LDCs is of considerable significance. Six LDCs acceded to WTO between 2012 and 2016 (Afghanistan, the Lao People's Democratic Republic, Liberia, Samoa, Vanuatu and Yemen) and six more (Bhutan, the Comoros, Equatorial Guinea, Ethiopia, Sao Tome and Principe, and the Sudan) were negotiating their accession at the time of writing.¹⁰ The terms of accession are detailed in a Protocol of Accession negotiated between each acceding country and a working party composed of interested WTO members. The process is long and complex, encompassing negotiations both with the working party on the country's trade regime, and with each of its bilateral partners on its tariff schedule for trade in goods and on offers in trade in services.

In the 2001 Doha Ministerial Declaration, WTO members agreed "to work to facilitate and accelerate negotiations with acceding LDCs" (WTO, 2001: para. 42). An initial set of guidelines to this end, adopted in December 2002, included provisions to facilitate the negotiation process and to provide technical assistance. These guidelines also called on WTO members to "exercise restraint in seeking concessions and commitments on trade in goods and services from acceding LDCs" (WTO, 2002). As concerns were repeatedly raised on the effectiveness of these provisions (UNCTAD, 2010), they were further strengthened, streamlined and operationalized by a subsequent set of guidelines in 2012. These introduced specific flexibilities for acceding LDCs, including a quantitative benchmark (in terms of binding coverage of a country's tariff structure and the level of bound tariff rates) for market access negotiations on goods; a qualitative benchmark for the bidding process, SDT and transition periods.

While these guidelines represent a significant step towards facilitating LDC accession to the WTO, the process remains skewed against the acceding country. The acceding country receives requests for trade concessions from existing WTO members, both multilaterally and bilaterally, but is not entitled to request tariff concessions or services commitments (Van Grasstek, 2013). As a result, accession has typically entailed significant costs for acceding LDCs, and the process remains long and cumbersome. The accessions of Cambodia (completed in 2004), Nepal (2004), Samoa (2012), Vanuatu (2012), the Lao People's Democratic Republic (2013), Yemen (2014) and Liberia (2016) have taken an average of 13 years to complete. The LDCs that have sought to join the WTO since its creation have faced difficulties in the accession process; and LDCs have complained, both individually and collectively, about the nature of the procedures and the excessive demands that have been made on them in the course of the negotiations (Cortez et al., 2014).

2. PREFERENTIAL MARKET ACCESS

Preferential market access is one of the most important ISMs available to LDCs (and ODCs), as preferential tariffs on their exports help to offset the higher production and trade costs associated with their structural and geographical handicaps.¹¹ In the WTO context, the 2001 Doha Ministerial Declaration, which launched the eponymous round of WTO negotiations, included an

Six LDCs acceded to WTO in 2012–2016, and six more are negotiating accession.

WTO members agreed in 2001 "to work to facilitate and accelerate negotiations with acceding LDCs" but progress remains inadequate.

Preferential market access is an important ISM for LDCs.

explicit commitment "to the objective of duty-free, quota-free market access for products originating from LDCs" (WTO, 2001: para. 42). In 2005, this commitment was reiterated and further clarified by annex F of the Hong Kong Declaration, which urged developed countries, and those developing countries declaring themselves in a position to do so, to "provide duty-free and quota-free market access on a lasting basis, for all products originating from all LDCs ... [or] at least 97 per cent of products originating from LDCs, defined at the tariff line level, by 2008 or no later than the start of the implementation period" (WTO, 2005: annex F, 36 (a)(i) and (ii)).

Notwithstanding these clear statements, WTO members have long struggled to achieve a satisfactory agreement on duty-free quota-free (DFQF) market access, and the last Ministerial Declaration to address the subject — the Bali Ministerial Declaration (WTO, 2013a) — weakened previous commitments and also remained in non-binding language.¹² This underlines the importance of LDCs forging a united position on the issue.

The lack of agreement within the WTO has not precluded some significant progress in terms of preferential market access on a unilateral basis. On the contrary, a growing number of developed and developing countries have adopted unilateral preferential schemes for merchandise exports originating from LDCs (see chapter 4). These schemes vary in terms of coverage, exclusion lists and in some cases even beneficiary countries, since some schemes (notably the African Growth and Opportunity Act (AGOA) of the United States of America) are not directly applicable to all LDCs. Developed countries generally provide preferential market access to LDCs through the Generalized System of Preferences (GSP) or through regional and bilateral agreements, while many developing countries have adopted dedicated schemes for this purpose.¹³ Among members of the Group of Twenty (G20), average preferential tariff rates on LDC exports are substantially lower in developed than in developing countries (2.6 per cent compared with 8.1 per cent (World Bank, 2015)); but some major developing countries, notably China and India, have granted extensive unilateral preferences to LDCs.¹⁴

As might be expected, by reducing tariffs faced by LDC exporters, preferential schemes contribute significantly to boosting LDC export revenues (Klasen et al., 2016). This is confirmed by the assessment of the costs to LDCs of losing LDC-specific trade preferences discussed in chapter 4. However, the very limited change in the composition of LDC exports, despite the plethora of preferential schemes, highlights the importance of productive capacities in translating preferential market access into economic diversification as well as higher export revenues.

The potential development impact of preferential trade arrangements in this respect is constrained by at least three key factors. First, the potential boost that preferential schemes can provide to LDC exports is limited by their incomplete product coverage, as LDCs' typically high levels of export concentration mean that excluding even a few tariff lines may have a disproportionate effect. For example, an analysis by Bouët and Laborde (2011) of the impacts of alternative potential outcomes for the Doha Development Round estimated that raising DFQF coverage in the same set of preference-granting countries from 97 per cent to 100 per cent would nearly double the export opportunities available to LDCs.

Second, the competitive advantage conferred by preferential tariffs depends on tariff rates relative to competitors — that is, preference margins — more than the absolute rates. In this respect, many primary products at the core of LDC export baskets, most notably minerals and fuels, would be subject to relatively low (and possibly zero) tariffs even on a most-favoured-nation (MFN) basis, so

A growing number of developed and developing countries have adopted unilateral preferential schemes for merchandise exports originating from LDCs.

Preferential schemes have contributed to increasing LDC exports, but have not been translated into diversification...

...due to incomplete product coverage, low preference margins and high compliance costs... that preference margins for these products are generally limited.¹⁵ Moreover, the preference margins for LDC exports are gradually eroded over time as the tariff rates faced by ODCs are reduced by liberalization at multilateral, regional and bilateral levels. Nonetheless, LDC preference margins remain significant, at least for some key products in some export markets (ITC, 2010).

Third, preference margins may be limited or offset by the cost of compliance with the scheme's regulations and associated administrative procedures, notably rules of origin. It is widely acknowledged that the combination of low preferential margins and high compliance costs may undermine the appeal of preferential schemes, resulting in a low rate of preference utilization. Rules of origin and other NTBs are of particular importance in this respect in LDCs, as a result of higher compliance costs to potential exporters (reflecting limited supplies of local inputs and/or productive capacities in the case of rules of origin), and weaker institutional frameworks for quality assurance and standard setting. This problem is further exacerbated by the lack of harmonization of rules of origin, which gives rise to different compliance requirements across different export markets, with additional costs and inefficiencies.

The potential adverse effects of restrictive rules of origin acquire even greater relevance in global value chains, as production processes become progressively more fragmented and trade in intermediate products plays a growing role. In this context, stringent rules of origin are likely to be particularly burdensome in the manufacturing sector (especially apparel and clothing) and in phases of production in the middle of the value chain (that is, adding value to imported raw materials and intermediate products), and much less so for the export of wholly obtained products, such as fuels and unprocessed agricultural commodities (WTO, 2014).

At the Ninth WTO Ministerial Conference in December 2013, recognizing the above problems and their detrimental impact on LDCs' integration into global markets, WTO members agreed on a set of guidelines for preferential rules of origin for LDCs, which were further elaborated at the Tenth WTO Ministerial Conference in Nairobi in 2015 (WTO, 2013b; WTO, 2015b, respectively). These guidelines are based only on best-endeavours clauses, and thus not legally binding. However, if fully implemented, they could represent a substantial step towards enhancing the flexibility accorded to LDCs, including by allowing up to 75 per cent of value added to be imported from outside the exporting LDC, facilitating cumulation across LDCs and other beneficiaries of preferential schemes, and simplifying documentation requirements. Since no preferencegranting country has yet implemented the Nairobi guidelines, their effectiveness and impact can only be a matter of speculation. However, evidence of other reforms (notably in Canada and the European Union) suggests that introducing additional flexibilities in the rules of origin would be likely to increase the effectiveness of LDC-specific preferential market access by increasing utilization rates.

