



# ACHIEVING THE SUSTAINABLE DEVELOPMENT GOALS

IN THE LEAST DEVELOPED COUNTRIES

*A Compendium of Policy Options*





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# Foreword

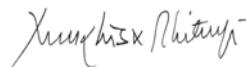
The goals and targets of the 2030 Agenda for Sustainable Development will guide development policy action over the coming years, in the pursuit of a revitalised Global Partnership for Sustainable Development. The eradication of poverty is among the most prominent of the Sustainable Development Goals, and the challenge of poverty eradication is the greatest for the least developed countries, where almost half of the population still lives in extreme poverty. This is why UNCTAD argues that the LDCs is the battleground where the Sustainable Development Goals will be won or lost. At least eighteen of the 169 Sustainable Development Goal targets refer explicitly to the least developed countries, and dozens more are of central importance to their development success. This testifies to the concern of the international community with the development challenges of these countries.

Revitalizing sustained and sustainable economic growth and employment creation in the LDCs, and accelerating the structural transformation of their economies, will be indispensable to achieve the SDGs. In particular, achieving an annual growth rate of 7 per cent as established in the Istanbul Programme of Action for the Least Developed Countries for the Decade 2011-2020 and reiterated under SDG 8, is of paramount importance.

Although external factors have a strong impact on the pace and structure of GDP growth in LDCs, the governments of these countries can influence the process of structural transformation and reduce their external vulnerability by choosing appropriate policies. It is essential that LDCs themselves take the lead in their development policy design and implementation. Over the years, the analytical reports of UNCTAD's Division for Africa, Least Developed Countries and Special Programmes have aimed at supporting LDC governments in this task and have advanced the understanding of all development partners on policy issues that are common to most LDCs.

This Compendium reviews the policy recommendations derived from these analytical reports over the past 14 years. It is primarily addressed to LDC policymakers, as an easily accessible reference, offering a comprehensive and coherent set of policy options which LDC governments may consider in their challenging undertaking of achieving the SDGs. At the same time, the Compendium also serves as an appeal to their development partners for collaborative support at the international level.

Linking the wealth of UNCTAD experience and expertise on least developed countries to the challenges of the SDG imperative that they face today, we hope this Compendium will provide a potent arsenal of useful policy advice for LDC governments in the battle to end poverty.



Mukhisa Kituyi  
Secretary-General of UNCTAD

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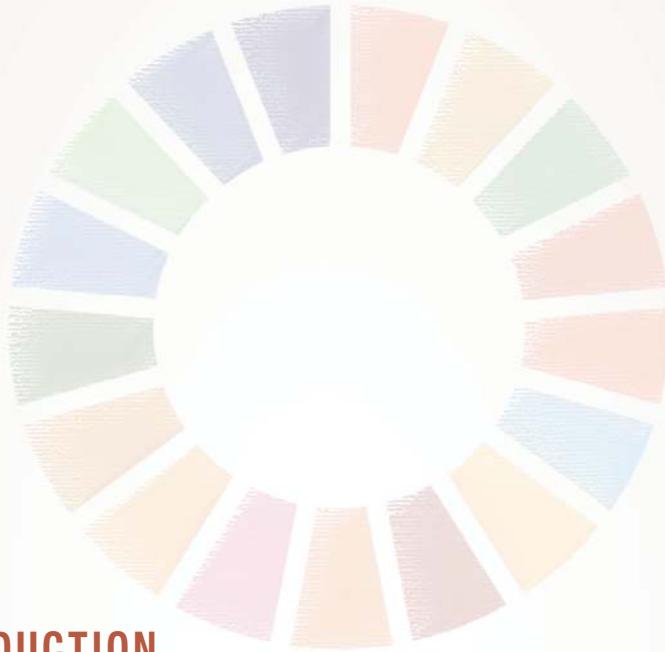
## NOTE

Any references to dollars (\$) are to United States dollars.

# Abbreviations

AEO	Authorized Economic Operator
AfT	Aid for Trade
AGOA	Africa Growth and Opportunity Act
ASEAN	Association of Southeast Asian Nations
ASYCUDA	Automated System for Customs Data
CDM	Clean Development Mechanism
CDP	Committee for Development Policy
COMESA	Common Market for Eastern and Southern Africa
CORFO	Production Development Corporation
CTCN	Climate Technology Centre and Network
DAC	Development Assistance Committee
DFQF	duty-free quota-free
DKN	diaspora knowledge network
DTIS	Diagnostic Trade Integration Study
ECOSOC	United Nations Economic and Social Council
EBA	Everything But Arms
EDAR	<i>Economic Development in Africa Report</i>
EIF	Enhanced Integrated Framework
EPZ	export processing zone
EVI	Economic Vulnerability Index
FDI	foreign direct investment
FFM	finance facilitation mechanism
FTA	free trade agreement
GATS	General Agreement on Trade in Services
GDP	gross domestic product
GNI	gross national income
GSP	Generalized System of Preferences
GSTP	Global System of Trade Preferences
GVC	global value chain
HAI	Human Assets Index
ICT	information and communications technology
IFC	International Finance Corporation
IMF	International Monetary Fund
IPoA	Istanbul Programme of Action for the Least Developed Countries for the Decade 2011-2020

IT	information technology
LDCR	<i>The Least Developed Countries Report</i>
LDCF	Least Developed Country Fund
LDC	least developed country
LLDC	landlocked developing country
MDG	Millennium Development Goal
NAPA	national adaptation plan of action
NEPAD	New Partnership for Africa's Development
NTM	non-tariff measure
ODA	official development assistance
OECD	Organisation for Economic Cooperation and Development
PPP	public-private partnership
R&D	research and development
RTA	regional trade agreement
RTC	rural transformation centre
SCM	(Agreement on) Subsidies and Countervailing Measures
SDG	Sustainable Development Goal
SDT	special and differential treatment
SIDS	small island developing State(s)
SME	small and medium-sized enterprise
SPS	sanitary and phytosanitary measures
STI	science, technology and innovation
SWF	sovereign wealth fund
TBT	technical barriers to trade
TFA	Trade Facilitation Agreement
TNA	technology needs assessment
TNC	transnational corporation
TRIMs	(Agreement on) Trade-Related Investment Measures
TRIPS	(Agreement on) Trade-Related Aspects of Intellectual Property Rights
TVET	technical and vocational education and training
UN-OHRLLS	United Nations Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNIDO	United Nations Industrial Development Organisation
VAT	value-added tax
WIPO	World Intellectual Property Organization
WTO	World Trade Organization



## INTRODUCTION

There are currently 47 least developed countries (LDCs) (box 1). They host just over 1 billion people, approximately 13 per cent of the world's population, but account for only 1.2 per cent of global gross domestic product (GDP). Almost half of the population of LDCs still lives in extreme poverty. At the same time LDCs have the world's fastest population growth rate. The basic causes of persistent and widespread poverty in LDCs are low productivity, and high levels of unemployment and underemployment.

Most LDCs face considerable challenges posed by demographic developments, rising inequality and persistent poverty, combined with accelerated urbanization (*The Least Developed Countries Report* (LDCR) 2013: ch.2). The population living in the present LDCs is projected to almost double to 1.9 billion by 2050. With a soaring youth population, an additional 630 million people (equivalent to about one third of the estimated LDC population in 2050) will have entered the labour market by 2050. Moreover, it is the most vulnerable countries among LDCs that are the most affected by these demographic trends (LDCR 2013: ch.2). Insufficient paid employment creation has the potential to become a source of significant social and political tension and can weaken domestic demand growth.

In sharp contrast with demographic developments, the rate of capital accumulation and technological progress in LDCs is generally slow. As a result, most workers, who, on average, receive only low levels of education and training, must earn a living by using their raw labour, and basic tools and equipment. They also face challenges related to poor infrastructure provision.

### Box 1. The least developed countries

Forty-seven countries are currently designated by the United Nations as “least developed countries” (LDCs). These are: Afghanistan, Angola, Bangladesh, Benin, Bhutan, Burkina Faso, Burundi, Cambodia, the Central African Republic, Chad, the Comoros, the Democratic Republic of the Congo, Djibouti, Eritrea, Ethiopia, the Gambia, Guinea, Guinea-Bissau, Haiti, Kiribati, the Lao People’s Democratic Republic, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mozambique, Myanmar, Nepal, the Niger, Rwanda, Sao Tome and Principe, Senegal, Sierra Leone, Solomon Islands, Somalia, South Sudan, the Sudan, Timor-Leste, Togo, Tuvalu, Uganda, the United Republic of Tanzania, Vanuatu, Yemen and Zambia.

The list of LDCs is reviewed every three years by the Committee for Development Policy (CDP), a group of independent experts reporting to the United Nations Economic and Social Council (ECOSOC). The CDP, in its report to ECOSOC, may recommend countries for addition to or graduation from the list of LDCs (for further information, see Box 2).

In most LDCs the growing labour force has mostly found employment in agriculture, largely in connection with the cultivation of additional land (LDCR 2013: ch.3). However, with further population growth, more and more young people are seeking work opportunities outside of agriculture. Nascent manufacturing activities and services offer new opportunities for productive employment, mostly in urban centres, but these employment opportunities are not expanding fast enough to meet the growing demand for jobs. As a result, poverty in LDCs has two faces. One is low-productivity, small-scale agriculture and the other is low-productivity, urban, informal-sector activities in petty trade and services. This situation has led to large-scale emigration.

If this situation persists, poverty reduction will be very slow, despite accelerated output growth. In addition, the link between output growth and employment creation needs to be strengthened. It was only during the period of relatively fast output growth from 2001 - 2008, that average annual LDC employment growth (at about 3.4 per cent) exceeded the rate of population growth (LDCR 2013, ch.3). Even during this period, however, employment growth was less than half of the growth rate of real GDP (7.2 per cent).

It is therefore alarming that after 2014, GDP growth in LDCs has fallen to an average of less than 5 per cent (UNCTAD 2018), while average annual growth of at least 7 per cent is recommended by the Istanbul Programme of Action for the Least Developed Countries for the Decade 2011-2020 (IPoA) (United Nations 2011), and targeted by the 2030 Agenda for Sustainable Development (target 8.1 under the Sustainable Development Goals (SDGs)).

Moreover, LDCs are characterized by chronic current account deficits and remain highly dependent on external finance. Even in times of record economic growth, during the

first decade of this millennium, many LDCs continued to rely on external resources to finance a majority of their investments and part of their consumption (LDCR 2010: ch.1; UNCTAD 2018).

Together with the IPoA, the broader 2030 Agenda for Sustainable Development adopted by the United Nations General Assembly (United Nations 2015a) provides the main reference for development policies in LDCs. It sets guidelines and targets for all countries, while at the same time emphasizing that “*each country’s policy space and leadership to implement policies for poverty eradication and sustainable development*” be respected (United Nations 2015a: para. 63).

It is against this background that this Compendium has been prepared. It identifies possible types of instruments in various policy areas that may foster development progress, enhance growth and support poverty eradication and economic structural transformation. It also suggests several elements to strengthen international support measures for LDCs within the global economic system.

The Compendium does not intend to provide a blueprint for policy intervention in LDCs. Country-specific circumstances differ considerably among LDCs and experience from successful development episodes shows that a variety of policies and institutional arrangements may be successful in supporting economic development in poor countries. Although LDCs have many challenges in common, each LDC government must take a pragmatic approach that involves a combination of policy measures tailored to country-specific conditions (LDCR 2014: ch.5). The key constraints for sustained and inclusive economic development must be individually identified in each country. Similarly, policies to overcome these constraints must be designed at the country level, taking into account different historical, cultural and structural circumstances. Government policy makers must also be aware that the same development constraints may require different actions in different countries.

This Compendium discusses those policy challenges that are typical for most LDCs and summarizes the main policy options derived from the analytical work carried out by the United Nations Conference on Trade and Development (UNCTAD), Division for Africa, Least Developed Countries and Special Programmes. It synthesizes the findings and policy recommendations published in its flagship documents since 2004. Specifically, these are the annual *The Least Developed Countries Report* (LDCR); the annual *Economic Development in Africa Report* (EDAR) and various *Diagnostic Trade Integration Study Updates* (DTIS) prepared by the UNCTAD secretariat in collaboration with governments of some LDCs in the context of the Enhanced Integrated Framework for Trade-related Assistance for the Least Developed Countries (EIF)<sup>1</sup>. In addition, the

Compendium draws on two policy handbooks that stem from the analytical work of the Division, namely, *Enhancing the Role of Domestic Financial Resources in Africa's Development* (UNCTAD 2009) on options for financial policies and the *Handbook on Mainstreaming Trade - Making Trade Work for the Least Developed Countries* (UNCTAD 2016a) for trade-related policies.

The Compendium is structured as follows. Chapter I discusses the overall framework for development policies in LDCs. It places the challenge of designing and effectively implementing development strategies for LDCs in the broader context of global development issues. Of special relevance in this context are the 2030 Agenda for Sustainable Development (United Nations 2015a), and the Istanbul Programme of Action for the Least Developed Countries for the Decade 2011-2020 (United Nations 2011). These frameworks are all based on interaction among the three pillars of sustainable development: Social, economic and environmental development. The policies to serve the three pillars are complementary and interdependent. Both the IPoA and the 2030 Agenda are *“based on commitments, accountability and partnership between least developed countries and their development partners to undertake concrete actions in a number of interlinked areas. This requires supportive and integrated policies across a wide range of economic, social and environmental issues”* (United Nations 2011: para.30).

The chapter also describes the framework that has guided UNCTAD's policy analysis and recommendations for LDCs over the past 15 years. This framework is based on the understanding that their social, economic and environmental development towards achieving the SDGs and their graduation from LDC status requires the building of productive capacities and structural transformation.

One of the main requirements for prosperity in all countries is a stable macroeconomic environment. Chapter II takes up the main components of development-friendly macroeconomic policies and explains the relevance of certain macroeconomic instruments for the building of productive capacities and structural transformation. It discusses possible conflicts between the objectives of accelerating development, on the one hand, and macroeconomic stabilization, on the other.

In addition to macroeconomic and financial policies, several other types influence the building of productive capacities in all or most sectors of economic activity. The main elements of such horizontal policies are outlined in Chapter III. By definition, these horizontal policies overlap with policies in support of specific sectors and sub-sectors of economic activity.

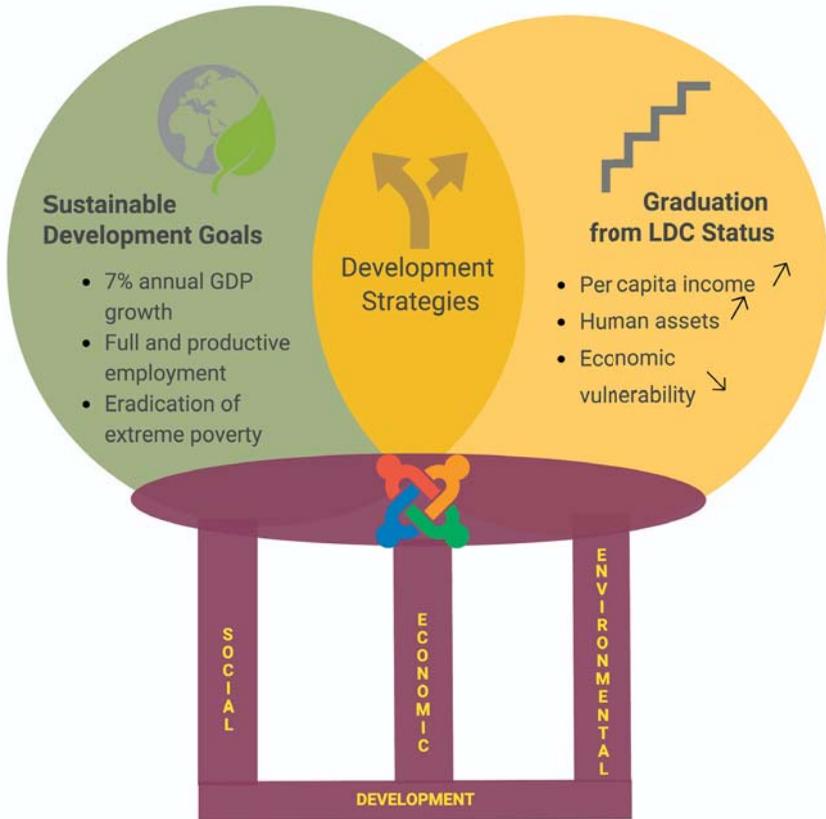
Structural transformation of LDCs at their current stage of development must occur both within and across broad economic sectors. Upgrading and diversifying agriculture and non-farm rural activities are important elements of such transformation. Yet, the main structural change required to set LDCs on a higher growth path is a reduction of the heavy dependence of national income, employment and foreign currency earnings on primary commodities. This Compendium discusses one way to reduce this dependency through the expansion of the share of manufacturing industries and modern services in countries' economic structures. Policies to support the creation and/or acceleration of productive capacities in manufacturing activities with a high potential for productivity and value-added growth are therefore specifically addressed in Chapter IV. Chapter V elaborates on the policy options in the context of structural transformation that are of specific relevance for agriculture, energy supply and services.

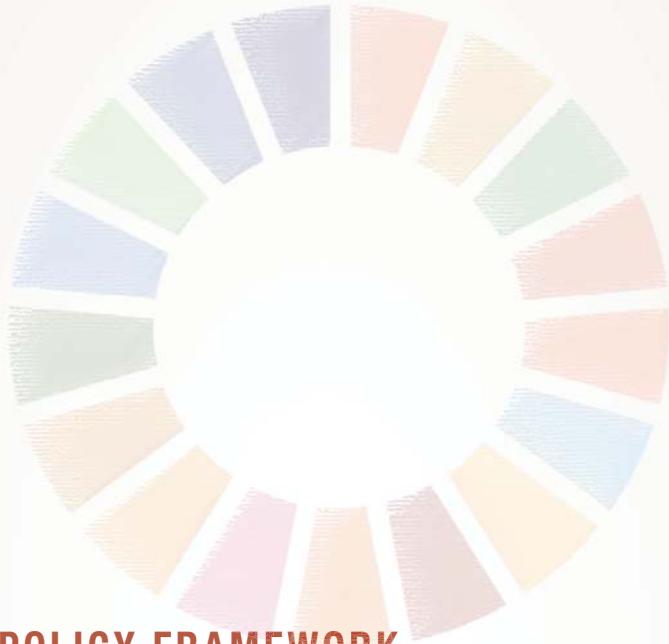
Given the strong influence that international developments in trade and finance can have on economic development in LDCs, policies in these areas bring both risks and opportunities for structural transformation. Chapter VI discusses policies that LDC governments may consider in order to take advantage of the opportunities arising from trade and finance, while simultaneously managing the risks.

Finally, Chapter VII turns to international policies in support of the expansion and upgrading of productive capacities and structural transformation in LDCs. The implementation of most policy options recommended in this Compendium implies the need for additional financial efforts on the part of LDCs, as well as additional support from LDC development partners and the international community, as stipulated in SDG 17. This final chapter develops a number of policy options for the international community on how best to support LDCs in their quest for achieving the SDGs.

The 2030 Agenda concerns all countries, but some of the SDGs and their related targets are particularly relevant for LDCs. Indeed, some targets explicitly mention this group of countries. Each chapter of this Compendium identifies these specific SDG targets and the respective policy challenges LDCs face in achieving them.

At the end of each chapter, a table summarizes the targeted policy options available to LDCs. Considerations and recommendations in one area of policymaking often overlap or are interrelated with recommendations in other areas. For ease of reference, this Compendium contains numerous cross-references, indicated by an arrow (→ or ←), followed by the numbers of the respective chapter and sections that policy makers can consult for further guidance.





## I. THE POLICY FRAMEWORK

### A. Broad development policy goals for LDCs

#### 1. The Sustainable Development Goals and LDC development strategies

Accelerated economic development in the least developed countries (LDCs) is at the centre of efforts to achieve the Sustainable Development Goals (SDGs). Not only is the incidence of poverty and malnutrition the greatest in this group of countries, but the selection and implementation of effective policies to overcome these problems are also the most challenging there. The SDGs comprise several goals which explicitly refer to income growth, employment creation and industrialization. The achievement of all other goals also depends on progress made on the economic front.

Some SDGs are important reference points for the design of national development strategies for LDCs. These are:

- End poverty everywhere (SDG 1);
- End hunger, achieve food security and improved nutrition and promote sustainable agriculture (SDG 2);
- Ensure access to affordable, reliable, sustainable and modern energy for all (SDG 7);
- Promote sustained and sustainable economic growth, full and productive employment and decent work for all (SDG 8);

- Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation (SDG 9);
- Reduce inequality within and among countries (SDG 10);
- Combat climate change (SDG 13); and
- Strengthen the means of implementation (SDG 17).



LDCs have the highest shares of population living in extreme poverty. The fundamental goal of ending poverty, with the specific target to eradicate extreme poverty<sup>2</sup> by 2030, must be the central reference of policy making in LDCs. Achieving this goal matters for improving welfare, sustaining livelihoods and enabling peace. It also will strengthen

domestic growth and promote structural transformation in LDCs.

Thanks to substantial increases in social spending, poverty has been reduced almost everywhere since 2000, the year when the international community agreed on the Millennium Development Goals (MDGs). Yet, for sustained and sustainable poverty reduction, income transfers and other forms of public or charitable social spending must be subsidiary to measures that tackle the root causes of the problem, i.e. the lack of productive and decently paid jobs. This means that output growth and employment creation in LDCs must be accelerated considerably.



Enhancing agricultural production remains an indispensable element of the development strategy of LDCs. The scope for raising agricultural output and productivity is considerable and leveraging this will help to ensure food security, raise agricultural exports and increase the quantity and quality of raw materials available for domestic manufacturing.

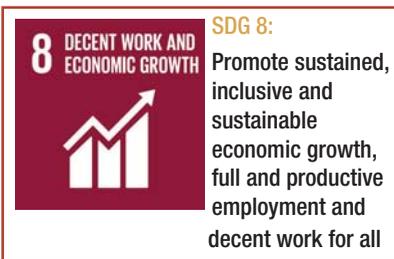
Moreover, innovative agricultural management, including climate-smart agriculture (FAO 2018), will also be necessary to meet the new challenge of adaptation to the impacts of climate change. Yet, a rapid expansion of non-agricultural activities must also be considered as the central pillar of sustainable development strategies.



Energy provision is one of the priority areas of the Istanbul Plan of Action (IPoA), as inadequate access to energy seriously constrains economic growth and sustainable development in the majority of LDCs. 62 per cent of people in LDCs lack access to electricity and even more do not have access to modern fuels for cooking and heating. While, energy deficiency

is most pronounced in rural areas, it is also an obstacle to the expansion of economic activities in the manufacturing and service sectors and to greater participation in international trade. The energy sector contributes directly to gross domestic product (GDP) by generating value added, jobs and, in some LDCs, exports. Energy is also indispensable for the adoption of technological innovations and productivity growth in other sectors.

Achieving SDG 7 will require increased power generation, extended distribution infrastructure and upgraded technology to enable the supply of modern and sustainable energy, including an increased share of electricity generated from renewable energy sources.



Achieving virtually all the SDGs requires economic growth at a pace that is significantly faster than in the past. From 2010 to 2016, average annual GDP growth in LDCs was 4.8 per cent, considerably below the explicit SDG target of 7 per cent. Accordingly, average annual growth per capita in LDCs fell from 5 per cent in 2002-2008, to 2.6 per cent in 2012-2017, a pace far too slow to reach the

ambitious SDG targets, let alone catch up with more advanced economies (UNCTAD 2018). Therefore, sound national development strategies must be strongly geared towards a sustained acceleration of output growth, combining productivity increases with the creation of productive employment opportunities and an expansion of supply capacities with demand growth.

As in the case of energy, improvements in water, transport and telecommunications infrastructure can directly improve living conditions. Such improvements are also a prerequisite for the viability and profitability of productive activities in practically all sectors of the economy. As a complement to private investment in productive capacities,



they play a key role in the process of industrialization. Diversification of the production structure, technological upgrading and productivity growth also depend on innovation in the design of products and the application of new production techniques in LDC economies. Policies aimed at accelerating the progresses towards a higher share of the manufacturing industry in income and

employment generation must therefore be complemented by measures to ensure that benefits accrue to all groups of society and that the modes of production and consumption are environmentally sustainable and climate friendly.



Despite considerable progress in combatting poverty in low- and middle-income countries since the early 1990s, disparities in household income between the highest and the lowest income groups have widened. However, in Africa, the continent with the largest number of LDCs, these disparities have shrunk. Still, inequality in Africa is higher than the global

average (UNDP 2013). Similar to reducing poverty, reducing income inequality within each country is both an objective and a means to strengthen the domestic forces of growth. Faster growth provides more leeway for policies that influence income distribution, with an aim to progressively achieve greater equality within countries.

Average real per capita income in LDCs is only about 2 per cent of that in developed countries and about 21 per cent of the average per capita income in the other developing countries, excluding China. The gaps have narrowed somewhat since 2005, mainly due to growth in the Asian LDCs (UNCTAD 2018). Significant further reductions will only be possible if LDCs can move to a substantially higher growth path and increase the net earnings from their participation in international trade.



The challenges posed by climate change are especially pressing for LDCs and small island developing States (SIDS). Like other developing countries, these economies are obliged to integrate responses to climate change into their national development strategies, but they are more heavily affected than others by the

impacts of climate change. The principle of common but differentiated responsibility for combatting climate change is of particular relevance for these countries. Whereas developed countries must undertake major efforts for climate change mitigation, the challenge for LDCs is primarily to take effective measures to strengthen their resilience against the inevitable impacts of climate change. The 2030 Development Agenda clearly recognizes the responsibility of developed countries for taking the lead in climate change mitigation and for strengthening the capacity of LDCs, landlocked developing countries (LLDCs) and SIDS to adapt to the economic and social effects of climate change.