The scope of preferential market access for LDCs can be illustrated by data from the UNCTAD database on GSP utilization on tariff treatment and eligibility in the Quad markets (Canada, the European Union, Japan and the United States). In all four markets, preferential GSP schemes include a more favourable subscheme in favour of LDCs, the United States also providing preferential treatment to a number of eligible (LDC and ODC) African countries under AGOA. In 2013 — the latest year for which data are available — the Quad countries accounted for some 40 per cent of LDCs' total merchandise exports: \$48 billion imported by the European Union, \$23 billion by the United States, \$8 billion by Japan and \$4 billion by Canada.

...particularly as a result of restrictive rules of origin and other NTBs.

WTO guidelines on rules of origin, if implemented, could help significantly.

More than half of LDC exports to major developed country markets would have faced zero tariffs even without preferential market access. On average, as shown in figure 3.7, more than half of these flows were nondutiable, and would therefore have been subject to zero tariffs even on an MFN basis. Thus, preferential schemes conferred no net gain (that is, a zero preference margin) to beneficiary countries on these exports. Dutiable imports accounted for a variable share of the total, ranging from 29 per cent of total imports in the case of Japan, to around 47 per cent in Canada and the European Union, and 93 per cent in the United States. However, only a subset of the dutiable imports is potentially eligible for preferential treatment ("covered"); and only a subset of covered imports actually receives preferential treatment, as this depends on compliance with rules of origin and other administrative rules governing each preferential scheme.

Figure 3.8 provides further analysis of the potential coverage and utilization rates of LDC trade preferences in Quad markets.¹⁶ With the exception of the United States, almost all of each Quad country's dutiable imports were covered by GSP preferential treatment, with coverage rates of at least 99 per cent (in line with the provisions of annex F of the Hong Kong Ministerial Declaration). The rates of preference utilization are also relatively high by international standards, ranging between 85 per cent in Japan and 95 per cent in the European Union, with Canada at 89 per cent. In Canada and the European Union, these figures in part reflect reforms of their rules of origin in 2003 and in 2011 respectively, which boosted both utilization rates and import values (WTO, 2014).

In the case of the United States, the situation is complicated by the coexistence of two preferential schemes, GSP and AGOA. Since the latter offers broader coverage and more attractive tariff rates, but with more limited country coverage, it is generally the preferred option for AGOA-eligible African LDCs.¹⁷ This results in a very low rate of utilization for United States GSP preferences, and a higher rate of utilization for AGOA (figure 3.8).

Clearly, such aggregate figures hide considerable heterogeneity across products and sectors, as rules of origin are more critical for manufacturing than for extractive sectors and agricultural raw materials. Nonetheless, despite some undoubted progress in recent years, there remains considerable scope



Figure 3.7. Quad imports originating from LDCs by tariff treatment, 2013

Source: UNCTAD secretariat calculations, based on data from the UNCTAD database on GSP utilization (accessed August 2016).

LDCs made greater use of preferences in Canadian and European Union markets when these markets reformed their rules of origin.



Figure 3.8. Quad preference coverage and utilization rate, 2013

Source: UNCTAD secretariat calculations, based on data from the UNCTAD database on GSP utilization (accessed August 2016).

to improve the utilization of preferential trade arrangements, and thus their effectiveness. The potential of key LDC exports (for example, apparel and fish products) could be significantly enhanced, supporting efforts to foster economic diversification in LDCs, if the restrictiveness of rules of origin were relaxed along the lines recommended by the Bali and Nairobi Ministerial Declarations.

Looking ahead, however, it should be emphasized that the strategic relevance of preferential market access is inevitably set to decline over the long term, for two main reasons. First, preference erosion is set to continue in the future, as the process of trade liberalization continues, and may well be accelerated by the successful conclusion of so-called mega-regional trade agreements. Second, a growing body of research suggests that the trade-restrictive effect of non-tariff measures has, over time, become more relevant than traditional tariff barriers (UNCTAD, 2013). This is particularly the case for LDCs, whose export products are typically subject to numerous non-tariff measures, and whose exporters are likely to face higher compliance costs than those of ODCs (Nicita and Seiermann, 2016). There are also some concerns that the discretionary nature of unilateral preference schemes, which in principle allows them to be withdrawn at any time, introduces an element of unpredictability; and that this could discourage export-oriented investment, notably in value chains with high turnover, such as clothing (CDP secretariat 2012).

Beyond merchandise trade, the rationale for preferential market access in favour of LDCs has begun to be extended to trade in services, which plays an increasingly important role in a number of LDCs, as well as some LDC graduates. In September 2003, the WTO Council for Trade in Services adopted Modalities for the Special Treatment for Least-Developed Country Members in the Negotiations on Trade in Services. However, it was only eight years later, in December 2011, that trade ministers adopted a waiver enabling developing and developed-country members to grant preferential treatment to services and service suppliers of LDCs in breach of MFN obligations under the General Agreement on Trade in Services (GATS). Initially valid for 15 years, the waiver was extended by four years to the end of 2030 at the 2015 Nairobi Ministerial Conference, where a review process was also established.

Considerable scope remains to improve preference utilization, particularly by relaxing rules of origin.

Preferential market access will become less important over time, due to preference erosion and the increasing importance of NTBs.

Preferential market access has been extended to trade in services...

...but caution is required in interpreting the effects of preferences on services exports. To date, 23 WTO members,¹⁸ including several developing countries, have notified the WTO of services preferences for LDCs (WTO, 2016b; Rodriguez Mendoza et al., 2016). As the operationalization of the services waiver is still ongoing, it remains unclear to what extent it will translate into meaningful commercial gains or additional opportunities for structural transformation. As discussed in box 3.2, a preliminary assessment of the offers notified to date suggests that preferences may be of some significance, but that some caution is required in their interpretation.

Box 3.2. An early assessment of the services waiver

UNCTAD has commissioned an analysis of the more than 2,000 preferences to LDCs notified to the WTO in the context of the services waiver, to provide a preliminary assessment of their relevance and usefulness. While this analysis indicates that the offers to date are of some significance, it also suggests a need for some caution.

A comparison of the preferences notified under the services waiver with the offers made (to all WTO members) by the countries concerned in the course of the Doha Round negotiations (which started in 2001) found that 12 per cent provided less favourable terms, 40 per cent more favourable terms, and 48 per cent equivalent terms. Since most of the Doha Round offers represented MFN treatment at the time when they were made, and most WTO members have liberalized trade in services further since, this suggests that at least half of the preferences offered to LDCs do not offer actual preferential treatment relative to any other WTO member.

A comparison with the terms of existing preferential trade agreements (PTAs) found that 68 per cent of the preferences notified under the services waiver provided terms equal to those of PTAs, 7 per cent less favourable terms, and 25 per cent more favourable terms. However, these results may have a positive bias, as the PTAs used for comparison were not necessarily the most favourable. The large proportion providing equal terms is likely to be indicative of the use of approaches already used in PTAs as a basis for offers to LDCs.

A third comparison was made with the LDCs' own collective request of July 2014 (WTO, 2014). Here the comparison appears positive, in that 46 per cent of the offers exceeded what was requested, 23 per cent matched the request, and 31 per cent fell short. However, this may be indicative of offers that were not requested because they are of limited relevance to LDCs. For example, two fifths of the offers exceeding the collective request (18 per cent of all offers) represented preferences in mode 2 (consumption abroad), which is of very limited relevance in most sectors (except tourism, health care and education), and is generally subject to very few trade restrictions. The figure is also likely to include offers in sectors and subsectors considered of insufficient economic interest to LDCs to merit inclusion in the request, or in which they are insufficiently competitive to compete successfully even with significant preference margins.

Among other findings of the analysis are:

- Approximately one third of offers concerned mode 4 (movement of natural persons), one quarter mode 3 (commercial presence), and about one fifth each mode 1 (cross-border supply) and mode 2 (consumption abroad);
- The most important sectors for offers were business services, followed by transport and logistics, in both cases predominantly in mode 1 (cross-border supply);
- 86 per cent of offers were in the form of market access, virtually all the remainder being in the form of national treatment.