The SDGs are extremely ambitious, especially at a time when climate change poses additional challenges. Achieving them requires economic progress at a pace similar to the performance of the most successful newly industrializing countries over the past 50 years. Indeed, the speed of poverty reduction will have to be even faster than it has been in China. This illustrates the scope of the challenge for each of the

LDCs and for the international community.

With the 2030 Development Agenda, the international community has acknowledged that LDCs can achieve the SDGs only with the strengthened financial and technical support of more advanced countries. Therefore, developed countries are called upon to fully implement their official development assistance (ODA) commitments, including raising their ODA to the target range of 0.15 to 0.20 per cent of their gross national income (GNI). They are encouraged to consider setting their targets even higher.

## 2. Economic, social and environmental pillars of sustainable development

Human development, with improvements in the living conditions of all population groups, is the ultimate objective of all policy efforts directed at accelerating the pace of development in the poorest countries. The wording of the SDGs makes it clear that to be sustainable, the development process must be based on all three pillars of sustainable development, which interact and complement each other. These are: Social, economic and environmental development (*The Least Developed Countries Report* (LDCR) 2016: ch.3).

*Social sustainability* implies that peace, social justice and inclusiveness are indispensable for sustained economic progress and lasting development. Social disruption resulting from excessive discrepancies in the standards of living of different segments of the population — including poverty and all its symptoms — could eventually bring economic progress to a halt and jeopardize the quality of the natural environment.

*Environmental sustainability* implies that the quality and protection of the natural environment, as well as successful adaptation to climate change, influence the scope for long-term social progress and economic development. Environmental degradation, waste of non-renewable natural resources and the various impacts of climate change have a direct effect on living conditions. They also raise the risk of social friction and reduce the scope for economic growth and the allocation of public finances.

*Economic sustainability* implies that macroeconomic and financial stability, as well as the prevention of balance-of-payments crises are a basic requirement for sustained economic and social development. It also implies that human and financial resources must be used in a way that ensures continuous and lasting improvements in standards of living. Inappropriate consumption and production patterns, and waste of human, natural and financial resources compromise the quality of the natural environment and jeopardize peace.

The complementarity of social sustainability and economic development results from the fact that human and social objectives cannot be pursued in isolation. The eradication of poverty and a better provision of food, health care and education are important human development objectives in their own right, but the challenges of poverty cannot be solved only by the use of social income transfers and the provision of public services (LDCR 2014: ch.3). While these tools are indispensable in instances of extreme poverty and crisis situations, they only address the symptoms. To combat poverty at its roots, it is crucial to focus development strategies on the creation of productive employment possibilities for the poor by expanding productive capacities in LDCs (LDCR 2004: Part Two, ch.1). Greater purchasing power of the lowest income groups then supports economic development dynamics by strengthening domestic demand, which, in turn, improves the willingness of firms to invest in additional productive capacities. Improved economic performance also increases the resources available to the public sector to spend on poverty reduction, health and education.

The economic and environmental pillars of development have various complementary aspects. First, improved access to and better-quality energy and water is crucial for raising overall living standards and increasing production levels in LDCs. It is equally important to promote efficiency and foster environmentally sustainable practices in the use of these resources. In the case of energy, this requires a switch to renewable sources.

Second, in agriculture, forestry and fisheries, all activities that provide a major source of income for most LDCs, sustainability hinges on the establishment and maintenance

of an ecological balance that allows for the appropriate regeneration of the underlying natural resources and protect biodiversity.

Third, a development trajectory that is sustainable in the long run requires the careful management of non-renewable resources. To ensure long-term sustainability, productive activities in all sectors must be organized in a way that reduces resource-intensity and supports economic growth (*Economic Development in Africa Report (EDAR) 2012*). For LDCs rich in natural resources, rents from the extraction of minerals and hydrocarbons can serve as a basis for building the productive capacities to develop other economic activities. However, this requires that the depletion of natural capital, rather than fuelling the consumption of mostly imported goods, must be translated into the creation of physical, financial and human capital that creates productive capacities for future generations.

### 3. Graduation from LDC status

Efforts to achieve the SDGs will eventually enable development indicators in a growing number of LDCs to improve beyond the thresholds established for LDC criteria. Graduation is a milestone in a long-term socioeconomic development process. However, meeting the graduation criteria does not necessarily mean that a country has achieved a level of economic development momentum that can and will be sustained in the future. It only marks the end of an initial stage of development, at which point LDC-specific international support measures are phased out (LDCR 2016).

LDCs should therefore develop their productive capacities in such a way that enables them to achieve their graduation with momentum. This means giving the highest priority to structural transformation by shifting production to higher-value-added products and sectors, upgrading technology, diversifying the economy and raising productivity.

The graduation-with-momentum perspective entails targeting longer-term development and its underlying processes, rather than focusing narrowly on the graduation criteria and adopting measures aimed at achieving statistical eligibility for graduation (box 2).

## Box 2. Graduation criteria

Graduation from LDC status depends on a recommendation by the Committee for Development Policy (CDP), a group of independent experts reporting to the United Nations Economic and Social Council (ECOSOC). This recommendation is based on a review of three criteria:

- (a) *Per-capita income*: GNI per capita exceeds \$1,230 in two consecutive triennial reviews of the criteria.
- (b) *The Human Assets Index (HAI)*: This index is composed of:
  - (i) a health subindex measuring the under-five mortality rate, the percentage of population that is undernourished and the maternal mortality ratio; and
  - (ii) an education subindex measuring the gross secondary school enrolment ratio and the adult literacy rate.
- (c) *The Economic Vulnerability Index (EVI)*: This index is composed of measures of:
  - (i) population;
  - (ii) remoteness;
  - (iii) merchandise export concentration;
  - (iv) the share of agriculture, hunting, forestry and fishing in GDP;
  - (v) the share of population in low-lying coastal zones;
  - (vi) the instability of goods and services exports;
  - (vii) victims of natural disasters; and
  - (viii) the instability of agricultural production.

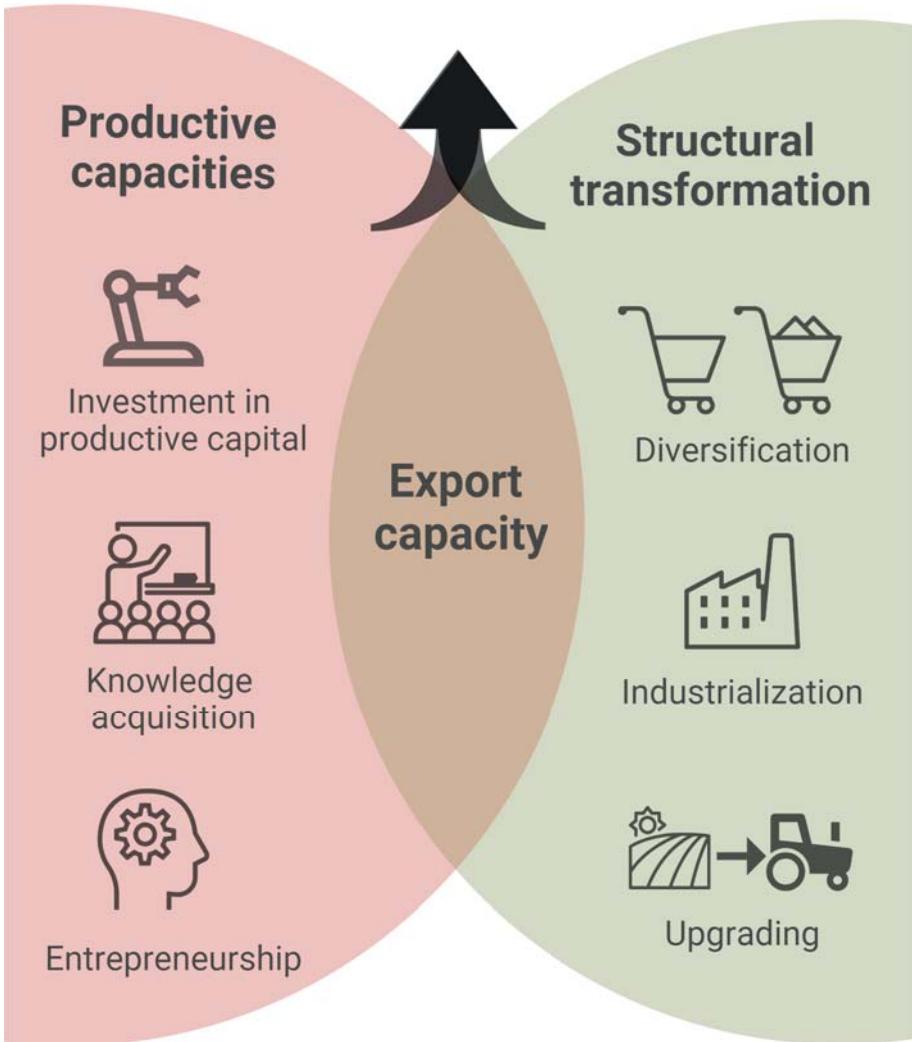
A country will normally qualify for graduation from LDC status if it has met the graduation thresholds under at least two of the three criteria in at least two consecutive triennial reviews. However, if the three-year average per-capita GNI of an LDC has risen to a level at least double the graduation threshold in two triennial reviews, and if this performance is considered to be durable, the country will be deemed eligible for graduation regardless of its score under the other two criteria. This rule is commonly referred to as the “income-only” graduation rule.

While fulfilling these criteria is a pre-condition for graduation, the decision on graduation also depends on an evaluation of the specific circumstances of each country, especially its vulnerability and the likely impact resulting from the loss of LDC treatment. (For further information on the formal aspects of inclusion of countries in the LDC category and on graduation from LDC status, see United Nations (2018)).

 **Productivity growth**



 **Employment creation**



## B. Strategic orientations

### 1. A production- and employment-oriented approach to achieving the SDGs

Several targets under the SDGs explicitly refer to structural transformation, industrialization, technological upgrading, economic diversification and productivity growth. This reflects a production- and employment-oriented approach to poverty reduction, and to the achievement of the social and human development-related SDGs. To achieve the SDGs and the objectives of the Istanbul Programme of Action for the Least Developed Countries (IPoA) (United Nations 2011), LDCs must accelerate output, per capita income and employment creation for a fast-growing population. In parallel, they must reduce the dependence of income growth and foreign exchange earnings on the production and export of primary commodities (LDCR 2016: ch.4). Progress towards these objectives is largely determined by the skills, level of entrepreneurship, capital investment and innovation capacity of private actors. It is also determined by the effectiveness of public policies in supporting productive activities. A sustainable development strategy must build on all of these elements.

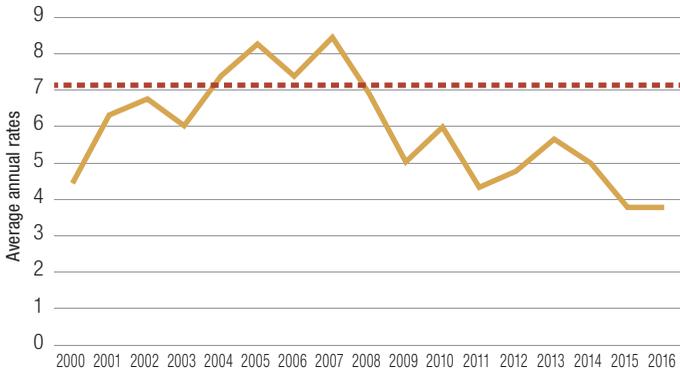
The economic and social situation in LDCs is, in large measure, an outcome of past policy choices. The development model that has been pursued in most LDCs over several decades sought to increase the efficiency of resource allocation by market liberalization, both domestically and externally, and to achieve faster income growth through an expansion of export activities. This approach has often been challenging. Deregulation and market liberalization rarely led to stronger capital accumulation, higher productivity and faster growth because of serious market failures. Exports often did not increase as expected, because insufficient attention was given to the need for enhanced capital accumulation and skills upgrading to enable higher export capacity. Moreover, even in countries where export earnings did increase, domestic incomes and employment, a precondition for inclusive development, often did not expand at a similar rate (LDCR 2016: ch.5).

GDP growth in LDCs accelerated from around 4.5 per cent in 2000 to more than 8 per cent in 2007. But this was due primarily to the boom in international commodity prices. After 2007, average GDP growth in LDCs fell and was below 4 per cent in 2015 and 2016, before somewhat recovering in 2017 (chart 1). Against the background of the 2030 Sustainable Development Agenda, the current growth trajectory is a reason for serious concern, especially its annual growth target of 7 per cent and the goal of eradicating extreme poverty by 2030 (United Nations 2017a: 9).

Chart 1

**Average annual GDP growth in LDCs, 2000–2016**

(per cent)



Source: UNCTADStat.

Reaching and sustaining output growth at the required level will not be possible without major breakthroughs in the expansion of productive capacities, economic diversification and technological upgrading. Policies to support this approach are characterized by three elements:

- A focus on production and productivity growth;
- A strong link between output growth and employment creation (LDCR 2013: ch.5); and
- A developmental state that engages in policies to support market forces, stimulates private economic activity and guides it to outcomes that benefit the national economy as a whole and all parts of society.

## 2. The concept of productive capacities

In the context of economic development in the LDCs, productive capacities as defined by UNCTAD, have three components (LDCR 2006: Part Two, ch.1):

- *Productive resources*: These are natural resources, human resources, financial resources, and physical capital;
- *Entrepreneurial capabilities*: These include core competencies and technological capabilities; and

- *Production linkages*: These are backward and forward linkages, flows of information and exchange of experience, resource flows (human capital and financial capital), territorial production clusters, global value chains (GVCs), links between foreign direct investment (FDI) and domestic entrepreneurs, and links between large firms and small and medium-sized enterprises (SMEs).

The combination and dynamic interaction of these elements determine a country's capacity to produce goods and services, to generate sufficient employment opportunities for a growing population, and to integrate successfully into international trade. It is primarily through developing their productive capacities in manufacturing activities that the LDCs will be able to reduce their dependence on the production and export of primary commodities. The development of productive capacities is also necessary to reduce aid dependence, to secure the fiscal basis for developmental governance and to ensure effective sovereignty (LDCR 2010: ch.3).

Productive capacities within a country develop through three closely interrelated processes (LDCR 2006: Part Two, ch.1):

- *Capital accumulation*, i.e. the process of maintaining and increasing stocks of natural, human and physical capital through investment;
- *Technological progress*, i.e. the process of introducing new goods and services, new or improved methods, equipment or skills to produce goods and services and new and improved forms of organizing production through innovation; and
- *Structural transformation*, i.e. the change in the inter- and intra-sectoral composition of production, in the pattern of inter- and intra-sectoral linkages and in the pattern of linkages amongst enterprises. Such change often occurs through investment and innovation and the emerging production structure in turn influences the potential for further investment and innovation.

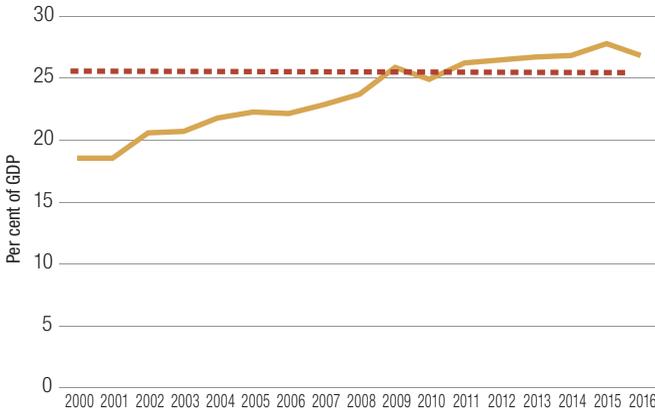
The challenge for policymakers is to start and sustain a virtuous circle in which these processes reinforce each other. The most critical variable in this context is investment in machinery and equipment, which determines not only the overall supply capacity, but also embodies new technology. Through its allocation across sectors and sub sectors and as a complement to human skills, capital investment sets the pace of structural transformation.

To achieve an annual GDP growth rate of 7 per cent, the ratio of investment to GDP would need to continue to remain at the current levels, which are above the threshold of 25 per cent, as stipulated in the Brussels Programme of Action for 2000-2010 (UN-OHRLLS 2006). During the period 2010-2016, gross fixed capital formation in LDCs accounted for 26.5 per cent of GDP on average (chart 2). In the past, low investment

## Chart 2

### Gross fixed capital formation in LDCs

(Per cent of GDP, group average)



Source: UNCTADStat.

rates in LDCs have delayed the industrialization process and reduced the scope for employment creation. They are also responsible for low productivity in agriculture. To some extent they may reflect insufficient entrepreneurship and limited market opportunities that would make productive investment commercially viable. However, the main constraints in most LDCs are a lack of complementary infrastructure and limited possibilities for long-term investment financing (LDCR 2014: ch.6). Given the need for strong investment, policies in all areas must be geared towards improving these determinants for capital investment.

### 3. Width and depth of structural transformation

Structural transformation implies both productivity increases in traditional economic activities, as well as a change in the inter- and intra-sectoral composition of production, value added, and export earnings (LDCR 2014: ch.4). For LDCs, this primarily means a shift in the composition of total output from primary activities to manufacturing, although the specific circumstances of some countries may be more favourable to an expansion of higher value-added activities within the primary sector or an increase in the share of modern services. Structural transformation also involves changes in the extent and ways in which the sectoral, subsectoral, and business activities of enterprises are linked. Changes in these patterns arise predominantly from investment decisions, and from knowledge and skills acquisition, and innovation in products and production techniques that are new to LDCs.

The fastest and most sustained economic growth has occurred in developing countries where manufacturing activities have expanded most rapidly. Although there is no automatic link between structural transformation and growth in LDCs, these processes are closely interrelated (LDCR 2006: Part Two, ch.1; LDCR 2014: ch.4). On the one hand, shifting economic activity to higher productivity sectors raises the growth potential. On the other, structural change is easier to achieve in a growing economy, where it is brought about by differential growth rates in sectors and subsectors and does not necessarily imply the absolute shrinking of traditional activities. This is relevant for most LDCs, where agricultural production must continue to grow in absolute terms, while its share in total GDP must decline in favour of manufacturing activities and modern services where output growth is even faster (LDCR 2006: Part Two, ch.3; LDCR 2015: ch.1).

In many LDCs, there is a considerable scope for increasing manufacturing output by raising the utilization rate of existing capacities. It is therefore essential to address the various factors that constrain manufacturing firms in the full use of their productive capacities (Diagnostic Trade Integration Study (DTIS) Ethiopia). Furthermore, rapid increases in overall productivity, manufacturing value added, and the shares of manufacturing in GDP and merchandise exports require an increased rate of capital formation and an upgrading of skills and technological intensity in production (LDCR 2006: Part Two, ch.8).

An additional challenge for LDCs is to ensure that productivity growth is not at the expense of employment creation. This means that as the structure of production shifts towards more skill- and technology-intensive forms of production in higher value-added activities, overall output growth must exceed the combined growth of productivity and the labour force.

#### **4. The main challenges to building productive capacities and structural transformation**

The critical constraints to a faster expansion of productive capacities may differ across countries, but in all LDCs, structural transformation depends on the existence of a virtuous circle in which enhanced productive capacities enable the generation of higher income and employment. This will then result in an expansion of domestic demand and together with foreign demand, will strengthen the motivation of firms to invest in additional productive capacities with gradually higher skills and technological intensity (LDCR 2006: Part Two, ch.1; LDCR 2013: ch.4). To initiate and sustain such a virtuous circle, LDC governments are faced with five broad challenges:

**1. The capital accumulation challenge:** The willingness of firms in LDCs to invest in the upgrading of their production capacities must be strengthened. Moreover, the conditions that enable private investment projects and the possibilities to finance them must be considerably improved. Both the motivation and the ability to invest can be influenced by fiscal instruments, targeted public infrastructure investments and measures that facilitate long-term financing. This is important for support to manufacturing activities with a high value-added content, and agriculture and sectors providing industrial services (DTIS Ethiopia). In some industries, with appropriate policies, FDI can make a considerable contribution to productive capacity building (LDCR 2014: ch.6; LDCR 2016: ch.5) (→ ch.IV.C; → ch.VI.A).

**2. The financing challenge:** The effectiveness of the financial sector plays a central role in economic activity and growth in the productive sectors. To the extent that they exist, stock and private bond markets are very small in LDCs. The assets traded are mainly government bonds. The development of a meaningful market for private securities in LDCs takes considerable time and depends on the expansion of the corporate sector in both the number and size of firms. Therefore, the immediate challenge is to widen the scope for financing productive investments from retained profits and to enhance credit provision by the banking system (→ ch.II.D).

**3. The knowledge accumulation challenge:** Structural transformation depends on the acquisition of new skills and technological capabilities alongside capital accumulation. Efforts must be increased to enhance technical skills and managerial know-how by improving the quality of education at all levels, including vocational training and learning by doing. To the extent that production technology is embodied in imported capital goods, it is necessary to upgrade the accompanying technical skills of the labour force for its use, maintenance and adaptation and, ultimately, to spur local innovation. (→ ch.III.X).

**4. The employment challenge:** Combining faster output growth with the creation of employment opportunities is critical for inclusive development and the expansion of domestic consumer demand because work is the most dignified and sustainable way out of poverty (LDCR 2013: ch.4 and ch.5) (→ ch.III.X). The employment challenge for LDCs is exacerbated by demographic developments, especially the “youth bulge” (LDCR 2013: ch.2). In most LDCs, the youth unemployment rate is much higher than the overall unemployment rate and, in many cases, almost twice as high.

When young people in LDCs do find work, it is typically in the informal sector where wages and productivity are low, jobs lack security and the scope for developing skills is quite limited. With a projected surge of the youth population, an additional 630 million

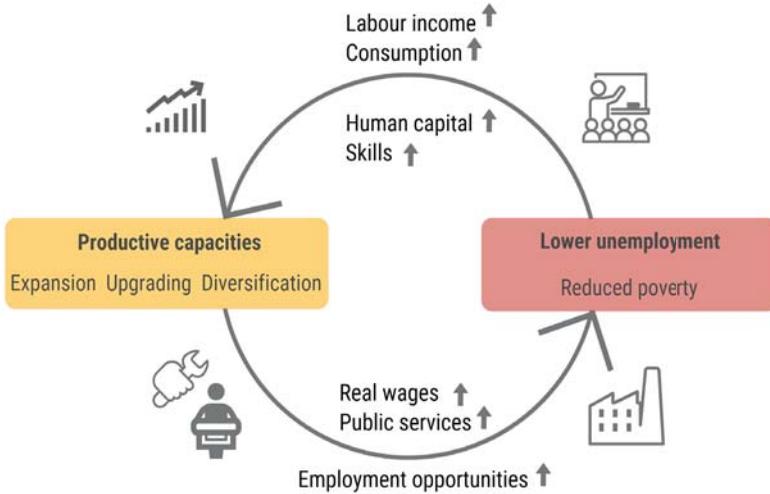
people (equivalent to more than one third of the total LDC population) will have entered the labour market by 2050. This involves a substantial shift in the age structure of the population, which can also be viewed as a “demographic dividend” (UNFPA 2016). If the growing LDC youth population could be equipped with the necessary skills and education to obtain decent jobs, it could become a major force of production and a significant driver of local consumption and investment (LDCR 2013: ch.2).

Total employment can expand only when output and the demand for labour rise faster than labour productivity. Thus, growth is necessary, but not a sufficient condition for employment creation and inclusive development. Policies with a specific focus on employment creation are necessary to avoid an increase in unemployment as a result of productivity growth. They are also needed to ensure that workers are not pushed out of sectors with fast productivity growth and into sectors with low or stagnant productivity, mainly traditional family farming or informal microenterprises in urban centres (LDCR 2013: ch.4).

**5. The demand growth challenge:** Clearly, domestic demand in LDCs is constrained by limited domestic purchasing power, unequal income distribution and widespread poverty. However, the expansion of domestic demand is critical for economic growth, even in countries that are widely open to international trade (LDCR 2006: ch.7). Stimulating and stabilizing domestic demand for non-tradables or domestically produced or producible goods is indispensable for an inclusive and poverty-reducing process of economic development. Because the share of agriculture in GDP and total employment is high in most LDCs, a major challenge is to establish a virtuous circle, in which a demand stimulus from agricultural income growth generates investment, entrepreneurship and employment in non-agricultural activities (→ ch.VA).

External demand allows for the export of primary commodities for which there is no domestic demand. It is also critical for industrialization since economies of scale in manufacturing activities are important for productivity and profitability. The availability of cheap labour is considered to be a comparative advantage of poor countries that favours the emergence of labour-intensive manufacturing activities. However, building on the labour cost advantage to accelerate structural transformation leads to a policy dilemma. Low wages are an important factor for the international competitiveness of domestic producers, while higher wages are necessary to improve a country's income distribution in favour of low income groups and increase domestic demand. It is therefore essential that governments do not encourage a race to the bottom with regard to labour costs. Rather, they must find ways to ensure that productivity gains translate, at least partly, into higher wages.

**Building productive capacities and reducing poverty: a virtuous circle**



**5. Trade and FDI as instruments for structural transformation**

**5.1 Instrumentalizing trade to advance structural transformation**

Integration into the international economy through both trade and financial relations can be a powerful instrument to advance structural transformation. The issue for policymakers is not whether, but how to pursue such integration. In many LDCs, exports have increasingly contributed to GDP growth in recent decades. In certain periods they have even driven GDP growth (LDCR 2008: ch.1). However, imports have risen in tandem and in many instances, even faster than exports. Thus, it is important to prevent a widening of trade deficits and the increased dependence on capital inflows that accompanies it. If export earnings do not grow fast enough and in a sufficiently stable way to match the growing import requirements at the early stages of structural transformation, economic growth will be threatened by the accumulation of external debt that may eventually become unsustainable (LDCR 2004: Part Two, ch.1).

Export growth plays a central role in the structural transformation process for two reasons. First, export earnings are essential to finance the import of machinery, equipment, technology and the intermediate inputs needed for the expansion of productive capacities. Second, external demand helps to fully utilize productive capacities, achieve economies of scale and stimulate investment in productive capacities (UNCTAD 2016: ch.2).

However, export expansion will not be possible without the expansion and diversification of productive capacities. The successful integration of a LDC into the international economy therefore requires a trade strategy that evolves with the level of productive capacities achieved and the capacity of existing institutions and industries, rather than through precipitated trade liberalization. Gradual trade integration presupposes the emergence of a virtuous circle during which profits generated by exports stimulate new investments, which in turn expand export capacities. The impact of trade on structural change also depends on whether exporting firms are integrated domestically through a network of forward and backward linkages.

It is also important to recognize that export growth does not always imply faster overall growth, let alone poverty reduction, because the incomes and livelihoods of most people in LDCs are largely disconnected from the export sector and the international economy (UNCTAD 2016: ch.2). Thus, if trade is to contribute effectively to income growth and poverty alleviation, it is important that LDC trade policies are based on the understanding that trade integration and export growth are means in a broader and long-term strategy for structural transformation, rather than objectives in of themselves.

Export opportunities for LDCs do not only lie in the world market and in the more advanced countries. They also exist in neighbouring and other developing countries. In many cases, these opportunities are likely to be easier to grasp, especially for smaller and domestically-owned firms in LDCs. This is an important reason for governments to engage in regional cooperation. Regional integration among developing countries also widens the scope of private sector activities and their diversification in terms of investment, production and factor mobility and can prepare the ground for their integration into the wider global economy (EDAR 2009) (→ ch.VI.D).

## **5.2 The importance of the trade structure**

In LDCs, it is typically commodity export earnings that provide the bulk of foreign currency to finance the import of the machinery, equipment and technology needed for productivity growth in the primary sector, particularly in agriculture, and for the expansion of productive capacities in manufacturing industries.<sup>3</sup>

Exports contribute primarily to structural transformation and employment generation when their product composition becomes more diversified, with an increasing share of manufactures and in some cases, services (UNCTAD 2016: ch.2). The LDCs with the highest long-run GDP growth have been those that managed to export manufactured goods at an early stage. The LDC performers that have lagged furthest behind are exporters of food and agricultural products, as well as mineral exporters (LDCR 2014: ch.4). An increasing share of manufactures in total exports also reduces the vulnerability of LDCs to the volatility of international primary commodity markets.

A development strategy incorporating the management of international trade as an instrument for enhancing structural transformation must also consider that the structure of imports matters as much as the structure of exports. The balance-of-payments constraint on building productive capacities can also be reduced by favouring the allocation of scarce foreign currency earnings to the import of capital goods. The balance-of-payments constraint can further be addressed by preventing imports that are not essential for poverty reduction and structural transformation, and substituting imports, when economically viable, with domestic production.

### **5.3 The role of FDI and global value chains for trade integration**

LDC policies for building productive capacities must consider the opportunities offered by FDI and integration into global value chains (GVCs). However, the benefits of these cannot be taken for granted, since they depend on how well the profit interests of foreign partners can be reconciled with the societal interest in structural transformation.

FDI may help mitigate the constraints arising from shortages of domestic capital, modern production and management techniques and international marketing know-how and networks. In LDCs, FDI inflows were often responsible for the increase in capital formation. However, there are several reasons for LDC policymakers not to overestimate the potential of FDI for accelerating the process of structural transformation.

First, FDI flows have been concentrated in only a few LDCs and did not always lead to faster output growth (LDCR 2008: ch.1; LDCR 2014: ch.6). Second, a large part of FDI in LDCs is usually undertaken in capital-intensive extractive industries, which typically have very few linkages with the rest of the economy. In this case it is often difficult for the State to appropriate a fair share of the considerable rents that have been generated (LDCR 2014: ch.6) (→ [ch.VI.B](#)). Similarly, FDI attracted by low labour costs in LDCs' manufacturing industries is often confined to externally-oriented enclaves, such as export processing zones, where imported inputs are assembled for re-export. The same applies to tourism enclaves, which are often supplied through imports (LDCR 2008: ch.2; EDAR 2017).

Third, experience has shown that FDI is often difficult to integrate into domestic strategies aimed at structural transformation. What matters for the contribution of FDI flows to structural transformation is not the quantity, but rather the type of FDI and its insertion into the domestic economy. It is therefore imperative that the costs of attracting FDI are carefully assessed against the benefits that can be expected from a specific foreign investment project. Such costs can occur not only in the form of fiscal incentives and other concessions in favour of foreign investors, but also as lower domestic investment or a perpetuation of existing production structures.

Fourth, LDC governments must be aware of the increasing competition among developing countries to attract FDI in labour-intensive sectors, which weakens their position vis-à-vis potential foreign investors.

Similarly, policies to help domestic manufacturing firms integrate into GVCs must form part of the overall strategy to build productive capacities and reduce poverty (LDCR 2007: ch.1). GVCs are international production networks dominated by large lead companies, mostly from developed countries, that subcontract different stages of value addition to producers in different countries, depending on the different cost advantages from each segment. This is an increasingly frequent entry point into export-oriented manufacturing activities for LDCs, whose firms operate as low-cost suppliers in the least sophisticated, but most labour-intensive stages of a value chain. However, participation in GVCs may place LDC firms at risk of becoming trapped in that position when they are not given the opportunity to build up the appropriate skills and technological capacity that will enable them to move up the value chain or to achieve functional upgrading (LDCR 2007: ch.1; LDCR 2013: ch.5; and EDAR 2013: ch.4).

Against this background, policies to optimize the effects of FDI and GVCs on structural transformation, such as trade policies, must be closely integrated into strategies for building productive capacities. They must be designed in such a way that economic activities within these frameworks have a strong direct employment effect and allow for an upgrading of these activities into higher-value-added segments over time. In addition, they should foster continuous skills development and the building of technological capacities in the respective firms and support integration with other sectors of the economy (EDAR 2011: ch.4; LDCR 2013: ch.5; UNCTAD 2013a: ch.IV).

Manufacturing FDI and GVCs tend to be oriented towards countries with an already established track record of long-term positive trends in productivity growth, supply reliability and the development of managerial, technological and labour skills (LDCR 2016: ch.1). Therefore, the extent to which FDI and GVCs can help advance structural transformation depends on incentives for potential partners to engage in these forms of cooperation with LDCs. It is also partly endogenous in the process of structural transformation and thus a by-product of improved domestic productive capacities.

## C. An effective developmental state

### 1. Balancing market forces and state intervention

The private sector generates the majority of jobs and constitutes the basis for efficient resource allocation as an outcome of market forces. Yet, the persistence of pervasive

poverty and increasing environmental problems suggests that the market mechanism alone cannot be relied upon for an economically, socially and environmentally sound development process towards achieving the SDGs. The latter requires balancing the creative dynamics in the private sector with a developmental state that is designed to complement private initiative, not to replace it (LDCR 2009: ch.1).

The developmental state involves public policies to support market forces, stimulate economic activity and guide the economy to outcomes that benefit the country as whole and all groups of society. For these purposes, the developmental state acts as a provider of appropriate and targeted public services and infrastructure. The developmental state acts as a guide that influences the direction of structural change by setting appropriate incentives and disincentives for private actors. Finally, the state functions as economic actor itself in areas where private domestic entrepreneurship is weak or absent and where the missing activities represent important elements in the overall economic structure of the domestic economy.

## 2. Components of the developmental state

Concrete policy action within the framework of the developmental state must be based on an assessment of the tangible potentials and constraints of each country. However, some general lessons for the design of an effective developmental State can be learned from the experience of successful countries. The first is the need for appropriate, often innovative, institutional arrangements and the creation of competent bureaucracies in a few strategic agencies. It is important that efforts to strengthen the legal, administrative and regulatory framework for structural transformation do not generate excessively burdensome bureaucratic hurdles that compromise the motivation to invest and initiate productive activities (EDAR 2011: ch.2; EDAR 2014 ch.3).<sup>4</sup>

Second, a successful developmental state involves continuous learning by policy makers about the strategies and institutions that can best harness the pursuit of private profit to realize a national development vision. Like private economic actors, governments are not infallible and act with imperfect information. They are also exposed to the risk of capture by special interests (LDCR 2009: ch.1). However, when intervention does not lead to the desired outcomes, the challenge for governments, with the support of international organizations, should be to correct and improve intervention mechanisms rather than abandoning them altogether and to adjust the role of the developmental state in line with market maturity.

Third, policy design must consider that producers in LDCs operate in an evolving global economy where competing foreign firms often have already accumulated significant experience and productive advantages, and where governments from other

countries are also pursuing policies to accelerate growth, industrialization and structural transformation (LDCR 2014: ch.6).

Fourth, institutionalizing dialogue and forging growth coalitions with the private sector in the form of active cooperation to support structural transformation are important components of a successful developmental state (LDCR 2009: ch.1). On the one hand, mechanisms for regular dialogue and coordination between the state and private sector help policymakers identify the main constraints to the expansion of productive capacities, and to learn where there is a need to adapt regulation to the requirements of socially and environmentally sound structural transformation. On the other hand, they contribute to greater transparency and predictability of policies, and a better understanding of regulatory measures on the part of private sector actors.

Finally, the notion of the developmental state implies complementarity between economic and social policies. Economic transformation inevitably has repercussions on social structures. Social acceptance, and sustainability of the process therefore demands proactive policies aimed at social inclusion. This implies that all social groups can share in the fruits of productivity and income growth and that all parts of society can use their productive potential to foster structural transformation (LDCR 2009: ch.1).

### **3. Providing for inclusive structural transformation**

#### **3.1 Complementarity of economic and social policies**

Social policies must be part of a comprehensive policy framework for a developmental state in support of structural transformation. They are necessary for three reasons. First, there is a human development imperative to eliminate poverty, undernourishment, poor health and low educational attainment. Second, the aforementioned problems are part of a vicious circle that prevents LDCs from progressing socially and economically. And third, the direct effects of structural transformation will benefit certain social groups more than others and some segments of the population may even see their social environments and sources of income threatened Diagnostic Trade Integration Study (DTIS) Gambia.

Poverty must be tackled at its roots through the generation of decently-remunerated, productive employment. Nevertheless, the most serious and urgent incidences of poverty call for specific and direct social policy interventions. These include food aid to eliminate hunger, targeted medical care to combat epidemics and child mortality and basic infrastructure to ensure that settlements of the poorest parts of the population have access to water and sanitation (LDCR 2009: ch.3; LDCR 2014: ch.2; DTIS Gambia; and DTIS Niger). Sometimes, conditional cash transfers may also be inevitable to alleviate symptoms of extreme poverty (LDCR 2010: ch.3).

National social safety nets are feasible and financially sustainable only if all but a small minority of households have primary incomes above the poverty line and if drops in household income below this level are limited and temporary. Similarly, the introduction and regular adjustment of a legislated minimum wage at a sufficiently-high level to allow households a per capita income above the poverty line requires a corresponding level of productivity growth (LDCR 2015: ch.5; DTIS Ethiopia; DTIS Mali). This suggests that the development of a social protection system and structural transformation are, in large measure, interdependent processes.

In the process of structural transformation, increasing value-added content and rising per-capita incomes enable developmental states to strengthen social safety nets to support those households that are unable to generate an income above the poverty line from productive activities. Overall productivity growth also widens the available policy space for the introduction or extension of more comprehensive social security systems. Therefore, the gradual development of such systems should be factored into a country's development strategy from an early stage of structural transformation (LDCR 2009: ch.1).<sup>5</sup> To enable the state to meet the recurrent costs of the social services needed to achieve the SDGs and to sustain the income transfers associated with social policies, it must be ensured that public revenue can grow in line with private incomes. (LDCR 2015: ch.1).

### **3.2 Mainstreaming gender concerns**

Within the policy framework of support for building productive capacities in LDCs, the unused productive and entrepreneurial potential of women must be given special attention. Reducing gender inequality is a challenge across all policy areas that are of relevance for structural transformation (LDCR 2016: ch.5).

Women's engagement in economic activities in LDCs is constrained by discriminatory practices, laws and cultural norms that limit their access to well-remunerated employment and financial services, as well as education and training. These interact with other disadvantages that diminish their productivity and entrepreneurial potential, such as the time constraints that typically arise for women from obligations to care for family members. Gender inequality tends to be particularly marked in rural areas, where specific disadvantages arise from the gendered assignment of roles, tasks and occupations and a lack of women's control over the proceeds from agricultural sales. Women are also discriminated against with regard to extension services, land ownership, titling and inheritance (LDCR 2015: ch.5; LDCR 2017: ch.2). The empowerment of women is therefore of particular relevance for the transformation of rural economies (→ ch.VI.B).

Given the traditional gender divisions of labour, improvements in social infrastructure are important for stimulating greater female participation in income-generating activities (LDCR 2014: Epilogue; DTIS Niger). For example, the considerable amount of time many rural women spend collecting water could be substantially reduced through improved access to a safe water supply. Rural electrification helps to accelerate the energy transition as incomes rise, thus reducing the time women spend gathering traditional fuels, as well as the serious adverse health effects, particularly for women and young children, from burning such fuels inside the house. Women's productivity would benefit considerably from improvements in the provision of maternal and reproductive health care. Increasing the number of health facilities could also greatly reduce the time needed to access health services for themselves, and children and relatives who require care.

Gender equality is a value in its own right. Measures to overcome gender-specific disadvantages are also essential for harnessing the economic potential of women for structural transformation and enhancing the response to incentives aimed at building productive capacities (LDCR 2017: ch.2). Structural transformation, in turn, provides the means for creating new income-generating opportunities for women. Innovative activities in certain sectors, such as horticulture, natural pharmaceuticals, textile manufacturing and tourism can provide substantial benefits for women in particular (LDCR 2017: ch.2).

### **3.3 Reducing informality**

Any reflection on adequate policies to support structural transformation in LDCs must consider the high share of informal activities in income generation, which is a typical structural feature of LDCs.<sup>6</sup> The informal sector in LDCs is characterized by a predominance of microenterprises that pursue labour-intensive, low-technology activities (ILO 2012). It offers employment opportunities primarily for unskilled workers. The informal sector is also characterized by a relatively large share of women and young people, and a high incidence of child labour (LDCR 2013: ch.3). Informal employment is vulnerable, poorly paid and based on personal and social relations rather than contractual arrangements.

One type of informal sector work consists of a wide range of survival activities for people without any prospects for formal employment. This can take the form of self-employment or casual jobs, for example, in subsistence farming, artisanal mining, petty trade or rubbish-picking. Another type relates to the activities of small-scale entrepreneurs that seek to avoid tax payments and labour regulations or to bypass other government or institutional norms (LDCR 2013: ch.3).

On the one hand, large informal sectors are the result of insufficient formal employment opportunities and the absence of social protection systems. On the other hand, the

existence of large informal sectors has been one of the reasons for slow progress in structural transformation, as policy measures in support of building productive capacities largely do not reach actors in the informal sector. A central aspect of social and economic transformation processes in LDCs is therefore a progressive reduction of the scale of the informal sector for social reasons and for policy effectiveness (LDCR 2014: ch.6; DTIS Niger). A number of policy instruments discussed in the following chapters implicitly offer incentives for actors in the informal sector to formalize or can be combined with measures specially targeted at formalization (→ ch.II.D; → ch.III.D).

#### 4. Strategic choices and priorities

Governments that want to support private firms and farms to enhance productive activities and direct structural change in a socially desirable direction must decide on a specific way forward. This involves strategic choices, and a selection of targets and instruments for policy intervention. These are discussed in the following chapters of this Compendium. Macroeconomic strategy (→ ch.II.A) extends to the choice of principles and interventions that provide the most conducive environment for investment and stimulate demand growth. Horizontal policies (→ ch.III) must be based on the identification of the most binding constraints on building productive capacities and productivity growth, to design interventions that are the most appropriate for promoting specific private initiatives and the provision of specific public services across sectors. Examples include building transport infrastructure, improving the system of vocational training and supporting research and development.

Industrial and other sectoral policies (→ ch.IV; → ch.V) presuppose the selection of specific sectors, subsectors or firms to target policy interventions effectively (EDAR 2011). Examples are the creation of industrial parks for leather or metal manufacturing, and extension services for cotton farming or the subsidization of inputs for the production of staple crops. The selection must fall on those sectors or subsectors that hold the greatest promise for advancing structural transformation in a way that benefits flow to the entire economy and across all social groups. There is no standard method for prioritizing sectors. This depends on a government's perception of the present situation and the scope for future change in the country's economy and society, considering country-specific conditions, time-bound circumstances and experiences at home and abroad (Lin and Chang 2009). Elements for the selection of a strategic sector or sub-sector may, for example, relate to:

- The scaling up of successful or promising new production activities in agriculture, industry or services resulting from self-discovery by private enterprises;

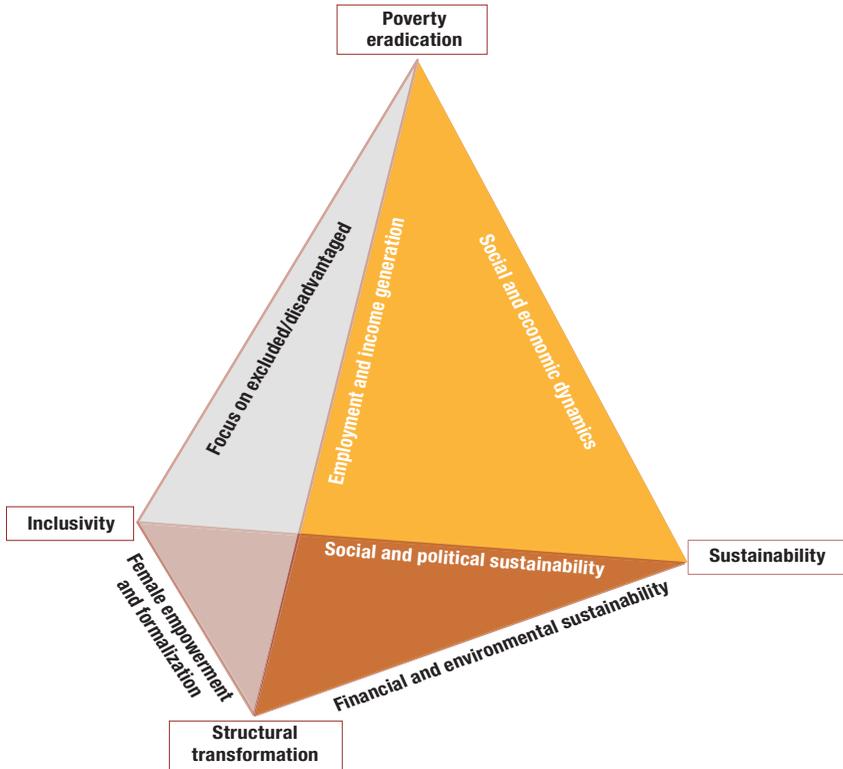
- The perceived or existing comparative advantages or the potential of expected dynamic comparative advantages, given a country's natural, technological and knowledge endowments;
- Emulating successful development at the sectoral or sub-sectoral level in countries with similar endowment structures;
- Perceived market or demand trends;
- The potential for building industries based on existing artisanal activities;
- Strengthening domestic ancillary industries and services to substitute imported inputs for thriving sectors;
- The scope for generating the maximum number of linkages with other sub-sectors; or
- The scope for participation in GVCs or other international production networks.

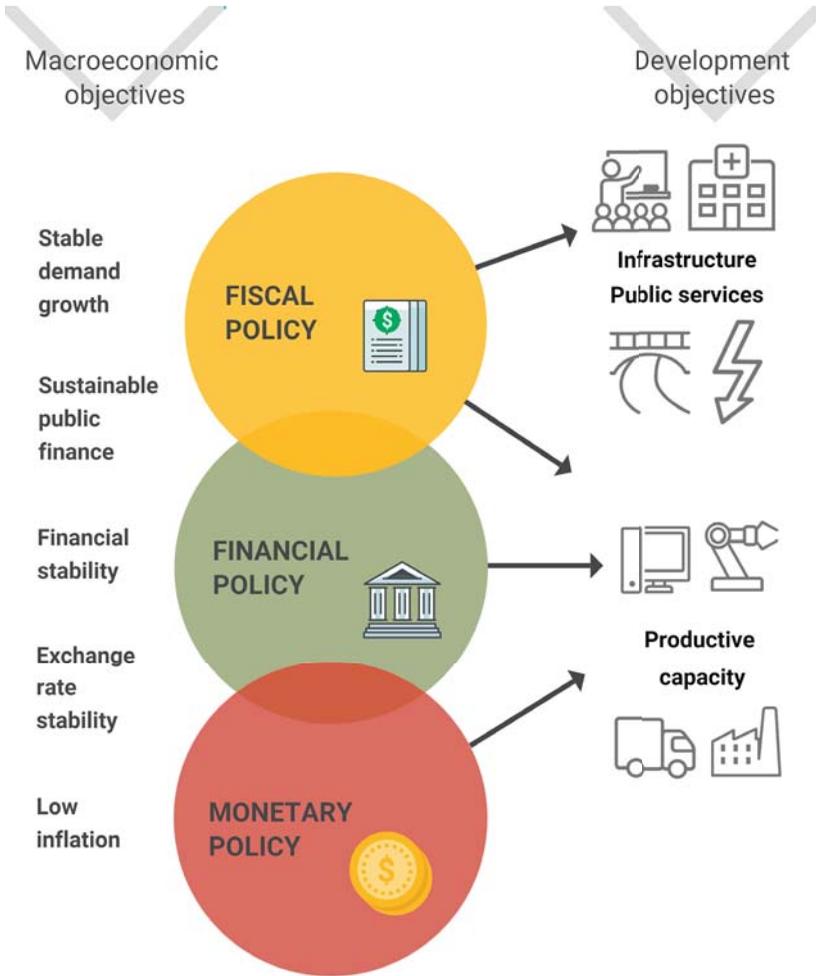
In any case, strategic sectors or subsectors are those that can be expected to serve as drivers of growth and structural transformation for a certain period of time, offering greater possibilities than other sectors in terms of the emergence of linkages and the potential for the upgrading of production process and products. Yet, whatever priorities are chosen, they should be reviewed regularly and adjusted, in light of a country's experience and the progress achieved in the selected sectors. Importantly, targeted industrial policy instruments should incorporate sunset clauses.

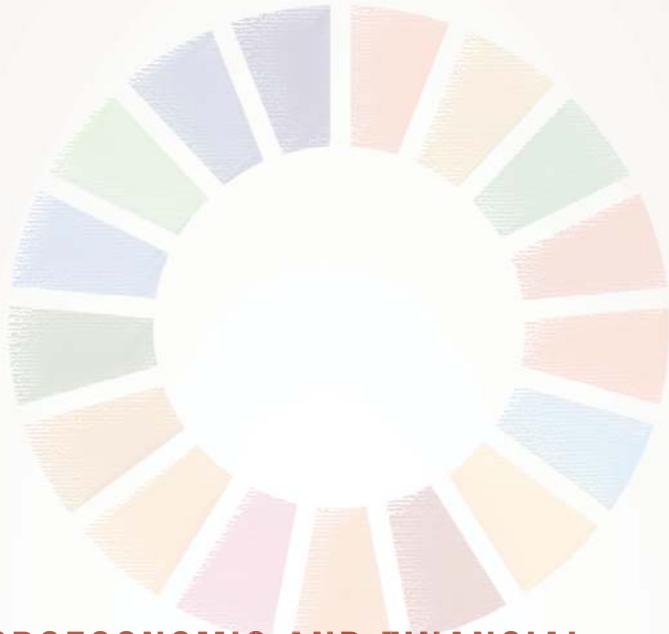
## 5. Domestic policy coordination and consultation

The speed of building productive capacities and the intensity of structural transformation are strongly influenced by the coherence and consistency of policy implementation (LDCR 2008: ch.3). These are best achieved with the help of an institutionalized mechanism that provides strategic leadership for policy design and effective policy implementation. Such leadership is required for coordination across different ministries with different, but partly overlapping mandates and those in charge of different, but complementary policy instruments. Similarly, in the spirit of an effective developmental state, regular consultation with private sector stakeholders should also be institutionalized to consider their perceptions of the most binding constraints on the building of productive capacities. Such consultation is even more important because in many cases, the results of policy measures, even if positive, may not always be well reflected in direct and immediate impacts at the individual firm level (LDCR 2014: ch.6; DTIS Ethiopia) (→ ch.IV.B).

### Interdependence of structural transformation, inclusivity and sustainability







## II. MACROECONOMIC AND FINANCIAL POLICIES

### A. Introduction

A stable macroeconomic and financial environment is a key prerequisite for building productive capacities and structural change. In addition to preventing domestic and external imbalances, macroeconomic management can actively stimulate capital accumulation to raise the rate of investment required for achieving the Sustainable Development Goals (SDGs) (*The Least Developed Countries Report* (LDCR) 2010: ch.4; LDCR 2013: ch.5; *Economic Development in Africa Report* (EDAR) 2014: ch.3) (→ ch.I.B). Macroeconomic policy choices regarding, for example, taxation, public spending, banking regulations and the exchange rate regime impact structural transformation as they affect the level of public investment, the availability and cost of credit and the real exchange rate, as well as the expansion of domestic demand, which makes a substantial and in many cases the main contribution to economic growth in least developed countries (LDCs) (LDCR 2006: ch.7).