Source: Rodriguez Mendoza et al. (2016).

3. OTHER SPECIAL AND DIFFERENTIAL TREATMENT

The WTO, in its latest (22 September 2016) compilation, lists a total of 145 provisions in the WTO agreements that provide SDT to the LDCs and/or developing countries (or other subgroups of developing countries). This total encompasses a broad range of provisions with distinct objectives (WTO, 2013c):

145 provisions in WTO agreements provide SDT to developing countries, but only 16 are specific to LDCs...

- 15 provisions are aimed at increasing developing countries' trade opportunities;
- 47 require WTO members to safeguard the interests of developing countries;
- 41 entail flexibilities in commitments, actions and use of policy instruments;
- 20 refer to transitional periods;
- 18 relate to technical assistance;
- 16 relate to LDCs.¹⁹

As can be gauged from table 3.1, these provisions have different degrees of reach and legal impact. Some do no more than reaffirm, in broad terms, the necessity of taking into account the interests and/or needs of developing countries, including LDCs. This is the case, for instance, for article XXXVI of the GATT and of many of the provisions aimed at increasing trade opportunities. Other provisions seek to simplify reporting to WTO bodies. These include, for example, potentially longer periods for trade policy reviews (annex 3 of the Marrakesh Agreement) and simplified procedures for balance-of-payments consultations (article 8 of the Understanding on the Balance-of-Payments Provisions of the GATT). Other SDT provisions call on WTO members to provide assistance to LDCs, notably in developing telecommunications infrastructure and a viable technological base (articles 66.2 and 67 of the Agreement on Trade-related Aspects of Intellectual Property Rights (TRIPS Agreement)), or in complying with technical barriers to trade and sanitary and phytosanitary requirements (articles 11.8 and 12.7 of the Agreement on Technical Barriers to Trade, and articles 9.1 and 9.2 of the Agreement on the Application of Sanitary and Phytosanitary Measures, respectively). While helpful and well-intentioned, these SDT provisions are clearly unlikely to play a decisive role in relation to LDC graduation, owing to their nature – generally related to procedural aspects of the multilateral trading system - and their often vague formulation (notably in terms of commitments for technical assistance).

More tangible impacts can in principle be expected from SDT provisions related to transitional periods and flexibilities in commitments, which allow LDCs, on a temporary or a permanent basis, slightly greater policy space than is available to ODCs. A number of SDT provisions grant LDCs extended transitional periods for the implementation of clearly-defined legal obligations, in recognition of their institutional constraints. Some of them are no longer relevant, as the extended implementation periods have now elapsed. However, an important exception is the TRIPS Agreement, whose implementation period for LDCs (under article 66.1) has subsequently been extended (subsection E.1, below).

Measures providing for greater flexibilities in commitments, action and use of policy instruments for LDCs include, for example, article 15.2 of the Agreement on Agriculture, which exempts LDCs from commitments to reduce tariffs and subsidies. Similarly, LDCs are exempted from the prohibition of subsidies contingent on export performance under article 27.2 and annex VII of the Agreement on Subsidies and Countervailing Measures. However, the ability of LDCs to take advantage of these flexibilities is seriously constrained by their lack of financial resources for such subsidies.

Although the Trade Facilitation Agreement has not yet entered into force it contains an innovative form of SDT. Section II of the Agreement allows LDCs, on an individual basis, to group some of the relevant commitments into three categories to be notified to the Trade Facilitation Committee at the WTO:

- Category A: to be implemented upon entry into force of the agreement;
- Category B: to be implemented after a transitional period;
- Category C: to be implemented after a transitional period, contingent on the provision of assistance and support to capacity-building.²⁰

Notwithstanding the substantial number of SDT provisions, their overall impact is circumscribed by their relatively narrow scope. They are thus insufficient either to improve the terms of LDC integration into the global market decisively or to provide substantial support to their progress towards graduation. A first concern in this regard stems from the limitation of many SDT provisions to vague principles or "best-endeavours" language, so that their practical effect depends on the goodwill of other WTO members, rendering their implementation

Some WTO SDT provisions have little concrete impact, and are unlikely to contribute significantly to graduation.

Extended transitional periods and flexibilities in commitments may have a greater impact...

...but LDCs' ability to make use of some flexibilities is limited by their financial and institutional constraints.

Many SDT provisions amount to mere "best endeavours" language or vague principles. The overall impact of SDT provisions si limited by their narrow scope and often limited specificity.

The effectiveness of SDT provisions will remain limited in the absence of productive-capacity development.

The Aid-for-Trade initiative has a critical role for LDCs and the EIF is of particular relevance. unreliable and unpredictable. Examples include article 24.2 of the Rules and Procedures Governing the Settlement of Disputes, under which WTO members are to "exercise due restraint in raising matters" involving an LDC. While no LDC has yet been a defendant in a dispute settlement case, such vague language does little to enlarge LDCs' policy space. Another such provision is article IV para. 3 of the GATS, which states that "Particular account shall be taken of the serious difficulty of the least-developed countries in accepting negotiated specific commitments in view of their special economic situation and their development, trade and financial needs".

A second factor undermining the usefulness of SDT provisions is their uneven utilization, partly reflecting a lack of awareness and technical knowledge on the part of LDCs (UNCTAD, 2010; WTO, 2013c). These elements are critical, as the utilization of many ISMs is contingent on appropriate legal action within the WTO by the LDC concerned. A report by the CDP secretariat (2012), based on survey responses from 18 LDC WTO members, found wide differences in knowledge of specific SDT provisions and related procedures among LDCs, and greater benefits to those countries with greater awareness. This underlines the need for enhanced technical assistance and capacity-development efforts to address institutional bottlenecks in LDCs and support their full and active participation in the multilateral trading system, including through full and appropriate use of the available SDT provisions. Financial constraints are also critical. As recognized in the findings of the CDP survey, SDT provisions are likely to remain ineffectual unless LDC governments are able to mobilize adequate financial resources to make full use of the policy space they afford.

More broadly, these considerations highlight the inevitable limitations to the effectiveness of SDT provisions in the absence of a broader process of productive-capacity development. Addressing supply-side constraints is the main rationale behind the Aid-for-Trade initiative, including trade-related technical assistance, which is discussed in the next subsection.

4. TRADE-RELATED TECHNICAL ASSISTANCE

The international community has devoted increasing attention and resources to trade-related technical assistance — an implicit recognition of the structural constraints faced by LDCs in harnessing trade and leveraging trade-related ISMs for sustainable development. This has resulted in efforts to build LDC trade capacities, including by addressing supply-side constraints, and to promote a more conducive policy framework to mainstream trade into LDC development strategies. The Aid-for-Trade initiative thus has a critical role for LDCs, and, though not specific to LDCs, it has paid increasing attention to their needs. While mentioned as a "valuable complement" to the Doha Round in the 2005 Hong Kong Ministerial Declaration of the WTO (para. 57), the initiative has been progressively decoupled from the Doha negotiations (Hallaert, 2012).

Of particular relevance in the context of trade-related technical assistance is the LDC-specific EIF, a multi-donor programme involving six core partner agencies (the International Monetary Fund, the International Trade Centre, UNCTAD, the United Nations Development Programme, the World Bank and WTO) established at the WTO in 1997, and subsequently reviewed in 2005. The EIF's support to LDCs focuses on three key objectives:

- Mainstreaming trade into national development strategies;
- Establishing structures to coordinate the delivery of trade-related technical assistance;
- Building capacity to trade, including by addressing critical supplyside constraints.

The EIF has also assisted LDCs in the WTO accession process, through analysis of accession-related issues in their diagnostic trade integration studies and support to their participation in accession-related meetings.

Several other international agencies also provide trade capacity-building activities for LDCs, including UNCTAD, relevant United Nations regional commissions and the CDP secretariat. LDCs are also accorded particular priority in the delivery of WTO trade-related technical assistance activities, and on average benefit from more than 40 per cent of such activities (WTO, 2016). LDCs are also entitled to participate in three national training and technical assistance activities per year, in addition to regional courses, as against two for ODCs (WTO, 2015c).