Monetary policy impacts aggregate demand in general and investment in particular, by providing liquidity to the banking system, setting central bank interest rates and influencing the exchange rate. Fiscal policy influences the level and pattern of private consumption and private investment through taxation, and impacts aggregate demand and the conditions for private economic activity through income transfers, public

procurement and public investment. Financial policy partly overlaps with monetary and fiscal policies. It operates by structuring the domestic financial system and influencing the overall level and the allocation of credit. By determining the financing conditions for private firms' current activities and the expansion of their productive capacities, the interaction of fiscal, monetary and financial policy is of central importance for the process of structural transformation (LDCR 2006: ch.8; Diagnostic Trade Integration Study (DTIS) Ethiopia). Finally, wage policy strongly influences the cost of production on the supply side and the level of demand for consumer goods, especially domestically produced goods, on the demand side. Both fiscal policy, through social transfers and taxation, and wage policy influence the distribution of income (LDCR 2013: ch.5).

## B. Fiscal policy

### Main relevant SDG targets:

- 9.1: Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all
- 9.4: By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities
- 10.1: By 2030, progressively achieve and sustain income growth of the bottom 40 per cent of the population at a rate higher than the national average
- 10.4: Adopt policies, especially fiscal, wage and social protection policies, and progressively achieve greater equality
- 12.7: Promote public procurement practices that are sustainable, in accordance with national policies and priorities

### 1. Integrating fiscal policy into a broader development strategy

Virtually all measures of public policy in LDCs aimed at influencing the speed and direction of structural transformation will have repercussions on the government budget. One reason for the weakness of the developmental state and the insufficient provision of public services and infrastructure to support private productive activities in LDCs is the narrowness of fiscal space, i.e. the low level of public revenue as a result of narrow tax bases, deficiencies in tax collection and administration and losses due to illicit financial flows (LDCR 2016: ch.1 and ch.5). To some extent, fiscal space is itself a policy variable in the process of structural change. It depends, inter alia, on the ability of

the government to impose and collect taxes and on the repercussions of GDP growth on public revenues.

Public finances have both direct and indirect effects on demand and supply in an economy. The direct demand effects result from the current consumption of goods and services, as well as the infrastructure investments made by public entities. Direct supply effects result from the public provision of services to citizens and enterprises. Indirect demand effects result from the impact of taxation, social transfers and subsidies on income distribution and on the spending behaviour of citizens and firms, while indirect supply effects result from the productive use of public services and infrastructure by enterprises and agricultural producers.

Thus, fiscal policy is not only about budget management. By using fiscal instruments, governments influence the pace of productive capacity building and the direction of structural transformation. Of particular importance in this context is the influence of fiscal instruments on the investment behaviour of private entrepreneurs (→ [ch.IV.C](#)).

Different types of public revenue, such as taxes and customs duties, and of public expenditure, such as various types of infrastructure, public services or subsidies have different effects on both the level and the structure of economic activity. Therefore, decision making, and budgetary and tax planning are inexorably linked with the design and implementation of a country's development strategy.

## 2. Public revenue management

### 2.1 Functions and structure of public revenue

Public revenue collection must capture a share of national income that enables necessary and desirable public expenditure for the provision of infrastructure and public services. At the same time, the composition of public revenue and its variation over time are key instruments to shape economic activity on both the demand and the supply side. They also play an influential role in income distribution.

The tax base in LDCs is very narrow, due in part to low income levels and the large size of the informal sector (LDCR 2014: ch.6). In most LDCs, public finances have traditionally been highly dependent on revenue from customs duties. While trade liberalization is an element of policies that support structural transformation (→ [ch.VI.B](#)), the reduction of tariff barriers implies a further narrowing of fiscal space, which needs to be compensated for by higher revenues from other income sources. The same effect results from tariff exemptions for certain imports that are often granted as an incentive for export-oriented production (LDCR 2009: ch.2). Further large tariff cuts should be implemented only after alternative sources of public revenue have been identified.

The structure of personal income taxation and specific indirect taxes on certain types of consumption influence the pattern of domestic demand with possible repercussions for the structure of domestic production and the trade balance. The design of corporate taxation, which can serve as a major policy instrument in support of structural transformation, is even more important for shaping the dynamics of structural change.

## **2.2 Using tax privileges to influence entrepreneurial behaviour**

Corporate taxation can be geared towards strengthening the link between corporate profits and investment at the firm level, e.g. allowing specific systems of fiscally-relevant depreciation allowances or loss allocation, or the preferential treatment of reinvested profits (→ [ch.IV.C](#)). Tax holidays for foreign investors are a possible instrument to attract foreign direct investment (FDI), as are direct tax breaks for exporters to stimulate export-oriented production and bolster the international competitiveness of local producers (→ [ch.VI.C](#)).

Fiscal incentives in the form of tax or customs privileges can initially lead to a significant reduction in the total tax yield, but if applied successfully, the resulting income gains can subsequently generate an increase in public revenue that compensates for and may even exceed, much of the initial fiscal cost (DTIS Ethiopia). Direct income and corporate taxes tend to rise faster as the economy grows, provided that such taxes are effectively collected and the overall pattern of tax rates is progressive. It is therefore essential that the influence of interest groups, including foreign investors, and politically connected domestic companies and individuals, do not gain the upper hand in corporate tax governance.

In terms of attracting FDI, the effect of such tax incentives has often been disappointing because other determinants of FDI, such as attractive labour costs or a large raw material base, are of similar or even greater importance (EDAR 2014: ch.5; DTIS Ethiopia). Therefore, although tax concessions can be justified in some cases, many LDCs could benefit from a thorough review of the concessions they have granted and the costs and benefits that these generated.

## **2.3 Strengthening public revenues**

Measures that may be beneficial for strengthening and diversifying public revenues include increased taxation of high incomes and incomes from capital rents and speculative activities; increased taxation of wealth, especially higher value-urban properties; introducing consumption taxes on luxury goods and excise duties on alcohol, tobacco products and vehicles; broadening value-added tax (VAT) on non-essential items; and reducing tax holidays and exemptions for corporations and expatriates (LDCR 2009: ch.2). Incorporating more informal businesses into the formal sector is another crucial

part of the strategy to increase government revenue (LDCR 2014: ch.6) (← ch.I.C; → ch.III.E).

Where appropriate, as part of a broader strategy for structural transformation, higher import tariffs (within World Trade Organization (WTO) obligations and existing trade agreements) could provide additional revenues (LDCR 2014: ch.6). Authorities in LDCs should also explore opportunities for developing non-tax revenues, such as royalties, user fees or licenses, which potentially can serve as a major source of public revenue. This is a particularly relevant consideration for LDCs with important extractive industries (→ ch.VI.B). In several countries there appears to be scope for increasing public revenue from this source (LDCR 2014: ch.6).<sup>7</sup> Royalties should be determined as a proportion of company sales, given the problems associated with profit-based taxation resulting from creative accounting practices on the part of — typically foreign — mining companies (UNCTAD 2009: ch.III; LDCR 2010: ch.6).

## 2.4 Improving tax collection

It is estimated that some countries could double their tax revenue by improving tax collection alone. Tax collection can be enhanced when the tax system is perceived to be fair, not overly complicated and when taxpayers can be assured that public revenues are used efficiently (UNCTAD 2009: ch.III).<sup>8</sup> Related measures include enacting rules on tax avoidance and enlarging the capacity of tax collecting institutions by increasing the number of staff in tax administrations and improving their skills through training. Tax authorities can further improve their effectiveness through the use of better equipment for information management and the implementation of controls on tax declarations. This should be complemented with measures to encourage voluntary compliance and regular risk-based audits of firms and corporations. Tax fraud should also be severely penalized (UNCTAD 2009: ch.III; LDCR 2016: ch.2).

In many countries, efforts to raise public revenue must also target the prevention of illicit cross-border financial flows (UNCTAD 2009: ch.IV).<sup>9</sup> These occur mainly in connection with tax evasion related to commercial activities (more than 60 per cent of illicit flows), as well as with criminal activities and corruption. Illicit flows are facilitated by abusive transfers and trade mispricing, the misinvoicing of services and intangibles, and unequal contracts. They are highest in the extractive industries (EDAR 2016: ch.4). At the national level, it is important to strengthen the relevant regulatory frameworks and enforcement mechanisms that severe punishments for intentionally providing incorrect taxation-relevant information about commercial and trade activities. However, since these flows are international in nature, preventing them requires international commitment and more effective cooperation in tax matters. LDCs require multilateral support in building their institutional capacities to deal with such flows (EDAR 2016: ch.4) (→ ch.VII.D).

Finally, it must be acknowledged that any improvements in tax collection through the reform of public financial management systems can be counteracted by corruption in tax collecting agencies. In this regard, combatting corruption and introducing or strengthening control mechanisms is essential (UNCTAD 2009: ch.III; LDCR 2016: ch.2).

### 3. Public expenditure for the expansion of productive capacities

On the expenditure side, the challenges are to identify the priorities and optimal sequencing for the allocation of public finances and to find an appropriate balance among different targets. The social pillar of sustainable development — as reflected in several SDGs — calls for considerable increases in public expenditure to improve public services in health care, general education and social protection. From the perspective of accelerating economic development, increased spending on infrastructure and public support services for productive activities is indispensable.

Even within these categories, spending cannot be increased at the same time for all needs and purposes. In current spending, priority must be given to mitigating the symptoms of extreme poverty. Capital expenditure, which is vital from the perspective of structural transformation, must focus on infrastructure investment in those areas where the constraints on the expansion of productive capacities are most strongly felt (← ch.I.C; → ch.IV.C). Moreover, public procurement can play a key role in the expansion and upgrading of domestic industries and services. Giving public procurement priority to locally produced inputs can make a significant contribution to the development of sectors that are of strategic importance for structural transformation (DTIS Ethiopia) (→ ch.IV.B). Finally, different forms of subsidies can be instrumental for building productive capacities and accelerating structural transformation by influencing the cost structure of producers or enabling access to essential inputs.

### 4. Budgetary discipline and public debt financing

Budgetary discipline is the basis for sustainable public finances and there can be no doubt about the need to keep public sector borrowing and debt accumulation in check. Some tax and social expenditure policies — for example progressive taxation, welfare and social protection policies — can act as automatic stabilizers. In commodity-dependent countries, stabilization funds or variable export taxes can also be important for macroeconomic stabilization.

It is therefore important to consider a fiscal deficit in its context. It is not only the size of the public sector deficit (measured, for instance, as a percentage of gross domestic product (GDP) that matters for its sustainability and the soundness of budgetary

management, but also its origin and the way in which it is financed. A deficit that arises from a temporary slowdown of growth has a stabilizing effect and is, therefore, less problematic than a high fiscal deficit during a period of fast growth. Deficit targets should therefore allow for flexibility to enact countercyclical policies during economic downturns, particularly in countries heavily dependent on commodity exports (LDCR 2014: ch.6). Similarly, a deficit that arises from excessive current spending on public consumption is of a quite different nature than a deficit that is the result of increased spending on infrastructure investment in support of productive activities. The first will soon become unsustainable, whereas the second, similar to private capital investments, can be expected to generate a future return in the form of higher tax revenues (LDCR 2009: ch.2) (→ VII.D). As a general rule, over the medium term, public sector deficits as a share of GDP should not exceed the GDP growth rate. In absolute terms, they should not surpass the level of public investment expenditure on (LDCR 2014: ch.6).

Public sector deficits in LDCs are financed in large part by external borrowing. Therefore, maintaining external debt sustainability is a challenge for LDCs in their efforts to finance national development strategies and in the context of the 2030 Agenda for Sustainable Development. Currency and maturity mismatches must be avoided. Furthermore, debt sustainability analysis should also reflect domestic debt exposure. Again, external debt sustainability does not only depend on the size and structure of the debt, but also, inter alia, on whether the deficit financed is the result of expenditure for public infrastructure investments or is the product of current spending. Fiscal authorities should select debt-financed investment projects primarily considering the contribution they could make to strengthening productive capacities that will contribute to higher fiscal revenue in the future (EDAR 2016: ch.5) (→ ch.VII.B).

## C. Monetary policy

### Main relevant SDG targets:

- 8.10: Strengthen the capacity of domestic financial institutions to encourage and expand access to banking, insurance and financial services for all
- 9.2: Promote inclusive and sustainable industrialization and, by 2030, significantly raise industry's share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries
- 9.3: Increase the access of small-scale industrial and other enterprises, in particular in developing countries, to financial services, including affordable credit, and their integration into value chains and markets

## 1. Monetary policy objectives and conflicts

### 1.1 Monetary policy in the context of structural transformation

Central banks in LDCs typically focus on attaining price stability, i.e. an inflation rate in the low single digits. Together with exchange rate stability, this is considered as the main component of a macroeconomic environment that is favourable for employment and output growth. The mandate of central banks normally does not include a proactive role to support structural transformation. Yet, central banks' monetary policy inevitably has a strong influence on the pace of capital accumulation through its impact on the level and cost of bank lending.

Central banks influence the scope for bank lending through the provision of liquidity to the banking system. In this regard, the establishment of an active secondary market for government securities and the widening of possibilities for commercial banks to refinance long-term loans would enable monetary policy to better support structural transformation by steering the capacity of the banking system to extend long-term investment credit (IMF 2014) (→ ch.II.D.2).

Central banks also influence interest rates and thus, the cost of credit, by regulating the maximum and/or minimum rates that commercial banks have to apply in transactions with their customers and by setting the rate at which banks can obtain credit from the central bank. A conflict between the objectives of inflation control and targets to increase productive investment arises in situations where inflation control calls for restrictive monetary policy and thus, rising interest rates. In contrast, strengthening the dynamics of investment in productive capital would require low interest rates (EDAR 2014 ch.3). Therefore, a monetary policy that is permanently and exclusively geared to keep inflation low, a priori hampers capital accumulation (LDCR 2014: ch.6).

Historical evidence shows that in all cases of successful industrialization, monetary policy has been expansionary or accommodating, with low interest rates. In countries where monetary policy was tight and interest rates were high, capital accumulation was low and structural transformation was slow or absent (DTIS Ethiopia). It is therefore essential that the desirable objective of keeping inflation low does not lead to a situation where financing costs become too high or the potential of bank lending for productive purposes is restrained (LDCR 2014: ch.6). Against this background, it would be useful to involve the central bank in the design and implementation of the overall development strategy by explicitly giving it a developmental mandate.

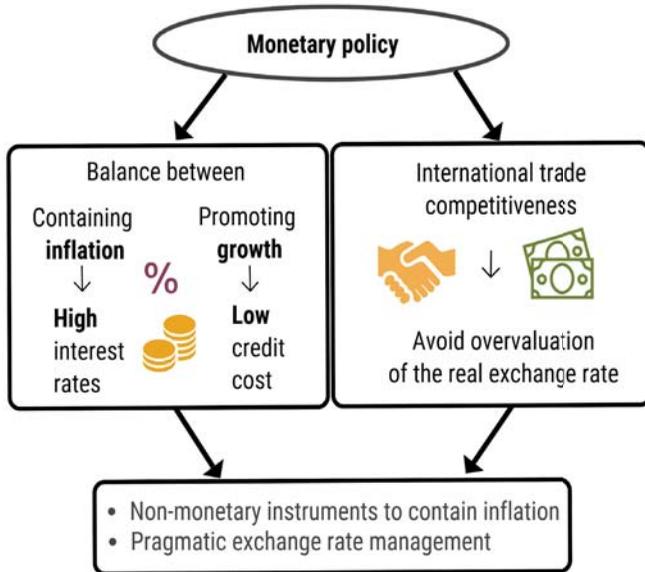
## 1.2 Anti-inflation policies revisited

In an effort to achieve coherence between monetary policy, on the one hand and a broader set of policies aimed at promoting the creation of additional and superior productive capacities, on the other, a number of considerations must be taken into account.

One consideration is that credit creation based on monetary expansion does not automatically translate into higher inflation when there are no inflationary pressures from excess demand, excessive wage increases, or rising food or import prices. Even if a more expansionary monetary policy allows for a moderate increase in the price level, this disadvantage must be weighed against the advantage of a higher rate of investment in strategically important sectors. In LDCs a higher rate of inflation than often assumed may be compatible with an acceleration in the building of productive capacities (LDCR 2014: ch.6).<sup>10</sup>

Moreover, if inflation arises from supply shocks, as is mostly the case in LDCs, restrictive monetary policy will not be able to remedy the problem (LDCR 2009: ch.2). It is important to recognize that, at least to some extent, inflation can also be controlled with non-monetary instruments. To the extent that inflationary pressure results from domestic demand in an overheating economy, shifting to a more restrictive fiscal policy stance, especially a variation of public sector demand for domestically produced goods, is a first alternative to monetary tightening (DTIS Ethiopia). A second non-monetary option that may be considered is intervention in the price setting process. Such interventions may take the form of direct price controls on certain goods that have a low price elasticity of demand, such as electricity and public transportation, or temporary price moderation agreements with associations of producers and wholesale and retail distributors.<sup>11</sup> As such measures are not without problems in a market economy, they should only be employed temporarily. To avoid a rise in unit labour costs, government control over formal sector wage increases or influence on wage-setting processes has been another anti-inflation device in developing countries that show a record of fast capital accumulation and low inflation (DTIS Ethiopia).

Furthermore, agricultural policy in LDCs can be instrumental in preventing inflationary pressures. Food typically represents a large share of consumer expenditure in LDCs, therefore changes in food prices can have a strong impact on the overall inflation rate and on labour costs. In addition to population growth, the increase in per capita income that is expected to result from faster growth in LDCs under the 2030 Agenda will tend to further raise demand for food. The emergence of inflationary pressures from this can be avoided, or substantially reduced, when agricultural policy is effective in increasing domestic food production (LDCR 2014: ch.6) (→ ch.VI.B).



## 2. Exchange rate management and access to foreign currency

### 2.1 Exchange rate management

The foreign currency exchange rate affects the competitive position of a country's producers in international trade. An overvalued exchange rate can compromise the beneficial effects of international trade, including those resulting from privileged market access for LDC products and the success of export promotion measures (→ ch.VI.A). Thus, pragmatic exchange-rate management through foreign-exchange-market intervention becomes even more important as the degree of export orientation and the share of manufactures and services in total exports rise (LDCR 2013: ch.5). From the perspective of exporters, currency overvaluation has the same effect as tariffs, whereas a slight undervaluation may not only help to prevent the build-up of unsustainable trade deficits, it may also support the process of building manufacturing industries (Rodrik 2008a; Dullien 2016).

In an LDC aiming to develop its manufacturing sectors and exports, exchange-rate management should be adjusted according to the level and movements in unit labour costs relative to those in its trading partners or competitors in international markets (LDCR 2014: ch.5; DTIS Ethiopia). When unit labour costs rise faster than in the countries whose manufacturers compete in the same markets, the nominal exchange

rate needs to depreciate by the differential to maintain a stable real exchange rate (→ [ch.IV.C.4](#); → [ch.VI.A.1](#)).

Central bankers are often concerned that a devaluation could lead to higher inflation as prices for imports in domestic currency would rise. This is a valid concern, but without such devaluation domestic producers of internationally traded manufactures are obliged to either compress wages or further increase productivity to compensate for the loss of competitiveness of their exports. It is also true that an overvalued exchange rate tends to reduce the domestic currency cost of imported inputs for growing production in strategic sectors. However, in situations where LDC exporters are eager to gain international market shares and to achieve efficiency gains from economies of scale, keeping up their medium-term perspectives for export growth may deserve priority attention (DTIS Ethiopia).

## **2.2 Foreign currency management and the capital account**

Controls over the use of foreign currency are essential for LDCs which have a severe shortage of hard currency. It is essential to rigorously restrict unproductive uses of the available foreign exchange, such as the import of luxury consumer goods. The efficient allocation of scarce foreign exchange could also be underpinned by import restrictions for certain goods that can be substituted by domestic production in nascent industries (→ [ch.IV.C](#)). In sectors of strategic importance, it may even be justified to restrict the allocation of foreign currency for the import of goods whose domestic production is initially costlier than importing them but will become cheaper over time as productivity increases (DTIS Ethiopia).

It is important that procedures to obtain authorization for payments in foreign currencies are not overly bureaucratic and lengthy, because this causes problems for the procurement of essential raw materials and intermediate inputs for strategically important manufacturing activities. The principles and procedures of foreign currency allocation must therefore be well coordinated with the import requirements of these sectors (DTIS Ethiopia).

Inasmuch as private domestic firms from LDCs have access to international capital markets or will gain such access in the future, it will also be essential that borrowing is restricted to the financing of capital goods imports in strategic sectors (DTIS Ethiopia) (→ [ch.VI.A](#)). Capital inflows play an important role in LDCs in alleviating the balance-of-payments constraint, but not all capital flows are benign. To protect their capital account from undesirable movements and foreign exchange losses as a result of speculative capital flows, LDCs should develop a capital account management system and strictly regulate external borrowing. Capital controls and/or taxes on inflows of equity and

portfolio investment enhance exchange rate stability by reducing the volatility of private capital flows and thereby increase their contribution to the achievement of overall development objectives (LDCR 2016: ch.5).<sup>12</sup>

Countries with large mineral exports may also consider setting up a stabilization fund to protect themselves against strong fluctuations in international commodity prices that lead to huge swings in their trade balance and complicate exchange-rate management. Such a fund can also help to stretch the use of gains from natural resource rents for financing the building of productive capacities over a longer period of time.

## D. Financial policy

### Main relevant SDG targets:

- 2.3: By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment
- 8.10: Strengthen the capacity of domestic financial institutions to encourage and expand access to banking, insurance and financial services for all
- 9.2: Promote inclusive and sustainable industrialization and, by 2030, significantly raise industry's share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries
- 9.3: Increase the access of small-scale industrial and other enterprises, in particular in developing countries, to financial services, including affordable credit, and their integration into value chains and markets

### 1. Challenges in the design of the financial system

#### 1.1 Improving access to financial and payments services

In LDCs, only a minority of the population has access to banking services. The unbanked are largely women, the rural population and the urban poor (Demirguc-Kunt and Klapper 2012).<sup>13</sup> Insufficient access to financial services for firms outside the main urban areas and for farmers considerably hampers the process of structural transformation and requires urgent action. Inclusive development in LDCs requires the creation of financial sector policies that allow the broader population and smaller firms and farms to better access of financial and payments services (EDAR 2015: ch.4).

New technologies based on internet and mobile-phone communication open new possibilities for financial innovation and inclusion (LDCR 2017: ch.6; EDAR 2015: ch.4).<sup>14</sup> The “mobile money” system M-Pesa, initiated in Kenya, is a good example of the deployment of innovative banking services with technologies that are accessible for LDCs. This branchless banking service enables users to make payments for purchases and to deposit, withdraw and transfer money with a mobile phone device (Jack and Suri 2011). In the longer term, the increasing use of debit and credit cards for electronic payments also has the potential to facilitate commercial transactions. Yet, the feasibility of such innovations will be influenced to a large extent by the availability of supportive infrastructure, in particular, telecommunications infrastructure and improved literacy in rural areas.

Alongside the development of new technologies, measures should be taken to encourage commercial banks to extend and densify their branch networks in rural areas. However, this may not be commercially viable until a certain level of economic activity is attained. Therefore, market-led processes cannot be solely relied upon for the development of inclusive finance (EDAR 2015: ch.4).<sup>15</sup> Regulation or direct service provision by public development finance institutions will be necessary in most LDCs, including measures specially targeted at expanding women’s use of financial services. Rural branch networks of national development banks and other public banks can be used to quickly and relatively cheaply extend the supply of financial services. Similarly, post offices could assume the role of payments service providers and savings collectors (LDCR 2009: ch.3).

## **1.2. The importance of bank financing for structural transformation**

Difficulty in obtaining affordable credit is one of the binding constraints on current economic activity and investment in productive capacities (LDCR 2009: ch.2). Micro, and small and medium-sized enterprises (SMEs) are the most credit-constrained, especially if these are owned by women or located outside urban areas. In large part, these enterprises are informal, do not follow established accounting and auditing standards and are unable to meet the, often excessive, documentation requirements of banks (EDAR 2013: ch.3). Consequently, they have to mostly rely on family, friends and informal financial intermediation, including various types of microfinance institutions. These sources of finance are of limited utility for investment in machinery and equipment, because they provide only relatively small amounts of credit with very short maturities and at high costs.

The challenge for governments is to facilitate the access of firms and farms to short- and long-term finance on reasonable terms, without endangering the stability of the

financial system. Facilitated access to cheap credit for micro and small enterprises in the formal sector would have the side effect of serving as an incentive for informal firms to formalize (← ch.I.C.3). In developing countries bank lending constitutes the most important external source of finance for firms, but in most LDCs only a few firms have access to a bank loan or a line of credit. On average, this is the case for only 23 per cent of LDC firms, compared 47 per cent of firms in more advanced developing countries and transition economies (World Bank 2018). The development of the banking sector must therefore be at the centre of LDCs' efforts to build productive capacities (LDCR 2006: ch.6).

### **1.3 Alleviating credit constraints**

Even when they dispose of ample liquidity, commercial banks in LDCs are often unwilling to lend to SMEs and for long maturities, because they perceive the risks involved in such lending to be too high or incalculable. To the extent that banks provide such credit, it is mostly subject to unfavourable terms, including high risk premiums, insufficiently long maturities and restrictive collateral requirements that potential investors are often unable to fulfil.

This leads to a shortage of liquid working capital, i.e. the difference between firms' liquid assets and their current liabilities, which is one of the main reasons for the sub-optimal capacity utilization of SMEs. Easier access to and cheaper arrangements for short-term credit could alleviate the problem of working capital shortages and allow companies to operate more comfortably.

Insufficient access to long-term financing for many potentially dynamic manufacturing firms, as well as for agriculture and commerce contributes to chronically-low investment rates and slow structural transformation in LDCs (LDCR 2009: ch.2; LDCR 2014: ch.6). The main sources of investment financing for the productive stock in LDCs are equity capital, when new businesses are being established and retained profits when enterprises aim to expand and upgrade productive capacities. These account for close to 80 per cent of productive investments in LDCs. The contribution of long-term bank lending as a complement to retained profits as a source of investment finance is much lower in LDCs (about 9 per cent) than in higher income developing countries and transition economies (about 21 per cent) (World Bank 2018).