It should be noted that, conceptually, Aid for Trade largely overlaps with ODA, and potentially with other forms of financial ISMs discussed in earlier sections of this chapter. Indeed, Aid for Trade is defined as the subset of ODA provided for programmes and projects that are "explicitly identified as trade-related priorities in the recipient country's national development strategies" (WTO, 2006:2).²¹ This overlap is also apparent in the sectoral composition of Aid for Trade to LDCs, the overwhelming majority of which is devoted to transport, energy and agriculture (figure 3.9). While this emphasis is certainly warranted (and closely aligned with UNCTAD's traditional focus on productive capacities), the overlap between Aid for Trade and broader definitions of ODA raises some concerns in relation to the additionality of support mobilized under the Aid-for-Trade initiative.

Aid for Trade is part of ODA, raising concerns about its additionality.



Figure 3.9. Aid for Trade disbursements to LDCs by broad sector (all donors)

Source: UNCTAD secretariat calculations, based on data from the OECD, Creditor Reporting System database (http://www.oecd.org/dac/aft/aid-for-tradestatisticalqueries.htm) (accessed September 2016).

The IPoA and the 2030 Agenda have reaffirmed the importance of Aid for Trade to LDCs. The continuing relevance of trade-related technical assistance is explicitly recognized in para. 66.3(e) of the IPoA, which calls on development partners to "Implement effective trade-related technical assistance and capacity-building to LDCs on a priority basis, including by enhancing the share of assistance to least developed countries for Aid for Trade and support for the Enhanced Integrated Framework, as appropriate". The importance of Aid for Trade, and of the EIF in particular, is also reaffirmed explicitly by Goal 8.a of the 2030 Agenda, to "Increase Aid for Trade support for developing countries, in particular least developed countries, including through the Enhanced Integrated Framework for Trade-Related Technical Assistance".

Since Aid for Trade is thus largely encompassed within ODA, which is discussed in section C, this subsection focuses on the extent of progress towards these more specific objectives.

As shown in table 3.3, the total amount of financial resources available under the Aid-for-Trade initiative has approximately doubled in real terms since 2005, both for developing countries as a whole and for LDCs, and in terms of both commitments and disbursements. As for ODA in general, however, there tends to be a significant gap between commitments and disbursements, the latter being more than 40 per cent greater than the former in the 2012–2014 period (UNECA, 2013). However, despite the doubling of Aid for Trade in real terms, there is little evidence of an expansion of LDCs' share of the total, as called for in the IPoA. Over the period as a whole, LDCs have accounted for an average of 29 per cent of total Aid-for-Trade commitments and 27 per cent of disbursements (with some year-to-year variation). In 2014, the last year for which data are available, the share of LDCs in total Aid-for-Trade disbursements fell to 25 per cent, the lowest level for at least a decade.

While support for trade policy and regulations represents only 2–3 per cent of total Aid for Trade, it is of particular importance to LDCs because of their limited institutional capacities. In this area, real disbursements to LDCs have increased substantially since 2005, at an average rate of 16.8 per cent per year, although this partly reflects the very low base, and growth was strongly concentrated at the beginning of the period and near the end (2005–2007 and 2011–2013). While their share in total disbursements increased strongly between 2005 and 2007, it has since fluctuated widely within a band between 16 per cent and 26

| Table 3.3. Aid for Trade to LDCs and other developing countries (Billions of constant 2014 dollars) | | | | | | | | | | | |
|---|---------------|------------|-----------|----------|---------|-----------|--------|--------|--------|--------|--------|
| | | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Total Aid for Trade | | | | | | | | | | | |
| Total developing countries | Commitments | 26 792 | 27 614 | 30 430 | 40 147 | 41 142 | 43 539 | 43 515 | 52 371 | 56 185 | 54 447 |
| total developing countries | Disbursements | 19 968 | 20 895 | 22 807 | 26 179 | 29 286 | 32 428 | 36 197 | 37 587 | 40 582 | 42 436 |
| LDCs | Commitments | 8 289 | 7 363 | 9 597 | 11 448 | 12 638 | 13 395 | 13 156 | 12 304 | 18 442 | 14 429 |
| LDUS | Disbursements | 5 552 | 5 366 | 6 161 | 7 379 | 8 607 | 9 212 | 9 652 | 9 625 | 10 913 | 10 532 |
| $I_{\rm DC}$ share of the total (0/) | Commitments | 31 | 27 | 32 | 29 | 31 | 31 | 30 | 23 | 33 | 27 |
| LDC share of the total (%) | Disbursements | 28 | 26 | 27 | 28 | 29 | 28 | 27 | 26 | 27 | 25 |
| | Of wh | nich trade | e-related | policies | and reg | Julations | | | | | |
| Tatal davalaning acception | Commitments | 793 | 1 218 | 868 | 1 127 | 1 443 | 1 274 | 1 362 | 1 380 | 1 520 | 967 |
| Total developing countries | Disbursements | 558 | 565 | 812 | 816 | 878 | 1 140 | 1 004 | 1 139 | 1 248 | 1 168 |
| 100- | Commitments | 85 | 278 | 98 | 259 | 325 | 204 | 158 | 503 | 320 | 219 |
| LDCs | Disbursements | 47 | 62 | 179 | 166 | 162 | 187 | 189 | 228 | 320 | 222 |
| | Commitments | 11 | 23 | 11 | 23 | 22 | 16 | 12 | 36 | 21 | 23 |
| LDC share of the total (%) | Disbursements | 8 | 11 | 22 | 20 | 18 | 16 | 19 | 20 | 26 | 19 |

Source: UNCTAD secretariat calculation, based on data from the OECD, Creditor Reporting System database (http://www.oecd.org/dac/aft/ aid-for-tradestatisticalqueries.htm) (accessed September 2016).

While Aid for Trade has doubled in real terms, the share allocated to LDCs has not expanded. per cent, and has on average been lower than their share of total Aid-for-Trade disbursements.

Given the difficulties faced by LDCs in leveraging trade-related ISMs in areas such as WTO accession and other SDT provisions, as discussed above, these figures highlight the need to strengthen capacity-development efforts in the area of trade policy. As demonstrated by the experiences of LDC graduates such as Cabo Verde and Samoa (section F below), EIF support to trade mainstreaming, and thus to strengthening the related institutional framework, is of particular importance.

E. Technology-related international support measures

Innovation and technological change are important parts of the development of productive capacities, together with the accumulation of productive resources and structural change (UNCTAD, 2006: chap. II.1). In the LDCs technological change requires a combination of two factors: technological learning and efforts by domestic economic agents (such as firms, workers and agencies); and, crucially, knowledge transfer from technologically more advanced countries, developed and developing (UNCTAD, 2014b).

There are important weaknesses in both these areas, limiting progress towards graduation with momentum. Technology flows to LDCs currently occur through market-based mechanisms such as international trade, foreign direct investment (FDI), intellectual property licensing and movement of people (visiting or resident foreign specialists, circular migration and training abroad) (UNCTAD, 2007; UNCTAD, 2012: chap. 4). Progress in technological learning and in building domestic capacity to innovate has been inadequate in many LDCs, limiting their ability to absorb internationally available technologies or to harness them effectively for development (for example, by creating stronger linkages and knowledge flows between more modern and less advanced sectors), and hence the benefits in terms of economic transformation and productive capacities. Consequently, these market-based channels have contributed little to narrowing the knowledge divide between LDCs and more technologically advanced countries (UNCTAD 2010: chap. 3). This has been an important factor underlying the widening technological gap between LDCs and ODCs (chapter 1).

Given the central importance of technology to development, these shortcomings highlight the need for effective ISMs in this area. Some measures have been put in place to address these issues, notably ODA allocations for science, technology and innovation (STI) in LDCs and technology transfer provisions in some international agreements. However, their contribution to building technological capabilities in LDCs has as yet been very limited, as shown by the analysis below of the major LDC-specific ISMs in the field of technology.

1. AID FOR SCIENCE, TECHNOLOGY AND INNOVATION

STI has not traditionally been a priority for ODA to LDCs. During the era of structural adjustment programmes (starting in different LDCs in the 1980s or 1990s), reductions in domestic funding of STI activities were not compensated by increased donor disbursements. ODA allocations for STI tended to reflect donors' priorities in terms of sectors and activities, rather than being aligned with national priorities (Enos, 1995). This pattern has largely continued.

Weaknesses in technological learning and technology transfer are limiting progress towards graduation with momentum.

Market-based technology flows have not prevented the widening technological gap between LDCs and ODCs.

importance to LDCs, and has grown more strongly.

Support to trade policy and

regulations is of particular

LDC-specific ISMs in technology have contributed little to building technological capabilities. Since the 1990s, as discussed in subsection C.1 above, donors have generally shifted the balance of ODA away from economic and physical infrastructure and productive sectors, and towards social sectors and governance. Support to the development of technological capabilities in LDCs also currently receives very limited aid allocations, STI accounting for only 0.49 per cent of total ODA disbursements in 2012–2014, barely one third even of the small proportion in ODCs (1.44 per cent) (figure 3.10).²²

In the case of bilateral ODA for STI, allocations often focus on traditional areas of specialization, notably agriculture (particularly traditional or higher-value cash crops such as cotton, coffee, mango and nuts). Technological improvements in these areas can increase productivity, and the development of non-traditional crops may contribute to diversification within the agricultural sector. However, this sectoral concentration limits the effect of ODA for STI on diversification across the economy as a whole, tending rather to perpetuate historical patterns of production and to reinforce LDCs' current comparative advantage (Foray, 2009).

2. THE AGREEMENT ON TRADE-RELATED ASPECTS OF INTELLECTUAL PROPERTY RIGHTS

The WTO TRIPS Agreement includes a longer implementation period for LDCs, now extended to 2021.

While several WTO agreements include provisions on the transfer of technology or knowledge, the most important in this respect (as in terms of intellectual property and technology in general) is the TRIPS Agreement. This includes two major SDT provisions specific to LDCs. First, under article 66.1, LDC members are not required to implement the provisions of the Agreement, except for articles 3, 4 and 5 (relating to national treatment and the MFN principle) for 11 years after the entry into force of the WTO agreement (1 January 1995). This waiver has since been extended to July 2021, and to 1 January 2033 in the case of pharmaceutical products.



Source: UNCTAD secretariat calculations, based on data from OECD, Creditor Reporting System database (accessed September 2016). Note: ODA to science, technology and innovation (STI) is the sum of ODA disbursements to Educational research, Medical research, Energy research, Agricultural research, Forestry research, Fishery research, Technological research and development, Environmental research, Research / Scientific institutions.

STI has not been a priority for donors, and aid allocations have been very limited and focused on traditional areas of specialization. The second LDC-specific SDT provision relates to technology transfer. The stated objective of the TRIPS Agreement, as defined in its article 7 (emphasis added), is that

The protection and enforcement of intellectual property rights should contribute to the promotion of technological innovation and to the transfer and dissemination of technology, to the mutual advantage of producers and users of technological knowledge and *in a manner conducive to* social and economic welfare, and to a balance of rights and obligations.

However, the only major substantive reference to technology transfer or dissemination in the text of the Agreement is in article 66.2,²³ which provides that "Developed country Members shall provide incentives to enterprises and institutions in their territories for the purpose of promoting and encouraging technology transfer to least-developed country Members in order to enable them to create a sound and viable technological base".

This text is stronger than a best-endeavours clause, in that it creates a legal obligation for developed country governments to foster the transfer of technology to LDCs; and it has been interpreted as imposing obligations beyond their ODA practices at the time of adoption of the Agreement in 1994. However, the Agreement does not define what constitutes technology transfer, neither does it detail how compliance with obligations under article 66.2 should be monitored (Moon, 2008). At the request of LDCs, the TRIPS Council requested developed countries to report on their activities in respect of their obligations under article 66.2, later (in a decision of February 2003) establishing that they should submit a full report on such activities every three years, with annual updates in the intervening years.

While it is possible to analyse specific projects, transactions and cases, an overall evaluation of the extent or the effects of technology transfer from developed countries to LDCs is problematic (UNCTAD, 2014b; UNCTAD, 2014c). However, a narrower assessment of the implementation of article 66.2 of the TRIPS Agreement can be made on the basis of developed countries' submissions to the TRIPS Council. An evaluation of such activities reported in submissions between 1999 and 2011 shows that, even with a broad definition of technology transfer, only 11 per cent refer to specific operations of technology transfer to LDCs.

In response to criticisms of limited technology transfer, developed countries emphasize the constraints arising from ownership of the vast majority of the relevant technologies by private sector entities, and the limited ability of governments to force such entities to transfer the technologies that they control. Technology transfer thus depends on efforts to encourage or facilitate actions by companies, rather than direct action by governments themselves (WTO, 2012).

Technologies originating in public entities of developed countries are sometimes transferred through bilateral assistance projects. In general, however, such projects do not have technology transfer as a primary objective, and the resulting transfers do not constitute a coherent programme of technology transfer. Rather, such technology transfer as occurs is generally incidental to projects with specific technical objectives such as providing clean water, combating particular diseases or eradicating crop pests. Even where development projects focus on STI, intellectual property capacity-building and technology transfer training are typically included only incidentally, if at all.

Article 66.2 of the TRIPS Agreement has thus had very little effect in fostering the adoption of additional incentives for technology transfer to LDCs, making a minimal contribution to their graduation.

While TRIPS Article 66.2 imposes legal obligations on developed countries for technology transfer, these are poorly defined...

...and few reported activities refer to specific operations of technology transfer.

While bilateral assistance projects sometimes transfer public technologies, this is generally incidental to their main purpose. The number of LDCs receiving technical assistance under TRIPS Article 67 fell from 25 to 8 between 2008 and 2012. Article 67 of the TRIPS Agreement provides that "developed country Members shall provide, on request and on mutually agreed terms and conditions, technical and financial cooperation in favour of developing and least-developed country Members". However, between 2008 and 2012, the number of LDCs benefiting from technical assistance under this article declined dramatically from 25 to 8, while the number of cooperation partners providing such assistance fell from 13 to 5 (UNSGHLP, 2015).

3. CLIMATE CHANGE-RELATED TECHNOLOGY TRANSFER

The transfer of climate-friendly technologies among Parties to the UNFCCC is considered a key means of achieving the Convention's primary objective of stabilizing greenhouse gas emissions. Article 4 para. 9 of the UNFCCC, quoted in section C.3 above in the context of climate finance, requires Parties to take account of LDCs' needs and situations in relation to technology as well as finance.

Under the UNFCCC, there are several mechanisms to monitor whether Parties are taking the actions necessary to facilitate technology transfer. These include national communications and biennial reports, in which developed countries periodically document their implementation of the Convention to the COP. Like other developing countries, LDCs are encouraged (under the 2001 Marrakesh Technology Framework) to submit technology needs assessments (TNAs) identifying their technology needs for mitigation and adaptation, based on a consultative process to identify barriers to technology transfer and measures to address them.

In light of the specific structural handicaps of LDCs, the COP has pledged to fund the TNA process in LDCs in full, and funding is provided under the Poznan Strategic Programme on Technology Transfer of the GEF. However, many LDCs are still in the process of finalizing their TNAs, and relatively few have developed technology action plans prescribing measures to address the needs and barriers identified. As of 2015, half of the 48 LDCs had completed a TNA and submitted it to the UNFCCC, but only nine of these TNAs included technology action plans (Craft et al., 2015).

LDC negotiators have repeatedly highlighted the need for the existing technology programmes under the UNFCCC to be strengthened in three major ways: by increasing funding, to provide full support both to the formulation of detailed TNAs and to the implementation of technology activities; by supporting capacity-building for the elaboration of TNAs and proposals for technology-related activities; and by full implementation of the Poznan Strategic Programme on Technology Transfer.

In 2010, the COP established the Technology Mechanism, which was subsequently enshrined in article 10 of the 2015 Paris Agreement. This consists of two complementary bodies that work together to promote the development and transfer of climate technologies to developing countries: the Technology Executive Committee and the Climate Technology Centre and Network (CTCN).

A primary function of the CTCN is to respond to requests from national designated entities (NDEs) in developing countries to accelerate technology development and transfer in these countries. NDEs have responsibility for translating TNAs into specific requests to the CTCN so that project proposals can be formulated and implemented. While many LDCs have set up NDEs, technical assistance is needed to build their capacities and allow them to function effectively. As yet, only a few LDCs have sent requests to the CTCN though their NDEs for the formulation of project proposals. However, the CTCN has set up

Technology transfer is a key means of stabilizing global greenhouse gas emissions.