Financing constraints for firms and farms in LDCs arise in part from difficulties in obtaining collateral for loans, particularly in rural areas. This is due to weak property rights systems for land and capital equipment (UNCTAD 2009: ch.II). The information asymmetry between borrowers and lenders is also especially pronounced in LDCs due to insufficient capabilities of many potential borrowers to file appropriate formal loan

applications and the lack of credit bureaus, credit and collateral registries, or credit-rating agencies (EDAR 2013: ch.3). These constraints should be addressed by governments, with an aim to create or strengthen credit-rating agencies. With the help of private sectoral associations, training in key areas of business administration, including banking relationships, should be provided to micro and small enterprises, female entrepreneurs and farmers. Moreover, mandatory collateral requirements should be better adapted to the capacity of these types of borrowers to provide such collateral.

Working capital constraints could also be alleviated by financial regulation that allows the private sector to operate with buyer's and supplier's credit and encourages the use of short-term financial instruments, such as promissory notes and bills of exchange that can be refinanced by the central bank.<sup>16</sup>

To remedy the problem of long-term financing by the banking system, a combination of regulatory, monetary and fiscal instruments is necessary. These instruments must be aimed at inducing private financial institutions to extend more credit with more favourable terms for investment in productive capacities, while discouraging lending for consumption and speculative real estate transactions (LDCR 2009: ch.2). In most LDCs an improvement of financing conditions will also require a greater role for public financial institutions, especially national or sectoral development banks (LDCR 2006: ch.8).

In principle, finance for working capital should come from commercial banks, while public banks are better suited to assume the risks of longer-term investment lending to innovative firms, where the creditor's risk is inevitably high. However, there is also considerable scope for cooperation between private and public banks. Another possibility for long-term investment financing is to facilitate leasing arrangements to overcome the problem of a lack of collateral (EDAR 2013: ch.3).

## **2. Increasing the capacity and willingness of commercial banks to lend**

Where bank lending is constrained by the amount of savings and time deposits, central banks should enable credit creation by increasing the provision of liquidity to the banking system (← ch.II.C.1.). Where credit ceilings are imposed on banks to prevent them from overexposure to credit risk and to ensure the stability of the banking system, it would be useful to differentiate between types of borrowers. This could help to avoid that lending to creditworthy firms in strategically important sectors is compromised. Central banks may also differentiate reserve requirements according to the type of loans provided by these banks, or they could offer refinancing for certain types of bank loans at preferential rates (LDCR 2009: ch.2). Taking the same considerations a step further, central banks may engage in direct lending to non-financial firms for selected projects (Epstein 2005).<sup>17</sup>

Commercial banks can be encouraged to extend more credit to support the building of productive capacities by enacting measures to counter their risk aversion. This would also help to reduce the cost of credit. To this end, the government may employ fiscal measures like interest subsidies or loan guarantees to reduce the risk that commercial banks inevitably incur when they lend for investments in innovative productive activities (LDCR 2009: ch.2) (→ ch.IV.C). A similar effect can be achieved with the co-financing of long-term investment projects by public banks. Linking formal with informal financial institutions, such as rotating savings and credit societies, which are often in a better position to evaluate borrowers' risks and operate with lower transaction costs, may also be helpful (LDCR 2014: ch.6).

### **3. Strengthening the role of development banks**

#### **3.1 Filling the long-term financing gap**

The rationale for attributing a strong role to public banks, including a national development bank, in a comprehensive strategy for building productive capacities and structural transformation is twofold. First, public banks can fill the financing gap that results from insufficient commercial bank lending. Second, public banks are well placed to consider not only the microeconomic viability of individual financing projects, but also their possible externalities, which are crucial for the broader process of structural transformation (LDCR 2009: ch.2) (→ ch.IV.C).

Discrimination between good and bad projects and reliable and non-reliable borrowers is necessary in any financial system. From the viewpoint of structural transformation, it is, however, essential that discrimination is oriented at the objectives of the overall development strategy and not exclusively at the risk-return criteria of commercial banks. From this perspective, it is not only the microeconomic profitability of an investment project that matters for the efficiency of credit allocation. The external benefits the project generates for the economy as a whole must also be taken into account. This consideration is generally accepted for infrastructure projects and their public financing. In contrast to commercial banks, which in order to be economically viable, must base their lending decisions on the evaluation of microeconomic risk, lending by development banks and possibly by other public banks must be based on considerations resulting from a much broader societal mandate.

#### **3.2 Public financing in support of sectoral development**

Development banks can provide finance for investment projects that would typically be judged too risky by a private bank, either because full recovery of the cost of investment takes too long a time or because investment is carried out by small and/or innovative

enterprises that aim to produce new products or apply new production processes. As a matter of principle, the criteria for loan allocation by development banks should include the financial return of the specific investment project to be financed, as well as its larger impact on social, economic and environmental development. Hence, public banks, especially a national development bank, should not be expected to have the same degree of profitability as private commercial banks (LDCR 2014: ch.6). Indeed, disproportionate pressure for profitability would cause managers of public banks to deviate from their developmental mandate (Levy Yeyati, Micco and Panizza 2007) (→ [ch.IV.C](#)).

National or sectoral development banks can also play a critical role in the generation of cumulative effects in the expansion of productive capacities. They are in a privileged position for the coordination of complementary investment projects.<sup>18</sup> This refers to both the coordination of infrastructure investments with the financing of private production capacities and the coordination among private projects. The underlying reasoning here is that an individual investment project can fail to be profitable unless there is simultaneous investment in upstream and downstream activities, particularly if such activities require geographic proximity. This is one of the core considerations underlying industrial policy in LDCs (→ [ch.IV.C](#)).

Public bank lending may also help to nurture cross-sectoral linkages, for example, by facilitating lending to farmers for the acquisition of different types of inputs, such as fertilizers, seeds or agricultural machinery. In this context, access to public credit could entail a boost to mechanization and productivity growth in agriculture and also be geared to specifically finance the purchase of agricultural machinery or equipment that is produced or assembled domestically. This would therefore help the domestic metals and engineering sector to advance (DTIS Ethiopia) (→ [ch.IV.A](#)). To address the particular financing needs of SMEs, women entrepreneurs and newly created firms with high growth potential, sectoral development banks could set up special credit lines with favourable terms of lending.

Governments may further consider setting up a long-term investment fund, similar to a sovereign wealth fund, explicitly targeting large and long-term investments in productive capacities. Such a fund could seek to pool together the resources of a wide array of financial sector operators with large cash reserves, such as insurance companies, private banks or pension funds. In countries benefiting from commodity booms, part of the windfall profit could also be allocated to this investment fund. Deposits in the fund can be state-guaranteed, provided the fund is professionally managed without political interference and is therefore able to ensure the quality of the investment projects.

The funds could also come from voluntary contributions from public and private institutions. The high levels of liquidity of commercial banks in many LDCs suggest that such investment opportunities could be attractive to institutions such as banks or pension funds. External assistance, in the form of official development assistance (ODA) contributions, could also help to kick-start such a fund (UNCTAD 2009: ch. IV).

### **3.3 Intermediation of foreign currency loans**

Public banks, especially national development banks, must also play a strong role in the intermediation of foreign currency loans from official or commercial lenders. This is especially important for the financing of capital goods imports that are essential for the advancement of productive capacities. In LDCs, almost all capital goods and advanced technologies must be imported and must be paid for in foreign currency at amounts that will exceed the current export earnings of individual firms and even of the entire economy of many LDCs. The International Finance Corporation (IFC) is an official source of such financing. Using an IFC facility requires, however, co-financing by a local bank and that the IFC interest rate is similar to the rate charged by domestic commercial banks in order to avoid competition with local banks and financing institutions.<sup>19</sup>

In the context of intermediation by a national development bank, it is crucial that foreign exchange borrowing is strictly linked to the financing of the foreign currency component of an investment project. In addition, the magnitude of such financing must be in line with the capacity to meet the related future debt service obligations. This capacity can result as a return from the additional investments in the form of either increased export earnings or foreign currency savings thanks to the substitution of previous imports by domestic production (→ ch.IV.C).

## **4. Harnessing the contribution of the private finance**

In the medium to long term, governments should create legislation and design the necessary institutions to develop and/or deepen domestic bond and equity markets, including establishing venture capital funds. These markets can be boosted by raising institutional capital through pension reforms (UNCTAD 2009: ch. IV). Bonds can be an efficient way for the government to raise long-term financing for infrastructure projects. In addition, capital markets and venture capital funds represent a more sustainable way of financing government borrowing than short-term treasury bills, particularly in terms of their impact on macroeconomic stability. In cases where the infrastructure investment to be financed entails marketable goods, such as electricity, governments could explore public–private partnerships (PPPs) and joint ventures (UNCTAD 2009: ch.IV).

When entering into PPPs it is important that governments minimize the pitfalls of the failure of such partnerships. A considerable risk of PPPs relates to their treatment as off-budget transactions, which imply contingent liabilities that can become a fiscal burden in the future. Thus, setting up a PPP policy framework that addresses and mitigates these risks is essential and requires a broad set of legal, managerial and technical capacities (EDAR 2016: ch.4). For appropriate PPP management, LDCs could consider the use of the Debt Sustainability Framework template (→ [ch.VII.A](#)) to design customized scenarios in both external and public debt sustainability analyses (EDAR 2016: ch.5).

## Macroeconomic and financial policies to achieve the SDGs

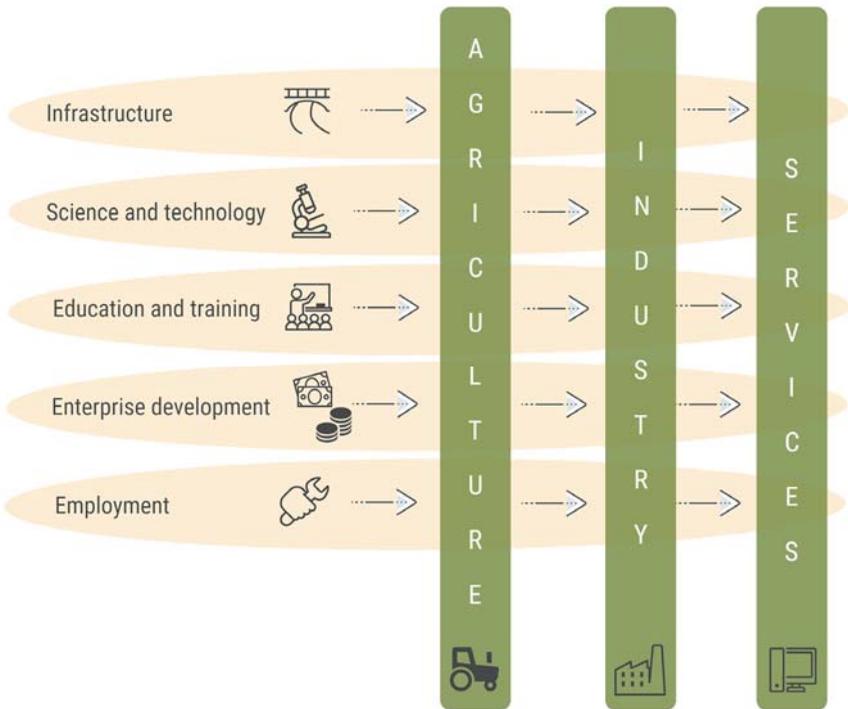


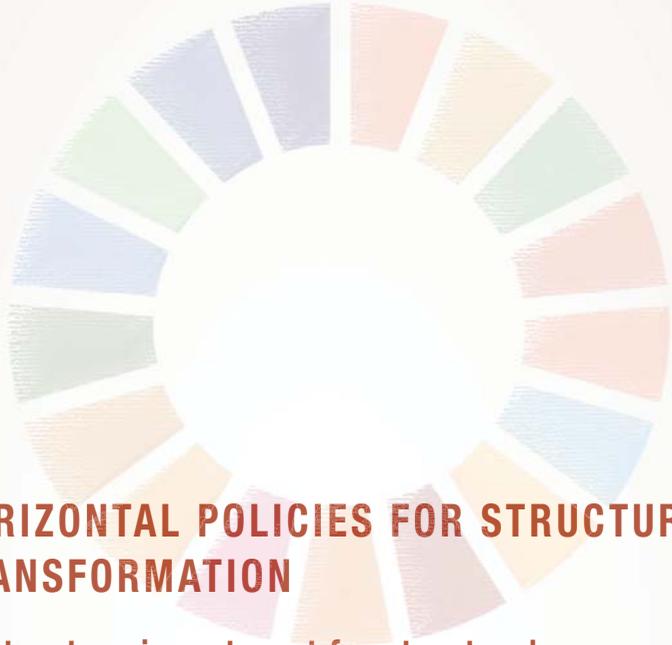
## E. Summary of macroeconomic and financial policy options

<b>Fiscal policy</b>		
<b>Intermediate objective</b>	<b>Policy measure</b>	<b>Relevant SDG/target</b>
To increase fiscal revenues and widen fiscal space	<ul style="list-style-type: none"> <li>• Broaden value-added tax (VAT) coverage, reduce VAT exemptions other than for social reasons and raise the VAT rate on luxury consumer goods and services</li> <li>• Introduce or raise excise taxes on alcohol, tobacco and luxury goods</li> <li>• Introduce or raise wealth taxes, especially on urban property above a certain threshold value</li> <li>• Strengthen taxation of high incomes, especially those from capital rents and speculative activities</li> <li>• Link tax holidays and exemptions for domestic corporations and foreign investors closely to performance requirements</li> <li>• Regularly reassess whether tax holidays and exemptions for corporations, foreign investors and high-income expatriates are effective for structural transformation and abolish them where this is not the case</li> <li>• Refrain from major cuts in customs duties before alternative sources of revenue are put in place</li> <li>• In natural-resource rich countries, revise excessively favourable levies, taxation and royalty arrangements for foreign investors in extractive industries and link such payments to movements in international commodity prices</li> </ul>	1
		2.1/2.2/2.3
		2.a
		3
		4
		5.4/5.6
		6.1/6.2/6.3
		6.b
		7
		8.1/8.3/8.5/8.6
To improve tax collection and administration	<ul style="list-style-type: none"> <li>• Increase the number of tax administration staff and improve their training and equipment</li> <li>• Streamline information management, cross-check statements and declarations and impose stringent penalties for non-compliance with tax rules</li> </ul>	1.a
		10.4
To combat illicit financial flows	<ul style="list-style-type: none"> <li>• Strengthen the relevant regulatory framework and enforcement mechanisms and enact severe punishments for intentionally incorrect taxation-relevant information</li> </ul>	16.4 17.3
To optimize public expenditure and the effectiveness of fiscal incentives in support of fixed capital formation	<ul style="list-style-type: none"> <li>• Prioritize public investments that reduce supply-side constraints in strategic sectors and have a strong potential to crowd-in additional private investment</li> <li>• Concentrate the provision of tax rebates, subsidies and government guarantees in firms in strategically important sectors and link them closely to capital investments in innovation or upgrading of existing activities</li> <li>• Introduce a system of accelerated depreciation allowances, loss allocation and preferential treatment of reinvested profits</li> </ul>	2.3
		2.a
		5.4
		7
		8.9
To combine budgetary discipline with flexibility in fiscal management	<ul style="list-style-type: none"> <li>• Apply public sector deficit targets in a way that enables counter-cyclical policy responses in economic downturns</li> </ul>	9.2
		9.2
To reconcile budgetary discipline and the provision of adequate public support for building productive capacities	<ul style="list-style-type: none"> <li>• Consider aggregate quantitative criteria, such as a percentage of GDP, for the definition of budget deficit limits, as well as the structure of the deficit-financed expenditure, in particular expenditure for infrastructure projects</li> </ul>	7
		9.2
To maintain fiscal and debt sustainability	<ul style="list-style-type: none"> <li>• Ensure that, over the medium term, the public sector deficit as a share of GDP does not exceed the GDP growth rate and in absolute terms, does not surpass the expenditure for public investment Restrict external borrowing to the financing of productive investments that contribute to structural transformation and future export earnings</li> </ul>	9.2/9.4

<b>Monetary Policy</b>		
<b>Intermediate objective</b>	<b>Policy measure</b>	<b>Relevant SDG/ target</b>
To widen central banks' monetary policy space in support of credit creation by the banking system	<ul style="list-style-type: none"> <li>Give priority in capital market development to the creation of a secondary market for government securities and preferential refinancing facilities for long-term bank credit that supports structural transformation</li> </ul>	8.1 9.2
To minimize conflicts between inflation control and monetary support for building productive capacities	<ul style="list-style-type: none"> <li>Give the central bank a developmental mandate and firmly institutionalize the coordination of monetary policy with all other areas of policy in support of structural transformation, especially policies in support of industrialization and international trade integration</li> <li>Consider instruments other than restrictive monetary policy to keep inflation low, such as income policy, fiscal policy, price controls and support for an increase of domestic food supply</li> </ul>	2.3 8.1 9.2/9.3
To maintain domestic manufacturers' competitiveness in domestic and international markets	<ul style="list-style-type: none"> <li>Avoid currency overvaluation through pragmatic exchange management, including adjustment of the nominal rate in accordance with differential changes in unit labour costs</li> </ul>	9.2
To reduce vulnerability to external monetary and financial shocks	<ul style="list-style-type: none"> <li>Introduce a capital account management system, controls over private capital inflows and/or outflows and strict regulation of external borrowing by residents to ensure that capital inflows are closely linked to trade and productive investment</li> <li>Set up a stabilization fund to act as a buffer against strong fluctuations in international commodity prices</li> </ul>	8.1 9.2
<b>Financial policy</b>		
To enhance the contribution of the financial system to the creation and upgrading of productive capacities	<ul style="list-style-type: none"> <li>Give priority attention to the development of the banking sector as a source of finance for firms and farms</li> <li>Induce commercial banks to extend their branch network to ensure greater local presence outside major urban centres</li> <li>Use the network of public banks and post offices for the provision of payments and financial services, especially in rural areas and for women</li> <li>Support the greater use of new information and communication technologies for payments and financial services by providing the necessary infrastructures</li> </ul>	2.3/2.4 8.1 9.2/9.3
To facilitate access of SMEs, women entrepreneurs and farmers to finance	<ul style="list-style-type: none"> <li>Provide training to potential borrowers that enables them to file formal loan applications and to provide the required documentation</li> <li>Adapt mandatory collateral requirements to the abilities of micro, small and medium-sized firms, farmers and women entrepreneurs to provide such collateral</li> </ul>	2.3/2.4 5.a 9.2/9.3
To facilitate the financing of working capital	<ul style="list-style-type: none"> <li>Revise financial regulation to support the use of short-term financial instruments that can be refinanced by central banks and allow the private sector to operate with the help of buyer's and supplier's credit</li> </ul>	2.3 9.2/9.3
To induce commercial banks to step-up their long-term lending to finance investment in productive capacities	<ul style="list-style-type: none"> <li>Improve the scope for refinancing of bank loans by the central bank and lower asset-based reserve requirements for long-term lending for productive purposes</li> <li>Introduce restrictions on commercial bank lending for consumption and other non-productive purposes</li> <li>Arrange for or increase joint financing of investment projects by private and public banks</li> <li>Provide public guarantees for long-term loans for projects selected based on their contribution to structural transformation</li> </ul>	2.3 8.1 9.2/9.3/9.5

Intermediate objective	Policy measure	Relevant SDG/target
To keep the cost of financing for productive activities and investment at a reasonable level, considering the possible return on investment	<ul style="list-style-type: none"> <li>• Keep central bank interest rates and legal maximum commercial bank lending rates in real terms at a level that is compatible with realistic expectations of rates of return on productive investment</li> <li>• Link formal with informal financial institutions, such as rotating savings and credit societies, which are often in a better position to evaluate borrowers' risks and operate with lower transaction costs</li> <li>• Consider the provision of interest subsidies for the financing of selected investment projects</li> </ul>	9.3 2.3 8.1
To expand overall financing possibilities for public and private investment of strategic importance for structural transformation	<ul style="list-style-type: none"> <li>• Strengthen the contribution of national and sectoral development banks to the financing of investment in productive capacities, especially for activities that have high social rates of return and crowd-in complementary private investments</li> <li>• Encourage national development banks and possibly sectoral development banks to assume certain risks that commercial banks are unwilling to incur, considering the positive externalities that the respective projects generate for structural transformation</li> <li>• Use national or sectoral development banks for the provision of special credit lines for micro and small enterprises with high growth potential</li> <li>• Consider mandating central banks with a stronger developmental role by engaging in direct lending for strategically important investments in prioritized sectors</li> <li>• Explore the potential of PPPs and when using them, take measures to minimize the risks of contingent liabilities in the case of PPP failures and keep debt sustainability in check</li> </ul>	2.3 8.1 9.2/9.3





### III. HORIZONTAL POLICIES FOR STRUCTURAL TRANSFORMATION

#### A. Infrastructure investment for structural transformation

##### Main relevant SDG targets:

- 7.b: By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing States and landlocked developing countries, in accordance with their respective programmes of support
- 8.1: Sustain per capita economic growth in accordance with national circumstances and, in particular, at least 7 per cent gross domestic product growth per annum in the least developed countries
- 8.3: Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services
- 9.1: Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all
- 9.4: By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities
- 9.a: Facilitate sustainable and resilient infrastructure development in developing countries through enhanced financial, technological and technical support to African countries, least developed countries, landlocked developing countries and small island developing States

## 1. The multidimensional challenge of infrastructure policy

Specific infrastructure needs differ considerably across countries, depending on geographical characteristics. Yet, in all least developed countries (LDCs), meeting the Sustainable Development Goals (SDGs) requires considerable investment in social infrastructure that has a direct impact on the well-being of the population, such as health, water and sanitation utilities, public transport and education. Partly overlapping with these are “transformational” investments in the economic infrastructure, which are indispensable for achieving the SDGs because they enable and motivate private investment in productive capacities. Such transformational infrastructure investments include, for example, electric power, telecommunications and transport and logistics facilities. Transformational infrastructure investment is an indispensable complement to private investment to support the process of structural transformation. In the rural areas of LDCs, infrastructure investment is often even more important for human development and facilitating diversification than it is in urban areas (*The Least Developed Countries Report* (LDCR) 2014: ch.6). In addition to its long-term contribution to structural transformation, the construction of new infrastructure and the upgrading and maintenance of existing infrastructure also has a significant direct income and employment effect during the construction phase (LDCR 2013: ch.5).

Not all elements of infrastructure can be improved at the same time. There is a risk that competing claims on scarce public finances may arise for the improvement of the different types of infrastructure needed to support the expansion of manufacturing activities, on the one hand, and those needed to support agricultural and rural development, strengthen services sectors, or enhance social and human development, on the other. Priorities must be set in a balanced way, in order to satisfy the most immediate needs and meet the social and environmental targets of the SDGs. At the same time, they must alleviate the most binding infrastructure constraints to higher investment in private productive capacities.

The need for extensive and large-scale infrastructure investment implies a heavy financial burden for LDCs. The productive use of additional and upgraded economic infrastructure will contribute to faster GDP and export growth and it will also generate higher public revenues in the long term. However, even taking this effect into account, the level of investment spending required exceeds the budgetary possibilities of LDCs for many years to come. Closing the infrastructure gap in LDCs depends highly on a substantial increase of support by the international community (LDCR 2017: ch.5) (→ [ch.VII.B](#)). Depending on the geographical and geological situation, improvements in large-scale physical infrastructure may be achieved most efficiently through cooperation among neighbouring countries. Such cooperation has the potential to generate economies of

scale and may enable the financing of projects which would not be viable for a single country (→ ch.VI.D).

Issues related to infrastructure and logistics overlap with those in other areas, such as industrial policy (→ ch.IV.C) and trade facilitation (→ ch.VI.A). Indeed, the effectiveness of infrastructure investment for structural transformation and achieving the SDGs largely depends on its complementarity with private productive investments and trade expansion.

## 2. Electric power, water and sanitation infrastructure

### 2.1 Interaction between infrastructure and private investment

The inadequate supply of electricity for productive activities is among the main reasons for production interruptions and low capacity utilization in manufacturing activities and for low productivity in agriculture<sup>20</sup> (LDCR 2017: ch.1). Modern technologies, productivity growth and the development of higher value-added activities in LDCs require additional electricity. More stable and reliable access to electricity also lowers production costs for firms, freeing funds for investment and the acquisition of new technologies. Rural electrification could substantially accelerate the process of both productivity growth in agriculture and the expansion of rural non-farm activities (→ ch.V.A) (LDCR 2014: ch.6).

In energy, the focus should be on improving infrastructure, enhancing transformational energy access and meeting the needs of producers for reliable and affordable supplies to support structural economic transformation. It should also focus on meeting the needs of households (LDCR 2017: ch.3). Improved energy infrastructure can also enhance the supply of energy to public facilities, such as schools and hospitals. Strengthening transformational energy access, a progressive move towards renewable technologies in energy generation, could offer considerable environmental benefits. Renewable energy technologies can play an important role especially in rural areas where electrification is crucial to enable economic diversification away from agriculture (→ ch.V.B) (LDCR 2014: ch.6; LDCR 2017: ch.2).

Integrating improvements in energy infrastructure into a strategy aimed at building productive capacities and accelerating structural transformation means enhancing the two-way relationship between structural transformation and electricity access — the energy-transformation nexus. Energy access provides an important contribution for the transformation of the economy. The productive use of electricity and the energy demand it generates, in turn, is essential for making the capital investments in infrastructure for electricity generation and distribution economically viable (LDCR 2017: ch.6). Productive use increases demand both directly and indirectly by strengthening the demand

of households whose incomes rise as productive capacities expand. It is therefore essential to ensure that the nature, quantity and quality of energy supply and access meets the needs of those actors that drive the process of structural transformation and that development policies contribute to generating higher demand. Complementary measures in other areas of development policy discussed in this Compendium harness this energy-transformation nexus.