LDCs have repeatedly called for strengthening of technology programmes under the UNFCCC. a Request Incubator Programme to support LDCs in accessing its technical assistance, to strengthen their institutional capacities on climate technologies, and to reinforce their efforts towards technology transfer. At the time of writing, 11 African LDCs and 2 Asian LDCs were participating in the Programme.

Climate-related technologies are also transferred under the Clean Development Mechanism (CDM), established under the 1998 Kyoto Protocol to the UNFCCC. This operates by issuing tradable certified credits for emissionreduction projects in developing countries, which can be purchased by developed countries to meet a part of their emission-reduction targets under the Kyoto Protocol to the UNFCCC. In principle, such projects should use technologies that are not currently available in host countries, and thus entail technology transfer. However, of 4,984 registered and proposed CDM projects in 2010, only 30 per cent claimed to involve technology transfer. Moreover, the majority of CDM projects were in large emerging economies - 1,993 in China, 1,254 in India and 338 in Brazil - while hardly any were in LDCs. By the end of 2012, there were only 12 registered CDM projects in 7 LDCs. The paucity of CDM projects in LDCs partly reflects its primary focus on mitigation rather than adaptation, the use of market-based approaches, and the more favourable balance of risk and return available to private investors in ODCs than in LDCs (Craft et al., 2015). Limited institutional capabilities in LDCs represent a further constraint to their access to the CDM. Thus, while the CDM is an important tool for fostering technology transfer under the UNFCCC, its relevance and benefits to LDCs have remained extremely limited.

4. THE TECHNOLOGY BANK

Recognizing the importance of STI for development and graduation, and the limited progress to date in accelerating technology transfer to LDCs, the IPoA envisaged the establishment of "a Technology Bank and Science, Technology and Information supporting mechanism, dedicated to the least developed countries" (United Nations, 2011: para. 52.1). Four years later, the Addis Ababa Action Agenda aspired to operationalize this proposal fully by 2017, an objective that was later adopted under the 2030 Agenda as target 17.8 of the Sustainable Development Goals.

The United Nations Technology Bank for the Least Developed Countries is expected to consist of two components: the Science, Technology and Innovation-supporting Mechanism and the Intellectual Property Bank. The former is intended to "help LDCs articulate their STI policies and priorities as part of their overall development strategy; assist them in finding and accessing those programmes that are most appropriate to their STI aspirations; and then act as their advocate with other institutional development actors" (UNSGHLP, 2015:8).

The Intellectual Property Bank is to (UNSGHLP, 2015:7):

[C]reate new opportunities for the dissemination of key technologies. These involve: direct transfers of protected IP – as well as the knowhow to implement it – to LDC recipients, including entrepreneurs and SMEs; maximum transfer of technical knowledge through Foreign Direct Investment (FDI), including supporting LDCs in complex contract negotiations; support of IP protection in LDCs; and, training to IP-enforcement officials as well as strengthening IP Offices in LDCs ... Ultimately, the IP Bank's goal should be that LDCs beneficially integrate themselves into the worldwide IP system

Clean Development Mechanism projects are strongly concentrated in ODCs, and relatively few entail technology transfer.

A Technology Bank for LDCs is scheduled to become operational in 2017. It is anticipated that the Bank will begin its operations in 2017, in accordance with Sustainable Development Goal target 17.8, and that it will be funded by Member States of the United Nations and other stakeholders on a voluntary basis, with an annual budget in the order of \$10 million. The intention is that it should grow progressively over time, building on the experience gained and lessons learned from its work. Possible means of enhancing the effectiveness of the Technology Bank in fulfilling its mandate are discussed in chapter 5.

F. The role of international support measures in past graduation cases

ODA played a major role in the graduation of all four of the countries that have graduated from LDC status to date. As might be expected, given their small populations (which at the time of graduation varied between 0.2 million and 1.5 million), all four countries had relatively large ODA receipts per capita, averaging \$163 in Maldives, \$181 in Botswana, \$387 in Cabo Verde and \$437 in Samoa (at 2013 prices) in the decade prior to their graduation. These figures are between 3.3 and 9.0 times that for LDCs as a whole in 2005–2014.²⁴

At least as important as the volume of ODA, however, was the graduates' policy towards their ODA receipts. Botswana and Samoa, in particular, adopted a very proactive role in management of ODA receipts, maintaining clear leadership and ownership of their respective development processes, and ensuring that ODA was clearly oriented towards their own development strategies.

As noted in chapter 2, Botswana's development strategy from the late 1960s was shaped by a planning cycle of five to six years. National development plans were approved by Parliament and enshrined into law, and parliamentary approval was required for any public sector endeavour that did not appear in the current plan. Donors were thus required to direct ODA into projects that had already been recognized in the plan as national priorities. Planning was also integrated into the budgetary cycle, so that projects could not be initiated unless provision had been made for their recurrent costs. This model appears to have been highly effective (Mogae, 2016).

Samoa, likewise, had a reputation for particular effectiveness in coordinating and managing its ODA. The Government was effective in identifying the need for projects and seeking donor assistance in accordance with its broader development strategy; and donors frequently noted the authorities' unusual willingness, not only to articulate the country's needs, but also to reject approaches and individual activities that did not accord with national priorities. This contributed to a much stronger sense of ownership of aid-funded activities than in some nearby countries (Delay, 2005). The aid coordination process was centred on a clear leading role of the Government, and had three main institutional elements:

- Two national committees with overlapping staff, one for coordinating national development planning and one specifically for donor coordination, which integrated donor assistance into the broader national development framework;
- A close relationship between the donor coordination process and a welldeveloped system of national planning based in the Ministry of Finance;
- A system of sectoral donor meetings, initially in education and health and later extending to other sectors.

ODA has played a major role in all four past graduation cases...

...partly reflecting proactive approaches to aid management, particularly in Botswana and Samoa. The cases of Botswana and Samoa highlight the importance of a proactive and strategic approach to ODA, integrating it effectively into nationally owned and driven development planning processes. In both cases, institutional and human capacity were important factors, as well as strong government leadership of the process. Other factors, at least in Samoa, were stability and continuity of key players in donor coordination, allowing donor confidence and knowledge of donor approaches to be built over time; and the relatively small number of major donors (the Asian Development Bank, Australia, Japan and New Zealand) (Delay, 2005).

In Cabo Verde, too, ODA played a major role in the development process leading up to graduation. It was an important source of non-debt-creating external financing, and financed major investments in economic and social infrastructure, resulting in infrastructure spending among the highest in Africa at around 15 per cent of gross domestic product (GDP) (Briceño-Garmendia et al., 2011). As well as contributing directly to economic and social development, this also (together with migrants' remittances) permitted a higher level of domestic consumption demand and investment than would have been possible from domestic resources alone. Food aid also played an important role, not only in stabilizing food supply (given the country's high level of food insecurity, droughtinduced famine and poverty), but also in generating resources for public works projects in rural areas, through the proceeds of sales of food aid to the population. The resources thus raised were an important instrument for rural development and poverty reduction.

Trade-related ISMs played a more limited role in these countries' progress towards graduation, reflecting the dominance in exports of primary commodities (principally diamonds) in the case of Botswana, and of services (particularly tourism) in Cabo Verde, Maldives and Samoa.

In Maldives, prior to graduation, fish represented more than 98 per cent of merchandise exports, nearly 90 per cent of which was tuna. The fisheries sector also accounted for 5 per cent of GDP and employed 11 per cent of the total workforce. As an LDC, Maldives benefited substantially from preferential access to the European Union and Japanese markets for fish, driving rapid growth in production from the early 1980s. While the main market was Thailand, accounting for 30 per cent of the total, and Sri Lanka accounted for most exports of dried fish, the European Union was the major market for canned fish.

A clearer case of a graduating country that has benefited from a preferential trade agreement (PTA) — though not a PTA specific to LDCs — is the development of automobile components manufacture in Samoa for export to Australia under the 1980 South Pacific Regional Trade and Economic Cooperation Agreement (SPARTECA). When local content requirements for the Australian motor industry were modified to include content from member countries of the Pacific Islands Forum in the early 1990s, the Japanese company Yazaki relocated a component factory from Australia to Samoa to take advantage of lower wages. However, the continuation of this operation depended on a number of increasingly generous ad hoc derogations of the terms of the SPARTECA provisions, particularly in relation to rules of origin, as value added in Samoa fell below the required 50 per cent soon after the relocation. The benefits to Samoa have been substantial, as the plant employ 950 Samoans, making it the single largest private sector employer in Samoa (Morgan, 2012).

ODA also played a major role in Cabo Verde's graduation.

The nature of past graduates' exports has limited the role of traderelated ISMs.

Samoa benefited from ad hoc derogations to a non-LDC-specific preferential trade arrangement with Australia.

G. The utilization of international support measures by present least developed countries and their perceived usefulness

To provide a more complete picture of ISMs from the perspective of LDCs themselves, the UNCTAD secretariat carried out a survey in 2016 on LDCs' utilization of ISMs and perceptions of their usefulness. Survey questionnaires were sent to LDC government officials (all but one from ministries of trade and industry) and United Nations country economists based in LDCs. These elicited eight responses, all from WTO members in Africa, Asia and the Americas.²⁵ While the findings cannot be considered statistically significant, due to the small sample size and the limitations inherent in exercises of this nature, they are nonetheless informative, particularly when considered in conjunction with the findings of similar surveys and supporting data (CDP secretariat, 2012; WTO, 2013c).

The majority of respondents (some 75 per cent) confirmed that their countries had made use of SDT provisions in the context of the WTO, but the extent of reported use varied significantly across agreements and provisions. Respondents singled out preferential market access, flexibilities in commitments, and support extended through the EIF on trade-related matters as the most effective and/or most widely used measures. Conversely, few countries reported having made use of the flexibilities available to the LDCs under the agreements on TRIMs, Technical Barriers to Trade, and the Application of Sanitary and Phytosanitary Measures.²⁶ Comments by respondents trace the uneven use of the available flexibilities to a variety of causes, ranging from lack of specialized skills and superficial understanding of the agreements to limited involvement of the private sector and poor coordination across different ministries (particularly in relation to notifications to the relevant WTO committees). Lack of funding was also mentioned as one of the main constraints limiting the use of available policy space, notably with respect to export and agricultural subsidies.

Questionnaire responses also pointed to continuing difficulties in the accession process, a consideration that resonates with the concerns voiced by those LDCs currently in the process of accession. More generally, budget constraints have long been recognized as a stumbling block to the proactive participation of LDC delegations in WTO activities, their regular presence in relevant committee meetings, and ultimately their negotiating capacities.

Despite some significant improvements since the turn of the century, the quest for development finance remains a key challenge for most LDCs, and 85 per cent of respondents deemed their respective countries' access to such finance insufficient to achieve the IPoA targets by 2020. In this respect, FDI and technical assistance were identified as the areas where the scope for improvement was greatest.

The large majority of respondents reported some improvements in terms of aid-management policies, incipient use of innovative sources of development finance, and to some extent increasing involvement in public-private partnerships. However, the findings on the management of resource rents were less encouraging, despite the fact that several of the responding LDCs are members of the Extractive Industries Transparency Initiative (chapter 2, subsection D2(b)). Only about half of the respondents considered that there had been improvements in their respective countries' ability to retain and manage resource rents. This sobering assessment is consistent with the mounting international pressure to tackle illicit financial flows linked to trade mispricing,

LDCs' use of SDT in the context of WTO varies widely across agreements and provisions.

LDC officials report continuing difficulties in the WTO accession process.

Management of aid flows is seen as having improved, but that of resource rents less so. which deprive many African fuel and mineral exporters, in particular, of muchneeded financial resources (UNECA, 2015; UNCTAD, 2016).

Serious concerns were also raised by all respondents on the effectiveness of ISMs related to technology transfer, notably those under article 66.2 of the TRIPS Agreement. In particular, many responses highlighted the modest overall pace of technology transfer and adoption, and the intrinsic difficulties of tracing successful cases of technology transfer to the existence of the ISMs rather than purely profit-driven private sector investment decisions. While some technical assistance has been delivered for implementation of the TRIPS Agreement, further action is also needed to support the development of comprehensive and coherent STI policy frameworks. The central feature of the development of productive capacities is a progressive increase in the sophistication of the productive base; and this depends on absorptive capacities as well as the transfer of technologies. To be fully effective, technology transfer therefore needs to be accompanied by broader support, to foster the emergence of vibrant innovation systems.

Following the Paris Agreement, the overwhelming majority of respondents acknowledged that the needs and priorities of LDCs in relation to climate change adaptation and mitigation were increasingly taken into account by the international community. Beyond this broad acknowledgement, however, "the devil is in the detail". Many LDC respondents lamented the lack of systematic information and technical administrative capacity, which impede access to climate finance. The two greatest concerns in relation to climate finance were the uncertainties surrounding the magnitude of disbursements (as opposed to pledges), and the degree of additionality vis-à-vis development assistance. Officials also underlined the need to strengthen technical assistance for the integration of climate change adaptation and mitigation into national development strategies.

Overall, the survey findings suggest that existing ISMs are often perceived as insufficient relative to LDCs' development challenges, while also highlighting the disadvantages LDCs face in using the available flexibilities effectively and in accessing adequate funds and technical assistance as a result of their weak institutional capacities. These findings indicate the need for a two-pronged approach, aimed at:

- Scaling up international commitments towards the LDCs, and strengthening the available ISMs in line with the ambitious targets of the IPoA and the Sustainable Development Goals;
- (b) Strengthening ongoing capacity development activities in the LDCs, notably in key ministries, to enable these countries to reap the benefits of ISMs more fully.

H. Conclusion

Notwithstanding the inevitable limitations to any assessment of their effectiveness, it seems clear that the existing ISMs are inadequate to the developmental needs of the LDCs, particularly in the context of the IPoA graduation target and the Sustainable Development Goals. This confirms and reinforces the conclusion of *The Least Developed Countries Report 2010* (UNCTAD, 2010). Though many existing ISMs are useful and promising in principle, their effectiveness in practice is often undermined by vague formulation (notably in the case of best-endeavours clauses), inadequate commitment on the part of the international community (notably on ODA), insufficient funding (for example, of climate finance), slow operationalization (for example, of the

Serious concerns remain about the effectiveness of ISMs related to technology transfer...

...as well as the magnitude and additionality of climate finance.

Efforts to strengthen ISMs need to be complemented by greater capacity development in LDCs.

Existing ISMs remain inadequate, particularly in light of the IPoA graduation target. services waiver) and exogenous developments (notably the effects of preference erosion and the increasing importance of NTBs on preferential market access).

The track record of the most recent initiatives, such as the LDC services waiver and the Technology Bank, highlights the critical dependence of ISM effectiveness on viable institutional frameworks (whose establishment may be time-consuming) and concrete operational mandates aligned with LDCs' needs and developmental interests, as well as adequate funding. In the absence of any of these three elements, even the most laudable initiatives are in danger of becoming little more than symbolic, and may have the unintended consequence of overstretching LDCs' scarce institutional and negotiating capacities in the quest for benefits of limited economic value.

Nonetheless, the experience of past LDC graduates suggests that at least some of the existing ISMs, notably preferential market access and ODA, can play an important role in supporting the graduation process. The findings of the UNCTAD secretariat survey whose results are reported in this chapter appear to confirm that current LDCs consider ISMs to be of some value in this context.

The effectiveness of ISMs is also influenced by the capacity of individual LDCs to leverage them strategically in pursuit of their own development and graduation agendas. More successful LDCs have capitalized on preferential trade schemes with their key trade partners to support an incipient process of diversification and sophistication, moving progressively into new products embodying greater value addition. Others, however, have failed to translate existing preference margins into opportunities for export diversification into new products or to new markets. Likewise, utilization of trade-related SDT varies widely across LDCs, depending in large part on their awareness and technical capacities, and development of the necessary productive capacities. The experience of past LDC graduates also highlights the importance of proactive aid management policies and strong ownership of a country's development agenda in enhancing aid effectiveness.

These considerations underline the critical role of LDCs' institutional capacities, as well as their productive capacities, as determinants of the relevance and effectiveness of ISMs. Institutional capacity constraints need to be taken fully into account in the establishment and design of ISMs to enhance LDCs' informed access to them, including through dissemination of information and technical knowledge, and capacity-building among stakeholders. The examples of the EIF and NAPAs underline the potential impact of combining the establishment of ISMs with the provision of related technical assistance.