The complexities of the electricity sector make long-term, system-wide planning essential, especially if it is to achieve transformational energy access. The latter requires a high degree of flexibility in the provision of energy infrastructure and services to respond to a rapidly evolving technological environment, to adjust to unpredictable changes in the pattern of demand as access is increased and to respond to changes in the business landscape as structural transformation progresses. Predictability and transparency in energy policy are needed to attract private investment into the sector (LDCR 2017: ch.6).

The supply of water and environmentally sound waste water management are of crucial importance for the economic efficiency and environmental sustainability of many industrial and agricultural activities. In most LDCs, strong improvements in water utilities are necessary to reduce the currently high distribution losses in their water utilities systems,<sup>21</sup> to upgrade agricultural irrigation systems and to expand the water distribution and waste water management systems to enable private manufacturing activities, which rely on water as an essential input.

## **2.2 Striking the right balance in tariff policy**

Determining tariffs for public utilities, like electricity and water, requires the delicate balancing of affordability and cost-reflectiveness (LDCR 2017: ch.5). Cost-reflective tariffs are important for the financial sustainability of public utility services and underpin service quality, future upgrading and further investment in the sector.

However, the scope for tariff design is constrained by high rates of poverty, limited purchasing power and the interest to support the process of structural transformation by providing cheap energy, water, sanitation and transport facilities for new productive activities. For these reasons, electricity and water tariffs have traditionally been subsidized in a substantial way in many countries and in almost all LDCs (→ ch.IV.B).<sup>22</sup> The design of public utility tariffs is also a matter of social justice, since across-the-board subsidization benefits those households that consume the most electricity and water.

Thus, the usefulness of this policy should be reviewed since it implies a considerable loss of easy-to-collect public revenue and therefore, a loss of fiscal space. While across-the-board subsidization has a positive social impact among households and the informal

sector, improving profitability and the competitiveness of businesses, it may negatively impact their motivation to use electricity and water more efficiently. From a social point of view, in the face of widespread poverty in LDCs, lifeline tariffs can be essential for achieving SDG 7 on universal access to energy and water. A gradual upward adjustment of tariffs to cost-reflective levels could be cushioned by equivalent direct income transfers to those most in need. From the point of view of supporting structural transformation, tariff subsidization could be limited to firms and activities in selected sectors that are leading the process of structural transformation and employment creation.

As the number of users and the volume of electricity consumed will rise with improved access, unit costs and the respective cost-recovering tariffs are likely to fall. Moreover, as overall productivity and energy efficiency advance as a result of various other policy measures discussed in this Compendium, gains from this productivity growth may enable electricity and water tariffs to be brought closer to supply costs, without reducing enterprise competitiveness or profitability.

### **3. Information, telecommunications and transport infrastructure**

The availability of information, communication and telecommunications technology (ICT) is increasingly important for the internal efficiency of firms in other sectors and for communication with their actual and potential clients. It also matters for the flow of information between public agencies and private actors, as well as for communication among public agencies. ICT infrastructure is indispensable for the development of an ICT services sector, which contributes to growth and structural transformation and facilitates economic activity in other sectors. Without enhanced ICT services, LDCs cannot reap the benefits of digital-based activities in trade and finance and harness other advanced technologies.

Investment in modern ICT equipment is a major challenge at the firm level, especially in the export-oriented manufacturing sectors. Public policies need to enhance the physical infrastructure required for the use of these technologies, and adapt the supporting institutional and regulatory frameworks.

Production linkages, participation in international trade, and, the expansion of tourism depend critically on the upgrading of transport infrastructure. The type of transport infrastructure that is most needed and suitable for fostering structural transformation differs considerably across countries, depending on their geographical circumstances, already existing facilities and the sectoral priorities in efforts to accelerate structural transformation. For example, to enable exports to drive the expansion of manufacturing industries, coastal countries are mostly in need of enhanced seaport facilities, whereas

landlocked countries may have to strengthen their air cargo transport capacities. In some countries, extension and electrification of the railway network may have a potential to generate substantial productivity gains, whereas this may not be the case in others. In some countries specific transport infrastructure may be required for the development of tourism services.

Yet, a substantial extension and upgrading of the road network, both urban and rural, as well as the provision of logistics infrastructure for the optimal functioning of the multi-modal transport system is likely to be required in all LDCs (→ ch.VI.A). At the same time, it must be ensured that the existing road network and other infrastructure receives adequate maintenance. In many cases, greater efficiency, speed and reliability and better-quality transport services can be achieved through regional cooperation and harmonization (Diagnostic Trade Integration Study (DTIS) Mali).

## B. Science, technology and innovation policies

### Main relevant SDG targets:

- 2.a: Increase investment, including through enhanced international cooperation, in rural infrastructure, agricultural research and extension services, technology development and plant and livestock gene banks in order to enhance agricultural productive capacity in developing countries, in particular least developed countries
- 5.b: Enhance the use of enabling technology, in particular information and communications technology, to promote the empowerment of women
- 8.2: Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors
- 9.5: Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending
- 9.c: Significantly increase access to information and communications technology and strive to provide universal and affordable access to the Internet in least developed countries by 2020
- 14.a: Increase scientific knowledge, develop research capacity and transfer marine technology, taking into account the Intergovernmental Oceanographic Commission Criteria and Guidelines on the Transfer of Marine Technology, in order to improve ocean health and to enhance the contribution of marine biodiversity to the development of developing countries, in particular small island developing States and least developed countries

## 1. The challenges for policy support to scientific and technological development and innovation

Science, technology and innovation (STI) policies are closely related to industrial policy, but they are also relevant for environmentally sound productivity growth in agriculture, the development of modern services and meeting the challenge of climate change adaptation and mitigation. STI policies also have an important role in accelerating progress towards social and human development goals. Policies to promote technological learning and innovation need to be appropriately calibrated to the level of technological development in each LDC, its economic structure and the capabilities of its government and business sectors. Thus, technological progress in LDCs primarily means the adaptation of technologies that are new to the country - though not necessarily for the world - and the technological upgrading of production processes.

Technological progress in this sense can come from either domestic research and development and learning efforts, or from a transfer of technology from more advanced economies. Advanced foreign technology is primarily acquired through the import of machinery and equipment by either domestic or foreign investors, but it can also take the form of foreign licencing. Since technology is largely embodied in machinery and equipment, adaptation of technology is also closely related to the level of investment and supported by the policy measures discussed in this Compendium in the chapters on industrial and sectoral policies (→ ch.IV; → ch.V). Therefore, it is essential that direct policy support to STI be designed in close coordination with other areas of development policy.

In any case, mastering imported technology, like the enhancement of domestic research and innovation capacities, requires parallel skills upgrading at the different levels of education and vocational training. Innovation and technological learning primarily takes place in enterprises, but these are embedded within a broader set of institutions that make up domestic knowledge systems, which enable the creation, accumulation, use and sharing of knowledge. LDC governments therefore must approach STI policies at two levels. First, they must support an increase in the capacity of domestic firms and farms to take up and utilize new technology. Second and in parallel, they must strengthen domestic knowledge systems (LDCR 2007: ch.2; LDCR 2016: ch.5).

In order to reconcile the objective of raising productivity through technological upgrading with that of employment creation for a fast-growing labour force, governments should follow a dual approach to technology acquisition (LDCR 2013: ch.4):

- A strategy for the modern sectors that involves the acquisition of advanced technologies from developed and more advanced developing countries. Here, the

productivity aspect prevails, since the goods produced in the modern sectors are mostly tradables that are subject to intense international competition; and

- A strategy for the traditional sectors, including agriculture, as well as the production of locally-consumed manufactures and intermediate inputs. Here the focus is on “appropriate” technology, i.e. technology that is introduced to improve product quality, enhance the reliability of production and create new jobs alongside its introduction and use, rather than technology to spur labour productivity and save jobs.

## 2. Components of effective science, technology and innovation policies

STI policies should focus on innovation systems at the national or sectoral level, within which interconnected institutions contribute to the development and diffusion of new technologies (LDCR 2007: ch.2). They should address:

- Human resources development for science and technology through secondary and tertiary education and technical and vocational training institutions (→ ch.III.C);
- Public science and technology infrastructure, including public research centres, technology advisory centres, agriculture and industrial extension agencies and business support services;
- Dissemination of relevant information through networks, advisory centres, consultancy services, specialist libraries and databases; and
- Technology transfer through appropriate forms of foreign direct investment (FDI), imports of production equipment and access to licences.

While innovation by private actors is at the core of structural transformation, public sector enterprises can be instrumental in pioneering innovative practices. Public procurement can be a powerful source of demand for innovation and influence the viability and profitability of new private sector activities (LDCR 2007: ch.2).

To ensure that STI policies are effective in supporting structural transformation, an appropriate balance between the promotion of science and technology in public institutions and actual innovation in productive enterprises is essential (LDCR 2007: ch.2). It is also necessary to facilitate fruitful interactions between centres of advanced education and research institutions, on the one hand and domestic and foreign firms on the other (LDCR 2016: ch.5; United Nations 2016).

## C. Policies for education, training and knowledge acquisition

### Main relevant SDG targets:

- 2.3: By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment
- 4.1: By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes
- 4.3: By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university
- 4.4: By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship
- 8.6: By 2020, substantially reduce the proportion of youth not in employment, education or training.

### 1. The challenge of upgrading human skills in line with technological capabilities

One of the main drivers of productivity growth and innovation is the acquisition of technical skills, including management know-how and experience by economic actors in all sectors of the economy (LDCR 2007). Skills upgrading, technological progress and investment in productive capital are interdependent in the process of structural transformation. On the one hand, a shortage of technical skills and knowledge among the workforce can lead to the underutilization of the existing capital stock. This may hamper the motivation to expand it, as is frequently the case in LDCs. On the other hand, skills upgrading through improved education and training will contribute to productivity growth and structural change only if better trained workers find employment. This requires an upgrading and expansion of capital equipment. Therefore, public policies in these areas must be well coordinated with the needs of enterprises. It is also essential that specialized creators of knowledge, such as research institutions, respond to the demands of potential productive users of that knowledge (LDCR 2006: ch.8).

### 2. Strategic issues in upgrading knowledge and technical skills

Structural transformation in the economy is inevitably connected with the longer-term process of social transformation, which at the same time requires the acquisition of and

facilitates the dissemination of new knowledge. The domestic knowledge base in LDCs has broadened in various ways—through on-the-job learning, especially in activities that require only moderate skills; through education and vocational training for the acquisition of medium and high-technical skills required for increasingly sophisticated production and services provision; and through the intra-firm mobility of experienced technical personnel (LDCR 2007: ch.2).

While in many LDCs improving primary education remains a priority, it is also important to begin raising the awareness of the next generation of the opportunities that the process of structural transformation offers them and of the challenges with which they will be faced. Another central element of policies aimed at skills upgrading and knowledge dissemination are actions to remove the de facto discrimination of women in educational systems, professional training and agricultural extension services (LDCR 2016: ch.5).

In secondary and tertiary education and in technical and vocational training, LDCs need to both improve the quality and expand the supply of education services. This includes revising curricula and teaching methods to make the labour force more adaptable and innovative and adjusting education policies to meet current and future domestic labour market requirements (LDCR 2013: ch.4).

In agricultural and artisanal activities, many traditional skills are worth being preserved, but they should be refined and complemented with knowledge about the use of modern production techniques and tools (LDCR 2006: ch.6). Blending modern and traditional knowledge in areas like health care, agriculture and artisanal production is likely to be favourable for the social acceptance and environmental sustainability of structural change and may even offer opportunities for product innovation (→ ch.V.A).

In some sub-sectors of the manufacturing industry, practical skills can partly be acquired through systematic on-the-job learning and experience and training at the firm level. However, demands rise rapidly in this regard, as product diversification, industrial upgrading and the development of industrial services advance. Therefore, appropriate staffing and building the capacities of technical and vocational education and training (TVET) institutions is equally important. Introducing a dual system of professional training that combines school learning with the acquisition of on-the-job experience may be the most effective for the upgrading of professional skills (DTIS Ethiopia).

Similarly, competencies in business management can partly emerge from experience at lower operational levels, but typically the skills required at this level also require higher education. Universities therefore play an important role in the process of building

productive capacities and structural transformation. However, what matters most in higher education is the dissemination of knowledge from applied sciences and practical expertise. Beyond that, the role of universities also extends to the development of research centres of excellence in support of technological, organizational and managerial progress in agricultural, manufacturing and service activities.

## D. Enterprise policies

### Main relevant SDG targets:

- 8.3: Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services
- 9.2: Promote inclusive and sustainable industrialization and, by 2030, significantly raise industry's share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries
- 9.3: Increase the access of small-scale industrial and other enterprises, in particular in developing countries, to financial services, including affordable credit, and their integration into value chains and markets

### 1. The rationale for policies focussing on enterprise development

In most LDCs, the size distribution of enterprises is generally characterized by a “missing middle”. A multitude of informal micro-enterprises coexist with a few large firms, typically state-owned enterprises or firms owned or controlled by foreigners (LDCR 2013: ch.4). These large firms tend to operate in the most capital-intensive sectors, such as the extractive industries, energy and telecommunications, air transport and modern financial services. Linkages between the large firms and small and medium-sized enterprises (SMEs) are rare in LDCs (LDCR 2006: part Two ch.6).

Small enterprises in both agriculture and manufacturing often produce at a sub-optimal scale. It is therefore important to enable these small firms to expand their production within the existing methods of production, which are typically labour-intensive and thus, can generate considerable employment opportunities (LDCR 2013: ch.5). With a growing number of medium-sized enterprises, conditions that enable technological progress will improve. This is likely to spur competitive pressure, as well as the ability of firms to innovate.

Small and medium-sized enterprises (SMEs) play an important role in domestic growth dynamics as they primarily use local inputs, thereby linking local primary production with manufacturing activities. From a dynamic efficiency perspective, however, large firms are in a better position to achieve higher rates of capital formation, innovation, scale economies and the accompanying learning effects. In addition, integration into the international economy and growing export activities may not often be possible without the creation of larger production units and transforming SMEs into larger enterprises that have a greater chance to be internationally competitive (LDCR 2006: Part Two ch.8).

Company growth, upgrading and innovation require a sense of entrepreneurship among firm owners and the related competencies at the different layers of management. Greater managerial competencies in factory layout and material flow management would help achieve better factor and input allocation and support company growth. Stronger capacity of entrepreneurs in SMEs to formulate appropriate business plans is a precondition for access to external sources of finance, notably bank loans. Moreover, export-oriented firms, or those with the potential to develop export capacities, have to improve the use of and compliance with international product and management standards, which are often vital for international competitiveness (LDCR 2006: Part Two ch.6; DTIS Ethiopia).

## 2. Approaches to enterprise development

Governments can foster the growth of SMEs in several ways:

- Strengthening entrepreneurial and managerial capabilities through support to institutions that provide managerial training, set product standards and help firms to meet these standards (LDCR 2006: Part Two ch.8).
- Facilitating the access of firms to finance by encouraging banks to extend more credit, especially with longer maturities, for productive purposes and by supporting firms in the formulation of meaningful business plans and the provision of collateral (LDCR 2009: ch.3) (← ch.II.D; → ch.IV.C).
- Improving information flows and strengthening networking and clustering among firms through the provision of relevant information from public institutions and supporting the creation of sectoral associations (LDCR 2013: ch.5) (→ ch.IV.C).

In addition, incentives for the formalization of previously informal economic activities must be a key element of enterprise policies in LDCs. Formal firms are in a better position to grow and are more likely to respond to policy measures that support structural transformation and employment creation. Incentives to encourage formalization are

more likely to be effective than repressive measures.<sup>23</sup> All policy measures should be designed in such a way that the benefits for firms outweigh the costs of having to pay taxes and observe regulations. Lowering entry costs and increasing the advantages that formalization encourages firms to join the formal sector. Facilitating the registration of firms and providing services such as training, improved access to credit, participation in business forums or assistance with import and export procedures can help to induce firms to enter the formal sector voluntarily (UNCTAD 2009: ch.III). In this regard, special actions are often indicated to remove the de facto discrimination of female entrepreneurs in formalization procedures (LDCR 2016: ch.5). The creation of a “one-stop shop” for businesses where they can register legally, obtain or renew licences, register property and fulfil their other administrative obligations is one of the ways in which states can try to reduce the administrative burden on firms.<sup>24</sup>

### 3. The need for stable and reliable supply inputs

The functioning of domestic supply chains and access to imported inputs is a constraint to enterprise development in many LDCs and sectors of activity. A stable and reliable supply of inputs is crucial for the emergence of linkages as part of structural transformation. This is of particular strategic importance when the entry point for industrialization is processing domestically available raw materials (→ ch.IV.B). In this case, domestically available raw materials should be processed to the largest extent by domestic manufacturers, instead of being exported unprocessed. On the other hand, the expansion of domestic productive capacities can be enhanced with limited reliance on imports when domestic manufacturers can draw primarily on domestically produced inputs.

It is, therefore, essential for enterprise development in LDCs that productive capacities in the rural economy evolve alongside the development of manufacturing and services activities. The same consideration is valid for ancillary industries. Thus, even if the strategy for structural transformation prioritizes certain manufacturing activities, such as food processing, textiles or leather manufacturing, capacities for the production of domestic inputs to these activities, for example packaging materials, chemicals, or wood, metal and plastic tools, should be supported in parallel (→ ch.IV.A).

This will often require supporting the market mechanism by awareness-building, the provision of information and better access of these supplier to finance, as well as improvements in productivity-enhancing infrastructure (→ ch.V.A). More stable and reliable supply linkages benefitting both farmers and domestic processors of agricultural produce can be supported by promoting contract farming or the establishment of Rural Transformation Centres, possibly in combination with industrial parks (UNIDO 2014).

Enterprise development can also be stymied by constraints on imports of essential inputs. Tariffs and excessive customs, tax and foreign exchange formalities in connection with such imports often complicate access to such inputs and raise their costs. Vouchers, duty drawback and bonded warehouse schemes, as they are practiced in many LDCs, may mitigate some of these complications, but tend to create additional administrative burdens for both firms and the public administration. It is therefore important to review and evaluate the costs and benefits of imposing import restrictions (DTIS Ethiopia).

Certain institutional arrangements may help to reduce the costs of imported inputs for both industry and agriculture further. These may take the form of intermediary import enterprises at the national or sectoral levels. Such enterprises could improve access to and lower the costs of, imported inputs. They could support domestic firms and farms by identifying the most suitable suppliers for each input on the world market. Moreover, as they would purchase significantly larger volumes than any individual importer, they would have stronger bargaining power in price negotiations. They might also be helpful in accelerating the management of import transactions and customs services.

## E. Employment policies

### Main relevant SDG targets:

- 2.3: By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment
- 8.5: By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value.
- 8.6: By 2020, substantially reduce the proportion of youth not in employment, education or training.
- 9.2: Promote inclusive and sustainable industrialization and, by 2030, significantly raise industry's share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries
- 10.1: By 2030, progressively achieve and sustain income growth of the bottom 40 per cent of the population at a rate higher than the national average.

## 1. The challenge of employment creation for a rapidly growing labour force

Combining fast employment creation for all with productivity growth is probably the most serious challenge for economic policies in LDCs, which are characterized by fast-growing labour forces and an already high level of unemployment or underemployment. Employment policies must pursue two complementary objectives (LDCR 2013: ch.5):

- Expanding the number of jobs to absorb the rapidly growing labour force, and
- Raising the incomes generated by these jobs, in line with productivity growth, to reduce poverty and strengthen domestic demand.

In the past, market liberalization in developing countries often led to higher labour productivity in manufacturing, but total employment in the sector fell. In many cases, labour moved from the manufacturing sector to lower productivity sectors, notably the informal sector (LDCR 2014: ch.4). This phenomenon of reverse structural transformation suggests that employment creation in the context of structural transformation requires carefully elaborated public policies. With regard to such policies, LDCs may draw some lessons from a few countries in East Asia, such as the Republic of Korea and Taiwan Province of China, where policies to support structural transformation were conducive to employment growth in manufacturing.

Employment creation in manufacturing activities in urban centres will not be enough to generate sufficient jobs to achieve full and productive employment by 2030. Since the incidence of poverty is particularly high in rural areas and urbanization is constrained by its social and environmental impacts, efforts to create employment must also include measures that enable and support the generation of incomes and employment in rural areas (LDCR 2014: ch.6) (→ ch.V.A).

## 2. Components of an employment strategy

Since growth is a necessary, but not a sufficient condition for employment creation, the challenge for policymakers in LDCs is to promote investment of a kind that combines productivity growth with employment growth. The entry point into a strong and sustainable investment-growth-employment nexus is investment that sets in motion a virtuous circle by boosting a type of growth that creates employment, which, in turn, entails increased income for workers, giving rise to consumption, which supports the expansion of aggregate demand (LDCR 2013: ch.4).

In the short to medium term, public investment in priority infrastructure must play an important role in initiating such a virtuous circle. Since most LDCs are open economies, a pragmatic approach would be to start to stimulate the process of capital accumulation via an investment-growth-employment nexus in the non-tradable sector. Social services are also strong candidates for initiating an investment-growth-employment nexus driven by public investment. Other sectors that could be targeted because of their potential to create employment are construction, the expansion of services in rural areas, textiles and leather production and food processing.

Employment policies in LDCs must consider that the poor generally have very limited technical skills. Thus, the scope for such policies initially appears to be the largest in the production of non-tradable goods and services, which have a low skill and technology content (LDCR 2013: ch.4). Since these activities do not generally face international competition, the policy space in these sectors is larger than in the tradables sector. Given the weakness of the private sector in LDCs and the need for all kinds of improved public infrastructure in all areas, public works programmes in combination with rural irrigation, drainage, the provision of feeder channels, local land reclamation and reforestation could be plausible starting points for employment creation in favour of the poor and unskilled parts of the population (LDCR 2013: ch.5).

Rural non-farm economic activities linked to farming, the food chain and the production of goods and services for local rural markets — mostly non-tradables — are another area where employment creation would not conflict with productivity growth. With improvements in rural-urban transport networks, they may also be increasingly involved in the production of goods and services for more distant urban markets (LDCR 2013: ch.5).

With respect to employment creation in sectors that produce tradable goods, low wages in international comparison are often considered to reflect the comparative advantage of poor countries in labour-intensive manufacturing activities. This is, however, a static perspective, which involves the risk that employment policy is excessively focussed on creating jobs by keeping wages low and on engaging in wage competition with other countries. There can be no doubt that labour costs impact the international competitiveness of domestic producers, but unit labour costs also depend on the level of labour productivity and its development over time. It is therefore essential to take a dynamic perspective on wage formation, considering the growth of labour productivity. If wage increases do not exceed productivity growth and the supply of goods and services, such as food, transport and housing, rises at the same pace, real wages can rise without an increase in unit labour costs and the possible loss of international

competitiveness (LDCR 2013: ch.5). Indeed, the emergence of a virtuous circle of productivity, income and domestic demand growth requires that wages are periodically adjusted upwards in line with productivity growth. LDC governments are therefore well advised to monitor wage developments and to influence wage setting in such a way that real labour incomes rise without eroding the labour cost advantage.