The international community could undoubtedly do more to improve the terms of LDCs' integration into the world economy and to deliver on its own commitments to support LDCs' development process through more ambitious and relevant ISMs; but country ownership remains essential to graduation with momentum. ISMs should not dictate a country's graduation strategy, but rather provide a set of instruments to facilitate its implementation. Accordingly, LDCs themselves need to exercise strong leadership of their own development processes, defining their own strategic priorities for structural transformation and harnessing dedicated support for it. Greater policy consistency, on the part both of LDCs and of their development partners, is also essential to ensure that the effectiveness of ISMs is not undermined by external factors, such as the outcome of bilateral and regional arrangements, or unlawful practices such as illicit financial flows.

ISM effectiveness depends on viable institutional frameworks, alignment with LDCs' needs and adequate funding...

... but also on LDCs' capacity to leverage them strategically in support of their own development strategies.

The potential contribution of ISMs to graduation highlights the importance of institutional capacities and of countries' ownership of their development strategies.



- There are a growing number of ISMs for LDCs, which vary widely in nature, focus and content. Their relative importance thus differs widely among LDCs according to their structural characteristics and capacities.
- Despite more than doubling in real terms between 2000 and 2010, ODA to LDCs remains only half the target level of 0.15–0.20 per cent of donor GNI to which donors have been committed since the early 1980s, and progress on aid effectiveness commitments remains very uneven.
- While climate finance has increased, the financing of the LDC Fund is inadequate and insecure, and LDCs' access to other funds is limited by the need to compete with better-resourced ODCs.
- Despite WTO members' long-standing commitment to facilitate accession by LDCs, the process remains skewed, and LDCs have continued to face obstacles.
- Preferential market access is one of the most important ISMs for LDCs, and progress in this area has boosted their export revenues significantly; but the benefits are limited by exclusions of sensitive products, small preference margins for non-agricultural commodities, preference erosion and restrictive rules of origin.
- While trade preferences for LDCs have been extended to services under the WTO services waiver, and a substantial number of preferences have been notified, it is too early to assess their significance.
- SDT provisions under WTO agreements vary widely, from non-binding "best-endeavours" language to extended implementation periods and exemptions from commitments; but their overall impact is limited by their relatively narrow scope and obstacles to their utilization.
- Aid-for-Trade disbursements to LDCs have doubled in real terms since 2005, but the IPoA target of increasing their share of ODA has not been fulfilled.
- Technology-related ISMs have had little impact in building LDC technological capacities, but may be enhanced by the operationalization of the Technology Bank, scheduled to begin in 2017.
- In the past graduation cases, ODA generally played a greater role than trade preferences, reflecting the large ODA receipts per capita associated with their small populations, their proactive management of ODA flows, and the nature of their exports (which limited the effects of trade preferences).
- A survey of LDC officials carried out for this Report highlights both the insufficiency of existing ISMs and the importance of institutional constraints in LDCs as an obstacle to their effective use.

Notes

- 1 The Midterm Review of the IPoA was held on 27-29 May 2016 in Antalya, Turkey.
- 2 As mentioned in chapter 1, the concept of graduation from the LDC group was established only in 1991, 20 years after the establishment of the category itself.
- 3 Available at www.un.org/ldcportal.
- 4 A few of the ISMs listed in table 3.1 are also available to some non-LDC developing countries, notably preferential market access under the African Growth and Opportunity Act (AGOA) and the Generalized System of Preferences (GSP).
- 5 In 2012–2014 (the last three years for which data are available) net ODA received accounted for an average of 8 per cent of GNI in the median LDC, with considerable heterogeneity across individual countries. In Tuvalu, for example, it accounted for some 50 per cent of GNI, compared with less than 1 per cent in Angola and Equatorial Guinea.
- 6 The imputed share of multilateral aid is the portion of aid delivered by multilateral institutions which is estimated to have been funded by each donor country. The donor's total ODA is estimated by adding this to its bilateral aid (based on https://www.oecd. org/dac/stats/oecdmethodologyforcalculatingimputedmultilateraloda.htm, accessed October 2016).
- 7 Such an assessment would require computing the grant element for each individual loan, based on its interest rate, maturity and grace period, and aggregating the results for all loans to each recipient country in each year.
- 8 Climate change adaptation is understood by the Intergovernmental Panel on Climate Change (IPCC) as "Adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities", while mitigation is "An anthropogenic intervention to reduce the anthropogenic forcing of the climate system; it includes strategies to reduce greenhouse gas sources and emissions and enhancing greenhouse gas sinks" (Parry et al. 2007, Appendix I: Glossary).
- 9 A more detailed explanation of LDCF operations is provided in UNCTAD (2010:71–74).
- 10 At the time of writing, five LDCs were outside the WTO system, namely Eritrea, Kiribati, Somalia, Timor-Leste and Tuvalu.
- 11 For WTO members, preferential market access is legally covered by the "enabling clause" of the General Agreement on Tariffs and Trade (GATT).
- 12 No further progress on DFQF was reported during the Tenth WTO Ministerial Conference, and the Ministerial Declaration issued at the Conference (WTO, 2015a) does not mention the issue.
- 13 It should be noted that neither AGOA nor the GSP is LDC-specific, in that both also apply to some ODCs.
- 14 Some South-South regional trade agreements also contain SDT provisions for their LDC members. The South Asian Free Trade Area, for example has SDT provisions in favour of Afghanistan, Bangladesh, Bhutan and Nepal.
- 15 While major importing markets generally apply low tariffs to raw materials, it should be noted that tariff escalation continues to be a hindrance to vertical diversification and upgrading of LDC exports, including in the minerals sector (UNECA and AUC, 2013, chapter 3).
- 16 The potential coverage rate is the ratio between covered and dutiable imports. The utilization rate is the ratio between imports receiving preferential treatment and those potentially covered.
- 17 Eligibility for preferential treatment under AGOA is available to sub-Saharan African countries that comply with a series of criteria, including protection of private property, rule of law, elimination of barriers to United States investment, protection of intellectual property, implementation of social policies and human rights protection. The list of eligible countries is revised annually by the United States Government. As of October 2016, 27 of the 34 African LDCs were AGOA-eligible, the exceptions being the Central African Republic, the Democratic Republic of the Congo, Equatorial Guinea, Eritrea, Guinea-Bissau, Somalia and the Sudan (based on http://trade.gov/agoa/eligibility/index.asp, accessed October 2016).
- 18 Australia, Brazil, Canada, Chile, China, the European Union, Hong Kong (China), Iceland, India, Japan, Liechtenstein, Mexico, New Zealand, Norway, the Republic of Korea, Singapore, South Africa, Switzerland, Taiwan Province of China, Thailand, Turkey, the United States and Uruguay.

- 19 This does not include the SDT provisions envisaged in the Agreement on Trade Facilitation as it was not yet in force at the time of writing this Report. The discrepancy between the total number of SDT provisions (145) and the sum of the provisions of each type (157) arises because nine provisions are classified in more than one category.
- 20 SDT provisions in the Trade Facilitation Agreement are not included in the compilation by WTO (WTO, 2013c), which was the latest available at the time of writing.
- 21 Aid for Trade is generally divided into four broad areas: economic infrastructure, productive capacities, trade policy and regulations, and trade-related adjustments.
- 22 It is important to emphasize that data on aid for STI do not include ODA allocations to education, which can make an important long-term contribution to building absorptive capacity.
- 23 Aside from articles 7 and 66.2, the only explicit references to transfer or dissemination of technology in the Agreement are in article 8.2 (which recognises the need for appropriate measures, consistent with the Agreement, "to prevent ... the resort to practices which ... adversely affect the international transfer of technology"); and article 40.1 (which recognizes that "some licensing practices or conditions pertaining to intellectual property rights which restrain competition ... may impede the transfer and dissemination of technology").
- 24 Data from the World Bank, World Development Indicators (accessed 15 September 2016).
- 25 The respondents were Burkina Faso, Burundi, Cambodia, the Central African Republic, the Gambia, Haiti, Nepal and the Niger.
- 26 This confirms the findings of CDP secretariat (2012).

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