### Horizontal policies to achieve the SDGs



## F. Summary of horizontal policy options

<b>Infrastructure for structural transformation</b>		
<b>Intermediate objective</b>	<b>Policy measure</b>	<b>Relevant SDG/ target</b>
To ensure the stable and reliable provision of energy for productive activities, especially in sectors of strategic importance for structural transformation and to enable the use of automated production systems and modern ICT equipment	<ul style="list-style-type: none"> <li>Invest in energy infrastructure, including power generation, transmission and distribution</li> <li>Diversify the energy mix, including especially renewable sources</li> <li>Adopt a hybrid of grid (expansion and upgrading), minigrids and local solutions, combining centralised and decentralized systems</li> </ul>	1.4 2.a 5.4 7 9
To raise hygiene standards, increase agricultural output, especially the production of food and inputs to domestic processing industries and to enable an expansion of manufacturing activities	<ul style="list-style-type: none"> <li>Invest in the expansion of water utilities and of the water supply for households, especially in rural areas and for irrigation, as well as for prioritized manufacturing sectors</li> </ul>	2 3.3/3.9 6
To benefit from synergies between energy and water infrastructure in support of agricultural irrigation and industrial production	<ul style="list-style-type: none"> <li>In countries where the geological and geographical possibilities exist, closely coordinate the development of power generating capacity with the development of water utilities and give priority to multipurpose water-storage systems</li> </ul>	6 7
To increase efficiency in production and commerce, improve the functioning of supply chains and facilitate the communication between private firms and the public administration	<ul style="list-style-type: none"> <li>Invest in telecommunications infrastructure</li> </ul>	8.1/8.2/ 8.3 9.c
To enable the emergence of forward and backward linkages within and across regions and sectors of economic activity, including between external trade hubs, urban industrial centres and rural areas	<ul style="list-style-type: none"> <li>Invest in the extension and upgrading of long-distance transport networks</li> </ul>	2.a 8.1/8.2/ 8.3 9.1/9.2/ 9.4/11
To facilitate trading activities, transport and trade logistics	<ul style="list-style-type: none"> <li>Accelerate the implementation and ensure the functioning of the multi-modal transport system, combining trucking, railways, airways and shipping</li> </ul>	8.1 9.1 9.a
To ensure efficient of energy, water, telecommunications and transport infrastructure	<ul style="list-style-type: none"> <li>Prioritize the provision of transformational infrastructure for industrial zones to create synergies within these zones and the emergence of linkages with firms outside these zones</li> </ul>	6.4 7.3 9.4
<b>Policies to strengthen science, technology and innovation capabilities</b>		
To reconcile technological upgrading with employment creation	<ul style="list-style-type: none"> <li>Pursue a dual strategy for technology acquisition, combining the acquisition of advanced technologies for modern sectors with the development of “appropriate” technology for traditional sectors, which is not labour saving but improves product quality and the reliability of production</li> </ul>	2.3 4.4 8 9.2
To advance STI capabilities and the diffusion of new technologies	<ul style="list-style-type: none"> <li>Set up public research centres, technology advisory centres, agricultural and industrial extension agencies, business support services and information systems</li> <li>Enhance technology transfer through the financing of support for imports of modern production equipment, access to licences and FDI policies that are conducive to the transfer of technology</li> <li>Use public sector enterprises to pioneer innovative practices and public procurement to drive demand for innovation</li> </ul>	9.5 12.9 1.4 2.a 5.b 8.2/8.3 9.1/9.5 9b

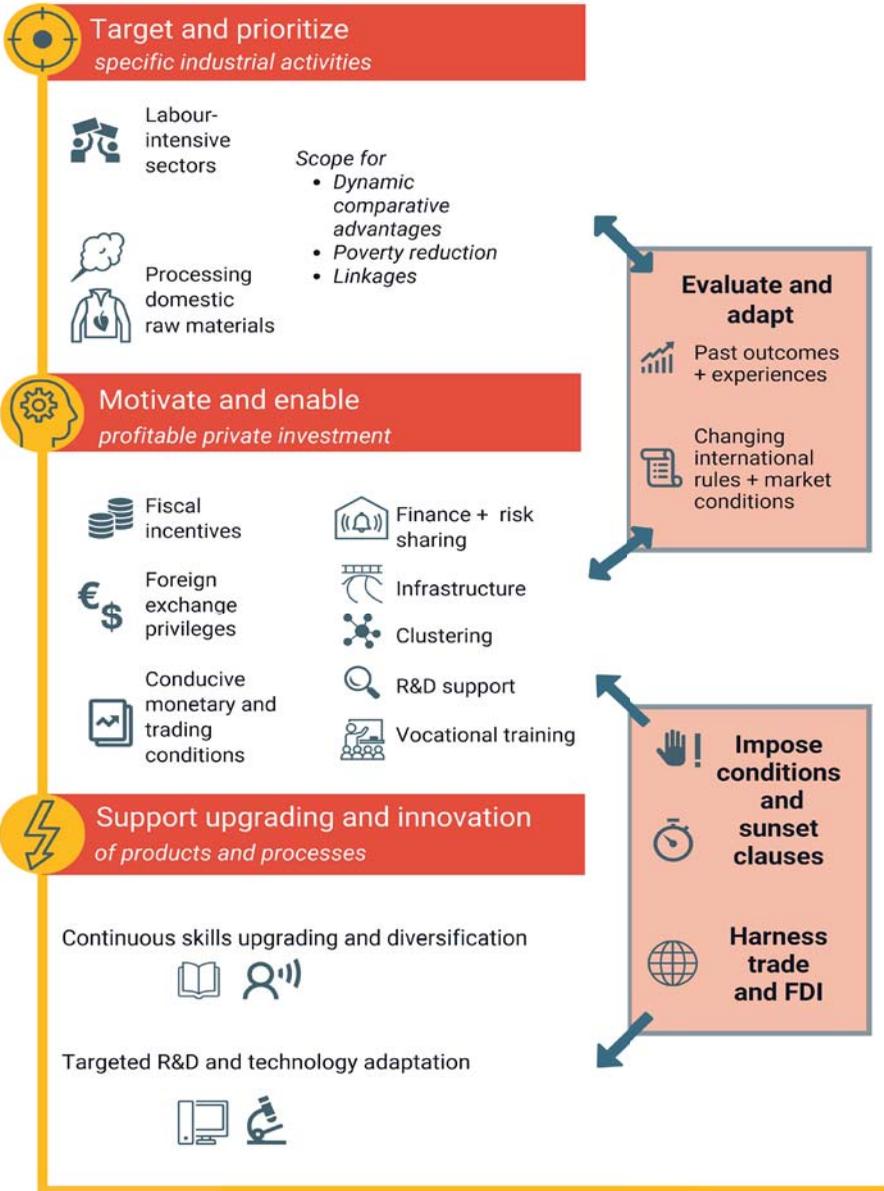
### Education, training and knowledge acquisition

Intermediate objective	Policy measure	Relevant SDG/ target
To raise the level of production-relevant skills and knowledge, including the competencies of managers and workers, especially in new economic activities	• Invest in all levels of education, especially for the development of technical skills and technological capabilities	2.3 4 8.6
	• Enlarge the number and enrollment capacity of technical and vocational training (TVET) institutions and strengthen the competencies of their teaching and training staff	4 5
	• Consider the introduction of a dual system of professional training that combines school learning with the acquisition of practical on-the-job experience	
	• Adapt curricula and teaching methods to new and future labour market requirements	
To strengthen domestic knowledge systems and improve their contribution to structural transformation	• Set up institutions for cooperation between universities, research institutes and training centres, on the one hand and the business community, on the other and promote the creation of knowledge linkages among private firms	2.3 4
To effectively use available imported technology, including through adaptation to local conditions and blending with traditional knowledge where possible	• Develop a coherent national technology learning strategy and institutions	1.4 2.a 5.b 8.2 9 12.a

### Policies in support of enterprise development

To enhance the contribution of micro, small and medium-sized enterprises and women entrepreneurs to the expansion of productive capacities and to allow them to respond to new opportunities arising from the process of structural transformation	• Provide training, through public institutions or publicly-sponsored private associations, to these firms in the formulation of business plans, the understanding of contractual obligations, the organization of production processes and possibilities to access export markets	2.3 8.3 9.3
To allow firms to grow to optimal size and enable them to respond to large orders, especially in connection with export activities	• Facilitate access to finance for working capital, productive capacities and mergers with other domestic firms	2.3 5.a 8.3/8.10 9.3
To enable the upgrading and diversification of products and production processes of domestic firms	• Set up or strengthen standard-setting bodies, e.g., for quality, security and sanitary certification, through government initiatives or in partnership with sectoral associations and provide training and services to firms to meet these standards	2.4 8.2 9.b 12.a
To facilitate and encourage the entry of informal firms into the formal sector and the formalization of employment in these firms	<ul style="list-style-type: none"> <li>• Provide incentives, such as access to public services or sources of finance that are not available to informal firms, as well business support services and training in established accounting practices in cooperation with private sectoral associations</li> <li>• Ensure that the benefits of formalization outweigh the costs of having to pay taxes and observe regulations</li> <li>• Dismantle de facto discrimination of women in formalization procedures</li> <li>• Keep formalization procedures and requirements for business reporting simple and free of charge and grant newly formalized firms a transition period and provide advice on how to comply with regulations</li> <li>• Consider the creation of a "one-stop shop" where firms can register legally, obtain or renew licences and complete all other administrative procedures</li> </ul>	1.3 1.b 2.3 8.3/8.8 9.3 10

Intermediate objective	Policy measure	Relevant SDG/ target
To strengthen domestic supply chains and facilitate the emergence of cross-sectoral linkages, including between larger lead firms and smaller producers	<ul style="list-style-type: none"> <li>• Identify shortcomings in the provision of domestic inputs to prioritized sectors, particularly raw materials to processing sectors</li> <li>• Provide similar support to both the suppliers of such inputs and firms in the prioritized sectors</li> <li>• Foster information flows, networking and clustering among firms by providing information and support to the creation of sectoral associations</li> <li>• Consider establishing Rural Transformation Centres in combination with industrial parks to improve the organization and quality of raw materials for processing firms</li> </ul>	2.3/2.4 2.a 8.2/8.3 9.2/9.3
To reduce the costs of imported inputs for activities of strategic importance for structural transformation	<ul style="list-style-type: none"> <li>• Keep import formalities simple and consider setting up intermediate input supply enterprises or agencies</li> </ul>	8.3 8.a 9.2/9.3
<b style="color: #e67e22;">Employment policies</b>		
To generate employment on a substantially larger scale than in the past	<ul style="list-style-type: none"> <li>• Give priority attention to the development of manufacturing activities with high labour intensity and to macroeconomic policies that support aggregate demand growth</li> </ul>	4.4 8 9.2 10.1
To achieve inclusive employment creation	<ul style="list-style-type: none"> <li>• Include specially targeted measures in employment strategies for the generation of income and employment in rural areas</li> <li>• Ensure gender equality in public employment and in any support for formal job creation in private enterprises</li> </ul>	2.3 4.4 8 5.1/5.6 5.c 9.2
To meet the immediate need of low-skilled employment for the poorest and unskilled parts of the population and in rural areas and to initiate a dynamic investment-growth-employment nexus	<ul style="list-style-type: none"> <li>• Launch public works programmes for the improvement of infrastructure, e.g. in rural irrigation, drainage, the provision of feeder channels, feeder roads, local land reclamation or forestation</li> <li>• Focus efforts aimed at employment creation on activities where they do not enter into conflict with productivity growth, such as rural non-farm activities linked to farming and the production of goods and services for local rural markets</li> <li>• Support the expansion of labour intensive sectors that offer a large number of jobs with relatively low skill requirements, such as construction, the production of textiles, clothing and leather goods and food processing</li> </ul>	1.1/1.2 1.b 2.a 9.1 8 9.2 1.1/1.2 1.b 9.2 10.1
To escape the risk that employment creation depends on lowering wages and to allow for regular wage increases	<ul style="list-style-type: none"> <li>• Promote continuous increases in labour productivity and influence wage setting in such a way that real labour incomes rise without increases in unit labour costs</li> </ul>	2.3/2.4 8.2 10.1/10.4





## IV. Industrial policy

### A. Rationale and challenges of industrial policy

Since the main structural change in most least developed countries (LDCs) is to raise the share of industrial output in gross domestic product (GDP), policy efforts to accelerate capital accumulation should support knowledge acquisition and the expansion of higher-value-addition and employment creation in manufacturing sectors. The first precondition for achieving the required strong investment push (← ch. I.B) is to strengthen the motivation of private entrepreneurs to invest in additional manufacturing capacities. The second is to ensure that such investment is physically and financially possible.

Policy measures to support the building of productive capacities in manufacturing, as they have been used in different forms in almost all economies that have achieved sustained growth based on industrialization, are often collectively referred to as industrial policy (*The Least Developed Countries Report* (LDCR) 2009: ch.1). However, beyond a few core elements, there is no single set of policy instruments and institutions that refer to this concept. Industrial policy instruments vary according to the conditions that prevail in a given economy at a particular time. In the context of LDCs, where the manufacturing sectors are still small and the main challenge is to create favourable conditions for the transformation from agrarian to post-agrarian societies, the concept of industrial policy

should be defined broadly, as “any strategic intervention by the State that catalyses structural change and stimulates economic restructuring toward more dynamic, higher value-added activities” (LDCR 2009: p.13).

Strategic and forward-looking industrial policy has two elements that partly overlap (LDCR 2014: ch.5). “Horizontal” interventions aim at correcting economy-wide imperfections. These are interventions supporting, for example, capital accumulation, knowledge acquisition and the creation of new firms. “Vertical” interventions aim at encouraging particularly promising economic activities which are of strategic importance for structural transformation and the generation of dynamic comparative advantages, but are discouraged by skewed incentives (← ch.I.C.4). Initially, these are mostly the labour-intensive manufacturing sectors, but may also include manufacturing subsectors that build on the local availability of raw material inputs. After an initial development phase, further diversification, productivity growth and industrial upgrading requires the building of productive capacities in sectors of increasing sophistication and innovation, where the technological- and skills-intensity of production is higher.

To build productive capacities cum employment generation, it is necessary to support specific nascent manufacturing industries, as well as the emergence of positive spillovers to other industrial sub-sectors and to the primary and services sectors. The possibility of creating such linkages requires simultaneous investments in all activities that comprise the value chain of the promising sector (← ch. III.D). In this context, attention must also be given to activities that are only weakly developed or may not yet exist, but can be crucial for the sustainability of output growth and employment creation. This involves supporting private entrepreneurs in their attempts to start manufacturing activities with higher levels of value-added in ancillary industries, for example agricultural and transport equipment, packaging materials, metal tools or chemicals, which can boost the local content by strengthening backward and forward linkages (Diagnostic Trade Integration Study (DTIS) Ethiopia).

## **B. Industrial policy approaches and principles**

Governments and the private sector must work together closely in the design and implementation of an industrial policy strategy. This should begin with the identification of those subsectors and specific manufacturing activities that offer the strongest growth and development potential. The State should focus on supporting market forces and promoting entrepreneurship and innovation based on a systematic assessment of the actions necessary to overcome the binding constraints to industrialization. It should facilitate transformational capital accumulation and learning in the process of

entrepreneurial search and discovery, and the identification of viable new economic activities (LDCR 2009: ch.4). As returns from the investment of one entrepreneur mostly depend on the investments made by others, the State also catalyses and coordinates private investment and innovation through incentives and the dissemination of relevant information (Rodrik 2008b).

One approach to industrial policy for LDCs aims at stimulating the building of productive capacities in labour-intensive manufacturing industries, with to the objective of raising output and increasing the quality of those goods that are already produced and maximizing direct employment creation for low-skilled labour (LDCR 2013: ch.4; DTIS Ethiopia). In this regard, some LDCs will be able to take advantage of the decentralization of productive activities from more advanced economies to strengthen opportunities for low-skilled and low-technology manufacturing. This can be supported through a combination of attracting foreign direct investment (FDI) and integrating domestic firms into global value chains (GVCs). A current window of opportunity in this regard is presented by the decentralization of the lower end of the Chinese manufacturing industry. To take advantage of such opportunities, it is necessary to expand productive capacities and develop the skills needed to produce goods (especially garments) rapidly and in large quantities as demanded by global retailers (LDCR 2013: ch.5; DTIS Ethiopia).

Another approach to industrial policy for LDCs builds on the local availability of raw materials for the emergence and development of downstream manufacturing industries, such as food processing, textiles, clothing and leather goods industries, or the fabrication of metal or wood products. Under this approach, industrial policy must start in the primary sector and place particular attention on improving the functioning of domestic supply chains ([← ch.III.D](#); [→ ch.V.A](#)). From this perspective, measures aimed at raising farm productivity and the quality and reliability of agricultural supplies, as well as temporary export tariffs on unprocessed raw materials, can be significant elements of an industrial policy (LDCR 2013: ch.5; *Economic Development in Africa Report* (EDAR) 2014, ch.4; DTIS Ethiopia).

Industrial policy may comprise, among other elements, public sector engagement in research and development by simplifying access to patents, fiscal and financial support for new productive activities, and the public dissemination of information that may be relevant for business operations (LDCR: 2009 ch.4).<sup>25</sup> In the absence of a dynamic private manufacturing sector, public enterprises can act as pioneers by establishing new industries or introducing innovative techniques (LDCR 2007: ch.2).<sup>26</sup> In most LDCs, public procurement can be a powerful instrument to stimulate private industrial investment and innovation from the demand side (LDCR 2007: ch.2).<sup>27</sup>

On the external front, industrial policy may include measures to attract FDI in manufacturing sectors and support for private businesses in their efforts to engage in international trade by helping to identify dynamic product groups and the most promising ways of trade integration (→ ch.VI.A). In some cases, there may an option to develop a common industrial policy with neighbouring countries as part of regional cooperation efforts, i.e. so-called “developmental regionalism” (→ ch.VI.B) (LDCR 2011: ch.3).

Industrial policies in LDCs will often require the use of innovative instruments that are tailored to specific country contexts. Therefore, they inevitably have a strong experimental element, and policymakers will need time to discover the instruments and institutions that work best in meeting their development goals and targets. This should be reflected in the governance framework. However, the implementation of industrial policies should respect a number of considerations, such as the following (LDCR 2007: ch.2; LDCR 2014: ch.6):

- The usefulness of policy measures should be regularly assessed against clearly specified criteria of success and failure;
- Industrial policy instruments should be regularly assessed for effectiveness, and the policy mix should be adjusted to reflect new opportunities for manufacturing activities and diversification as they are generated. Such opportunities may arise, for example, from:
  - Progress achieved in the process of structural transformation that opens possibilities for new activities that previously were out of reach in terms of capital, skills and technology requirements;
  - Shifts in domestic demand and consumption patterns as a result of poverty reduction and per capita income growth;
  - Global technological and market developments, such as changing costs of certain technologies or new options for the exploitation of natural endowments, e.g. for the generation of cheaper and more climate-friendly energy; or
  - Increases in external financial support to specific sectors, such as for construction and civil engineering activities.
- Incentives should be conditional on the actions of firms or investors that support the process of structural transformation through diversification and innovation. For example, the provision of interest subsidies or the possibility to make accelerated depreciation allowances should be conditional on additional investment in production capacities; Another example, temporary tax holidays should be linked to the establishment of new businesses;
- Incentives should be phased out as industries mature and should be assessed against pre-established criteria (LDCR 2014: ch.6).

- Implementation must be closely monitored and subject to regular review in the framework of institutionalized government and business cooperation mechanisms for specific industries; and
- To prevent capture by particular interests or unproductive rent seeking, government and business interactions must also ensure that firms meet their commitments in exchange for receiving policy support (LDCR 2014: ch.6).

## C. Instruments of industrial policy

### 1. Measures to raise fixed capital formation

#### 1.1 Strengthening the motivation of private companies to invest

Stable political and economic conditions are essential for potential investors to be willing to invest their capital to build productive capacities. Beyond that, the motivation to invest in manufacturing capacities depends on a potential investor's sense of entrepreneurship and the capabilities among private sector actors to identify promising new ventures or projects for capacity extension, upgrading and innovation. The likelihood of finding sufficiently trained and reliable personnel, the availability of adequate logistics services and easy access to raw materials and intermediate goods also influence the motivation of potential investors (DTIS Ethiopia).

Secondary and tertiary education and vocational training lay the ground for developing an entrepreneurial spirit and the acquisition of managerial capabilities and technical skills at various levels in the workforce. Governments can also foster the willingness of private enterprises to invest by minimizing bureaucratic hurdles, avoiding or eliminating or bottlenecks in the provision of public infrastructure and services and promoting the integration of supply chains.

#### 1.2 Fostering a profit-investment-export nexus in strategic sectors

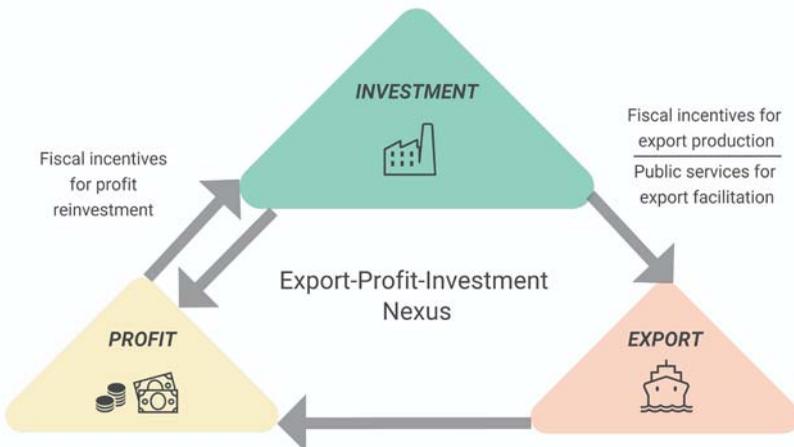
##### *(a) The motivation to invest and the role of profit expectations*

The expected profitability of an investment project largely depends on the expectation of future demand for the additional output that can be produced with expanded or technologically enhanced productive capacities or in new areas of economic activity. Governments can influence the net profits of enterprises with fiscal measures, such as temporary exemptions from corporate income taxes and customs duties and other taxes on imports of machinery, equipment and construction materials, or by allowing losses to be offset against subsequent profits (LDCR 2014: ch.6). Such privileges are

often reserved for manufacturers engaged in export activities, with an aim to strengthen the international cost-competitiveness of domestic producers and raise the foreign currency earnings of the economy as whole. From the point of view of industrialization and fostering structural transformation, however, it may be advisable to link tax privileges not so much to exports, but more directly to investment. This way, firms would benefit from tax exemptions or rebates only if they invest in additional or superior productive capacities. These incentives could be designed in such a way that they would stimulate firms that directly produce for export, as well as those enterprises that provide raw materials or intermediate goods to export industries or those that compete with foreign firms to supply the domestic market.

***(b) Self-financing from past profits***

Profit expectations are a strong motivation to invest. In LDCs, profits realized in the past typically serve as the main source of finance for new investment by domestic firms. These two elements of profit and investment are essential for a dynamic industrialization process. From this perspective, it may be preferable granting tax privileges only for the retained and re-invested part of company profits in strategic sectors, rather than exempting their profits across the board. Additional measures that can contribute to the emergence of a profit-investment nexus by stimulating the willingness to invest and facilitating the internal financing of such investment are special depreciation allowances. The practice of accelerated (or degressive) depreciation rather than linear depreciation refers to a tax credit that is higher and longer, the more frequently new investments are made (← ch.II.B).



Since the building of manufacturing capacities in LDCs is largely geared towards expanding export-oriented production, exports can play a key role in the functioning of a profit-investment nexus. This is the case when profits and foreign currency earnings from exports are used to finance a further expansion and upgrading of productive capacities and the import of additional machinery and equipment that embody modern technology. This method of strengthening productive capacities allows for a further increase of exports in the future. Ideally, market forces drive a virtuous circle of investment, exports and profits. In LDCs, however, such a profit-investment-export nexus is unlikely to emerge from market forces alone, given the weak development of domestic entrepreneurial capacities. Therefore, public policy should pay special attention to measures that foster the emergence of an export-investment nexus (LDCR 2004: Part Two, ch.2).

### **1.3 Targeted financial support for strategically important investments**

#### ***(a) Directing credit***

While the establishment of a profit-investment nexus is one of the keys to a dynamic expansion of productive capacities, it must be recognized that at the early stages of a manufacturing activity, profit margins are generally insufficient to allow for a high level of self-financed investments. Thus, an acceleration of structural transformation largely hinges on the improved availability of affordable bank credit. The options for monetary and financial policies suggested in Chapter III, sections C and D are therefore of special relevance for industrialization. An additional concern in the context of industrial policy is how to direct additional credit specifically for investments to upgrade and diversify strategically important manufacturing sectors. With the combined use of financial and industrial policy instruments, governments can influence credit allocation in such a way that it considers not only the microeconomic viability of an investment project but also the external benefits the project generates for the economy as a whole. These external benefits may include cumulative effects on capital accumulation and productivity, as well as employment creation.

For this purpose, extended central bank refinancing facilities and commercial bank reserve requirements can be designed to encourage banks to extend more long-term credit specifically for investment projects that contribute to industrial expansion and upgrading in targeted sectors. Another possibility is allowing central banks to engage in direct lending for such projects, which, by their nature, are unlikely to be financed by commercial banks but have important implications for the industrialization process as a whole (Epstein 2005).<sup>28</sup>

*(b) Risk sharing and lowering the costs of credit*

Investment in innovative activities and the creation of new firms are at the heart of industrialization and structural transformation. Assessment of the risks involved in lending to such firms or investments is especially difficult because the profitability of the investment project that is to be financed still needs to be discovered and there is no track record to evaluate the quality of entrepreneurship and the management capacity of new firms. As a result, smaller and new enterprises encounter severe constraints in obtaining bank credit. Moreover, bank lending typically comes with relatively short maturities and demanding collateral requirements. Interest rates also often include very high risk premiums. In the presence of such lending terms, potential drivers of industrialization are often unable to start new or expanding promising activities, even when they are fully aligned with the kind of structural transformation and employment creation required for economic progress.

The provision of interest subsidies serves as an instrument of industrial policy when they support the financing of firms and projects for which commercial banks charge high risk premiums, even though they may produce large benefits for structural transformation. Similarly, by extending guarantees for private lending or for the joint financing of investment projects by commercial banks and public banks, the public sector can share the risk associated with investments in innovative industrial activities. Government guarantees for loans to finance promising investment projects in support of structural transformation would reduce commercial banks' credit default risk, thereby lowering the risk premiums on long-term investment loans. The resulting lower interest cost for investors would reduce the probability of defaults and thus reduce the likelihood of governments having to cover such losses under guarantee schemes. Similarly, joint financing of certain investment projects by private and public banks would also reduce the credit risk of commercial banks and make them more willing to extend long-term investment lending at lower interest rates.

Public financing, through national or sectoral development banks can be instrumental in promoting investment in new economic activities with high social rates of return, especially in manufacturing. It can also encourage complementary and interdependent investments (← ch.II.D). It is inevitable in any dynamic economic process that some innovative investment projects will turn out to be commercial failures. Yet, it is only by undertaking such projects that their profitability can be tested. Even when an innovative investment project is unsuccessful, this failure provides information that serves as an external benefit to other firms. The elaboration and dissemination of this information should be an important part of a development bank's activities (LDCR 2014: ch.6).

Sectoral public banks with a developmental mandate may specialize in lending to specific sectors and act as incubators of innovative activities, including in research and development. Such sectoral financial institutions, re-financed by the national development bank or the central bank, could bring together sector-specific knowledge that gives them an advantage over commercial banks and large public financial institutions in identifying specific financing bottlenecks in the entire sectoral value chain (LDCR 2009: ch.2).

### *(c) External financing*

In most LDCs, the foreign currency requirements arising from the need to import capital goods for building industrial capacities often exceed current export earnings. FDI can partly address the challenge of access to foreign capital. Even if the potential of most LDCs to attract such investment is relatively modest, further efforts to attract the most appropriate types of FDI are an important element of industrial policy. The banking system must also play an important part in the intermediation between international capital markets and domestic investors.

In LDCs, this role falls mainly on the national development bank or other public banks (← ch.II.D). In the context of industrial policy, their foreign exchange rate intermediation must give priority to the financing of the foreign currency component of investment in strategically important manufacturing sectors and related infrastructure.

## **2. Generating complementary and cumulative effects**

Providing targeted infrastructure and fostering cumulative effects are key elements of industrial policy strategies. Among the tremendous infrastructure needs in LDCs, the projects that are likely to make the greatest contribution to the advancement of industrial development must receive priority attention, since private investment in industrial capacities becomes viable only when the complementary infrastructure is in place (← ch.III.A). The type of infrastructure investment that will best support the process of industrialization differs across countries and depends both the choice of the targeted industries and a country's geographical characteristics.

In addition to building on the complementarity between public infrastructure and private investment, industrial policy should also be geared towards the generation of cumulative effects among several investment projects and manufacturing activities. Such effects result when the viability of one investment project or economic activity depends on parallel investments in upstream and downstream activities, particularly if such activities require geographic proximity. Coordination among several complementary private investment projects can generate mutual benefits for all investors. A national development bank

that finances investments whose profitability depends strongly on complementary investments by other firms can be instrumental in this regard.<sup>29</sup> Publicly organized and sponsored information systems about specific aspects of the industrialization strategy are equally important for enterprises during the early stages of their decision making and investment planning processes.

Agglomeration and the clustering of similar or interrelated activities is also a way to increase the effectiveness of infrastructure investment. It also enables governments to tailor public services for specific subsectors. Public investments in modern infrastructure are more efficient and, thus, more justified when they are concentrated in clusters of enterprises with similar needs (LDCR 2013: ch.5; EDAR 2014: ch.3; DTIS Ethiopia). They can, for instance, improve energy supply by making use of mini grids and locally available renewable energy resources, such as bio-waste or small hydropower stations. For LDCs with large mineral and agricultural sectors, the development of production clusters could be created in locations where specific natural resources are available (LDCR 2014: ch.5).

Clustering allows firms to benefit from technological and managerial economies of scale and to act collectively. Public policy can support the emergence of industrial clusters by providing information to potential investors about similar, complementary projects of other investors and targeted public investments in infrastructure. The latter may include the creation of industrial parks with facilitated access for both domestic and foreign investors to land and logistics, customs, financial and legal services (LDCR 2009: ch.5; EDAR 2014: ch.4; DTIS Ethiopia).

Industrial parks also have a strong potential to enhance technological innovation and transfer and to improve access to the appropriate maintenance needed for machinery and equipment. Moreover, they can be instrumental in facilitating the establishment of networks among enterprises whose scale is too small to meet the demand of large overseas buyers on their own. Finally, industrial zones also facilitate compliance with environmental standards in the management of waste, waste water, emissions and hazardous chemicals. Furthermore, they can support the systematic monitoring of compliance.

The advantages industrial parks offer may also help to promote the transition of small informal enterprises into the formal sector. A comprehensive strategy for industrial parks and zones must also ensure that the purchase or rental of commercial property in them is affordable for domestic small and medium-sized enterprises (SMEs) and that firms within these zones are dynamically linked to the rest of the economy.

### 3. Targeted support for skills acquisition and technology adaptation

The options suggested for horizontal policies in support of science, technology and innovation (STI) and skills acquisition in Chapter III, sections B and C, are of particular relevance for the development of manufacturing activities. In every manufacturing subsector, the availability of appropriately skilled labour has both a direct and an indirect effect on productive capacities. The direct effect comes from the labour productivity gains that can result from better education and the acquisition of technical know-how. The indirect effect results from the willingness of investors to engage in activities of increasing sophistication when the required skills are available in the domestic labour market. The speed at which new knowledge can be acquired and applied in specific productive activities is therefore essential for the creation of new and the expansion of existing firms in new areas of economic activity.

At an early stage of development in manufacturing industries, the level of required skills present in the workforce is relatively low. Existing gaps in production skills and practical knowledge can often be narrowed through systematic on-the-job learning and experience. Even in nascent industries there is need for skills upgrading at the managerial level, with an aim to raise productivity and the sophistication of production over time. During the phase of structural shifts into manufacturing activities, most enterprises need electrical, mechanical and materials engineers, as well as specialists with higher education in information and communications technology (ICT) (DTIS Ethiopia).

In an industrial policy framework for LDCs, strong efforts are necessary to expand technical and vocational education and training (TVET) institutions and to reinforce the capacity of these institutions to produce the required quantity of quality and sector-specific manpower. An entrepreneurial spirit and competences in business management can partly emerge from work experience at lower operational levels. However, they are typically acquired through higher education. Universities therefore play an important role in the process of building industrial capacities. Their role also extends to the development of research centres of excellence to support specific manufacturing sectors. This requires that education and training offered in the public sector is closely aligned with the needs of employers in strategically important industrial sectors.

Apart from the need to raise the number of graduates with sector-specific qualifications coming from public educational institutions, additional training requirements arise at the practical level and within manufacturing firms. Smaller firms are especially reliant on external support for such training. Therefore, industry-specific coordination institutes and sectoral support associations must assume an important role in workforce training and in the development of managerial skills through tailor-made technical, supervisory and managerial training and associated support.

The creation of sectoral and sub-sectoral institutions that facilitate and strengthen the flow of information between public education and training institutions and research centres on the one hand, and the business community, on the other, would support improvements in strategic communication and substantive coordination (LDCR 2013: ch.5).

## 4. Managing trade and FDI as elements of industrial policy

### 4.1 Export promotion

Since exports allow for economies of scale in manufacturing, industrial policy should include measures aimed at strategic integration into international trade (LDCR 2016a: ch.5). This implies the promotion and facilitation of manufacturing for export, and the consideration of temporary import protection measures (→ ch.VI.A).

LDCs should use all the flexibilities provided under the multilateral trading rules to proactively promote exports (LDCR 2014: ch.6, LDCR 2016: ch.3). The production of manufactures for export can be nurtured by World Trade Organization (WTO)-compatible export subsidies and the subsidization of trade finance. Another strategy would be to strengthen trade promotion agencies that provide information on international market opportunities and related marketing support. Such agencies should also carry out programmes that improve the ability of domestic producers to make better use of preferential market access for LDCs and to meet international quality standards (DTIS Ethiopia) (→ ch.VI.A). Policies to attract FDI also help to integrate manufacturing activities into international trade (see sub-sections 4.4–4.6 below). These policies may include the creation of export processing zones (EPZs) (LDCR 2013: ch.5; LDCR 2014). The benefits of EPZs for longer-term industrial development and structural transformation, like those of FDI in general, critically depend on strong backward linkages with domestic firms. However, these linkages do not emerge very frequently (→ ch.VI.A).

In the context of strategies that combine agricultural and rural development with industrialization, there is often an interest to prevent direct the export of raw materials and to favour their domestic processing before they are exported (→ ch.IV.B; → ch.V.A). To this end, export restrictions such as export taxes and, in some cases, export bans on raw materials may be considered (EDAR 2014: ch.5; DTIS Ethiopia).<sup>30</sup>

### 4.2 Import substitution

A trade regime in support of developing manufacturing industries should facilitate access to the import of intermediate inputs, as well as machinery and equipment that cannot be produced domestically. Such imports should be duty-free. By contrast, when industrial policy aims at reducing import dependence by substituting imports with domestic production, significant import tariffs may be required (LDCR 2013: ch.4, DTIS

Ethiopia). In the interest of building well-integrated domestic manufacturing sectors, industrial policy should primarily aim at a gradual substitution of inputs, which may become possible over time as the process of structural transformation advances (→ [ch.VI.A](#)).

Import protection over a reasonably limited period of time should protect nascent manufacturing sectors against overwhelming international competition. Given the slow progress of industrial development in LDCs, this is essential to allow firms in these sectors to build productive capacities through capital investments, learning and experimentation and the gradual acquisition of modern technology and the accompanying skill sets (LDCR 2010: ch.5) (← [ch.I.C](#); → [ch.VI.A](#)). As initially protected sectors mature, protection should be phased out and shifted, again temporarily, to new emerging industries.

### **4.3 Exchange rate management in support of trade integration**

Trade in manufactures, and thus the success of any industrial policy strategy, is very sensitive to exchange rate variations and misalignments. Exchange rate management is part of industrial policy because the level and stability of the exchange rate is essential for the international competitiveness and profitability of domestic manufacturing firms. This, in turn, influences the motivation and ability of firms to invest in additional productive capacities. Appropriate exchange rate management in the context of industrial policy implies the systematic adjustment of the nominal exchange rate to reflect changes in the differential of domestic unit labour costs in manufacturing sectors compared to those in countries of international competitors (LDCR 2014: ch.5; DTIS Ethiopia). When unit labour costs rise faster than in the countries whose manufacturers compete in the same markets, the nominal exchange rate should depreciate by the differential to maintain a stable real exchange rate (→ [ch.VI.A](#)).

### **4.4 FDI, exports and domestic demand**

FDI can help to advance the building of manufacturing capacities because it implies an inflow of foreign capital. It can also facilitate export expansion because the foreign investors are typically already well connected to international markets. From the perspective of sustained structural transformation, industrial policy should focus on the possible contribution of FDI to building technological capabilities in domestic firms. It should also focus on the potential of FDI to transfer organizational skills to domestic managers and technical know-how to domestic workers.

Governments should be aware of the risks of over reliance on FDI for industrialization, because increased competition among countries to attract FDI in labour-intensive sectors often leads them to offer increasingly generous fiscal incentives and other concessions to transnational corporations (TNCs), resulting in an unsustainable “race

to the bottom” (LDCR 2013: ch.5). Similarly, building FDI policies on the advantage of low labour costs can lead to socially and economically unsustainable wage competition with other developing countries. Policies aimed at attracting FDI into labour-intensive activities as an element of industrial policy must therefore be accompanied by measures that support increases in labour productivity to allow for a continuous increase in wages at stable or even falling unit labour costs, so that domestic demand can rise in parallel due to increased income from wages.

#### **4.5 Fostering linkages between FDI and local firms**

Policies to attract FDI should also target the creation of production linkages with domestic firms and foster technology and knowledge transfers. Linkages between foreign-owned firms depend on those firms’ willingness to cooperate with local suppliers, as well as on the capacity of local firms to cooperate (EDAR 2014: ch.4).

To enhance the impact of FDI on the building of productive capacities, LDCs should consider imposing local content or technology-transfer requirements, to the extent that they are compatible with flexibilities in WTO agreements and bilateral trade and investment agreements (Ramdoo 2016) (→ [ch.VI.A](#)). In a parallel approach, selective FDI policies in support of industrialization should give priority to attracting types of FDI which have a relatively high probability for creating linkages with domestic firms (EDAR 2014: ch.4). This is the case of FDI in sub-sectors where local supply capacities already exist or are developing thanks to other sectoral and horizontal support policies. When FDI takes place in joint ventures with domestic partners who are familiar with local circumstances and supply possibilities, it may also lead to greater interaction with other local firms (EDAR 2014: ch.4). Furthermore, investment by diaspora entrepreneurs, although relatively modest in scale, is also more likely to interact with local firms (LDCR 2014: ch.6) (→ [ch.IV.C](#)).

As in the case of industrial policy more generally, it is the dynamics of the domestic corporate sector and, thus, the coherence of the entire spectrum of policy support for building productive capacities discussed in this Compendium that enables the creation of linkages between local and foreign enterprises. Policies must aim at developing and improving the skills of the labour force and at raising the number, size and absorptive capacity of local firms in sectors that are candidates for linkages with foreign-owned companies (EDAR 2014).

#### **4.6 Integration into GVCs — Opportunities and policy challenge**

Industrial policy in LDCs must also consider how the development of domestic manufacturing activities can be accelerated through participation in international production networks, or global value chains (GVCs). The expansion of GVCs is at

the core of the global trading system. They are established either within large TNCs or involve processing contracts between TNCs and groups of smaller enterprises in different countries.

On the one hand, the growing importance of GVCs makes it more difficult for domestically-owned LDC firms to market their products directly to retailers in the largest foreign markets. SMEs in LDCs wishing to engage in export trade are now mostly obliged to gain access to GVCs and use the distribution channels of the lead firms in destination markets. On the other hand, GVCs have opened up new possibilities for industrialization in LDCs (DTIS Ethiopia). They provide opportunities for LDC manufacturers to produce directly, or indirectly through further sub-contracting, for the lead firms of GVCs, by assuming the more labour-intensive and lower-skilled, less technology-intensive tasks in the value chain.

Although participation in GVCs may often generate only relatively small increases in value added, it can yield considerable employment opportunities for low-skilled labour. It also offers firms and workers in LDCs the possibility to acquire basic technical and organizational skills, which may spill over into other domestic manufacturing activities. However, the quality of the jobs and of the associated working conditions can be appalling. The environmental and physical safety impacts have, at times, also been adverse (LDCR 2013: ch.5). Countering these risks requires governments to ensure compliance with strong labour and environmental standards and to establish related monitoring institutions (UNCTAD 2013a: ch.IV).

The option of joining GVCs is typically feasible for firms that already have basic production know-how, but lack access to major markets and marketing know-how (LDCR 2013: ch.5). There is, however, a risk that these firms become locked into the lowest rungs on the GVC ladders that generate the least value added and have the least potential for upgrading. Since TNCs can choose suppliers from any number of countries, they are in a strong position to dictate the terms of their relationships with local suppliers in LDCs (LDCR 2007: ch.1; LDCR 2013: ch.5; EDAR 2013: ch.4).<sup>31</sup>

A pertinent issue in the context of GVC participation is therefore the scope for upgrading within GVCs and the potential to build capacities for manufactured exports with an increasing domestic value-added content (UNCTAD 2013a). This depends to large extent on horizontal or industrial policy measures that support the acquisition of additional competences, i.e. technical and managerial skills and the capabilities to innovate by applying various other horizontal and industrial policies measures.

Policy interventions to support SMEs in joining GVCs at more sophisticated production stages, or to upgrade within them should focus on skills development and training. They should also focus on investments in technologies for continuous technological

upgrading and enhanced compliance with international standards. Other public policy measures could include setting up business development services, promoting clusters such as science and technology parks or industry villages and developing productive capacities (EDAR 2011: ch.4).

Additionally, LDC firms engaged in GVCs should be enabled to reduce the import content of their production by increasingly drawing on domestically-produced raw materials or other goods. The potential to do so can be facilitated by measures to improve the functioning of domestic supply chains starting in the primary sector and by industrial policy support for ancillary industries (DTIS Ethiopia).

### Industrial policies to achieve the SDGs

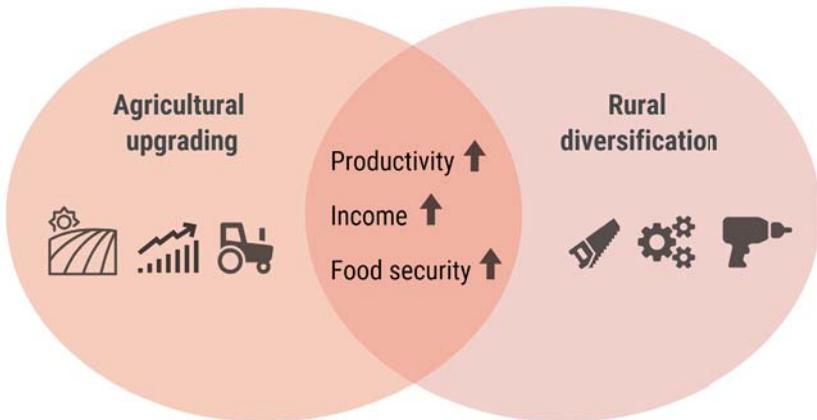
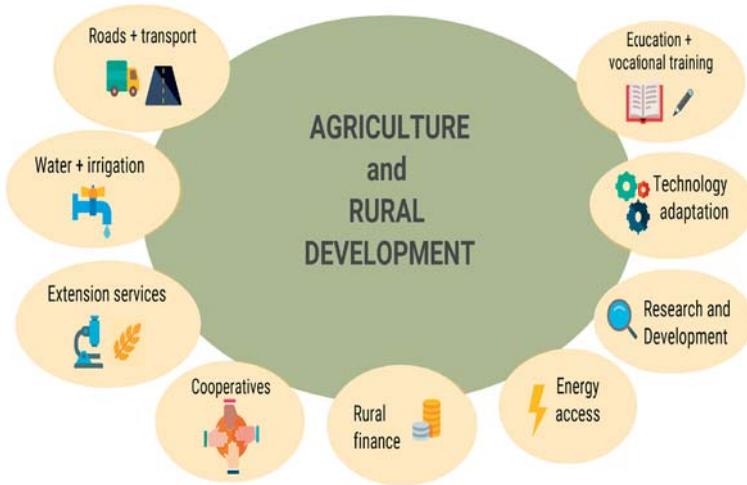


## D. Summary of industrial policy options

Intermediate objective	Policy measure	Relevant SDG/ target
To ensure the realistic design and flexible implementation of an industrial policy strategy	<ul style="list-style-type: none"> <li>• Build effective state-business relations through institutionalized dialogue and cooperation between the relevant state agencies and private manufacturing firms and their sectoral associations</li> <li>• Put in place a mechanism for the monitoring, evaluation and accountability of policy measures</li> <li>• Identify the most binding constraints for building productive capacities in the manufacturing sector and the development of specific activities that drive structural transformation</li> </ul>	1b
		9
		16.6
To strengthen the motivation of entrepreneurs to invest in manufacturing capacities	<ul style="list-style-type: none"> <li>• Provide fiscal incentives for investment in strategic manufacturing sectors and for innovative new activities, linking these incentives closely to the undertaking of additional investment and the reinvestment of retained profits</li> <li>• Ensure a growing and reliable supply of raw materials and intermediate inputs to strategic sector, by coordinating agricultural and industrial policies, providing industrial policy support to domestic ancillary industries and by setting up input supply enterprises, including for bulk purchases of imported inputs</li> </ul>	17.14
		1.b
		7a
To encourage long-term commercial bank lending for investment in manufacturing capacities	<ul style="list-style-type: none"> <li>• Grant privilege to long-term credit for investment in strategic manufacturing sectors in the design of central bank refinancing facilities and reserve requirements</li> <li>• Provide public credit guarantees covering long-term loans for investment in strategic manufacturing sectors and innovative activities, and engage in public-private joint financing of such projects, to share credit risks</li> <li>• Provide interest subsidies for the financing of investment in strategic sectors and innovative activities that may have large external benefits for structural transformation</li> </ul>	8
		9
		10.4
To facilitate investment in manufacturing activities with high social rates of return and complementary and cumulative effects	<ul style="list-style-type: none"> <li>• Establish national and/or sector-specific development banks with a mandate to assume specific credit risks related to investment in innovative activities, which commercial banks are unable to assume but have a potential to advance structural transformation</li> </ul>	17.5
		2.3/2.4
		2.a
To allow broad participation in building manufacturing the capacities of SMEs and firms owned and managed by women	<ul style="list-style-type: none"> <li>• Introduce a selection and monitoring process for the provision of special credit lines by the national or sectoral development banks for enterprises with a high potential for growth and diversification</li> </ul>	9.2/9.4
		9.b
		1.b
To generate cumulative effects and supply chain integration and raise the effectiveness of infrastructure investments	<ul style="list-style-type: none"> <li>• Provide infrastructure and public services in such a way that they foster the agglomeration and clustering of manufacturing activities, including by the creation of industrial parks dedicated to specific manufacturing activities</li> </ul>	2.a
		8.3/8.10
		9.2/9.3
To ensure that technical and management skills meet the needs of firms in the expanding manufacturing sector and evolve in line with growth of the capital stock and technological progress	<ul style="list-style-type: none"> <li>• Align the curriculum and instruction of technical and vocational education and training (TVET) institutions with the specific requirements of the strategic sectors</li> <li>• Increase the number and enrolment capacity of TVET institutions and upgrade the competences of their teaching and training staff</li> </ul>	15.b
		8.3
		9.3
To ensure that technical and management skills meet the needs of firms in the expanding manufacturing sector and evolve in line with growth of the capital stock and technological progress	<ul style="list-style-type: none"> <li>• Align the curriculum and instruction of technical and vocational education and training (TVET) institutions with the specific requirements of the strategic sectors</li> <li>• Increase the number and enrolment capacity of TVET institutions and upgrade the competences of their teaching and training staff</li> </ul>	7.a
		4.3/4.4/4.5/4.6/4.7
		7.b
To ensure that technical and management skills meet the needs of firms in the expanding manufacturing sector and evolve in line with growth of the capital stock and technological progress	<ul style="list-style-type: none"> <li>• Align the curriculum and instruction of technical and vocational education and training (TVET) institutions with the specific requirements of the strategic sectors</li> <li>• Increase the number and enrolment capacity of TVET institutions and upgrade the competences of their teaching and training staff</li> </ul>	9
		8.1/8.5/8.6
		8.6

Intermediate objective	Policy measure	Relevant SDG/ target
To harness the exports of manufactures for faster structural transformation	• Integrate industrial policy and a proactive trade policy for strategic insertion into the international economy	1a/1b 8.1/8.2/
	• Use all the flexibilities provided under multilateral trade rules to promote manufacturing exports with instruments such as export subsidies and subsidized trade finance	8.3/8.5 8.a 9.2/9.3
	• Create or strengthen export promotion agencies that provide information on international market opportunities and related marketing support	/9.5 10.1/ 10.5
	• Raise awareness in SMEs of the opportunities offered by preferential market access for LDC exports and enable them to use these opportunities to the largest possible extent	10.a/ 10.b 17.11/ 17.12/
	• Use FDI and integrate into GVCs as entry points for export activities	17.15
	• Consider the usefulness of export taxes or export bans on raw materials to incite their domestic processing before export	
	• Avoid currency overvaluation and maintain a stable real exchange rate	
To facilitate the access of producers in selected manufacturing sectors of strategic importance to essential inputs	• Allow the duty-free import of intermediate inputs and machinery and equipment and facilitate the financing of such imports	8.1/8.2/ 8.3 9.2/9.3
To reduce import dependence and gradually substitute inputs of intermediate and capital goods through domestic production	• Use the policy space available to temporarily protect infant industries against overwhelming international competition	8.1/8.2/ 8.3 10.a
To harness FDI for the creation of productive capacities	• Attract foreign investors to the manufacturing sector, including with fiscal advantages and the creation of EPZs, ensuring that the benefits from FDI are equal to the fiscal cost and that incentives do not discriminate against domestic firms	8.1/8.2/ 8.3/8.5 9.2/9.5 9.b
	• Encourage foreign firms to transfer knowledge and technology to domestic industries	10.b 17.5
	• Avoid excessive reliance on low wages for attracting FDI	
To optimize the impact of FDI on structural transformation	• Incite foreign investors to engage in production linkages with domestic firms, including through measures such as local content requirements	1.1/1.2 1.a/1.b
	• Give priority to attracting FDI in manufacturing subsectors where local supply capacities already exist or are developing thanks to other sectoral and horizontal support policies	8.1/8.2/ 8.3/8.5 9.b
	• Support FDI in the form of joint ventures with domestic partners	10.4

Intermediate objective	Policy measure	Relevant SDG/ target
To make the participation of local SMEs in global value chains work for sustained structural transformation	<ul style="list-style-type: none"> <li>Support the provision of managerial training to SMEs participating in GVCs to improve their capacities to negotiate with international lead firms and to gain influence in decision-making on products and processes</li> </ul>	4.5 4.b/4.c 8.2
	<ul style="list-style-type: none"> <li>Devise specific horizontal or industrial policy measures to support SMEs to engage in GVCs at gradually higher levels of skill and technology sophistication</li> </ul>	8.2/8.3 9.3
	<ul style="list-style-type: none"> <li>Enable local firms engaged in GVCs to suggest options to lead firms for increasing the use of domestically produced raw materials or intermediate goods, including by measures to strengthen domestic supply chains</li> </ul>	8.8
	<ul style="list-style-type: none"> <li>Ensure the adherence of partners in GVCs to strong labour and environmental standards and establish related monitoring institutions</li> </ul>	8.a





## V. SELECTED SECTORAL POLICIES

### A. Agricultural and rural development policy

#### Main relevant SDG targets:

- 2.3: By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment
- 2.4: By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality
- 2.a: Increase investment, including through enhanced international cooperation, in rural infrastructure, agricultural research and extension services, technology development and plant and livestock gene banks in order to enhance agricultural productive capacity in developing countries, in particular least developed countries
- 5.a: Undertake reforms to give women equal rights to economic resources, as well as access to ownership and control over land and other forms of property, financial services, inheritance and natural resources, in accordance with national laws
- 8.1: Sustain per capita economic growth in accordance with national circumstances and, in particular, at least 7 per cent gross domestic product growth per annum in the least developed countries
- 8.2: Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors

## 1. The rationale for policy support to economic activities in rural areas

A crucial objective for most least developed countries (LDCs) is to make agriculture significantly more productive in order to achieve greater food security and allow for the development of an enhanced and diversified range of productive capacities (*The Least Developed Countries Report* (LDCR) 2009: ch.3). Proactive policies focused on poor, smallholder farmers are necessary for greater food security, especially in South Asia and sub-Saharan Africa.

Raising agricultural output and productivity is a prerequisite for structural transformation in LDCs (LDCR 2015: ch.2). Even with an increasing share of the workforce employed in industry and services in urban centres, a substantial portion of the workforce in LDCs will remain in rural areas, and it is there where poverty remains the deepest and most widespread (LDCR 2014: ch.2). In most LDCs, efforts to increase agricultural productivity must face an already existing and substantial labour surplus in small-scale agriculture. In the spirit of an integrated social, economic and environmental approach to sustainable development, structural transformation must therefore include an increase in the non-farm share of rural income and employment. Agricultural development is also essential to ensure adequate supplies of domestic raw material inputs for nascent manufacturing industries, especially in countries where the industrialization strategy is based on a growing and reliable supply of locally available raw materials (Diagnostic Trade Integration Study (DTIS) Ethiopia) (← ch.IV.B).

Moreover, because the share of agriculture in gross domestic product (GDP) and total employment is relatively high in most LDCs, increasing incomes in agriculture and rural non-farm activities can contribute to a virtuous circle in which demand stimulus from agricultural growth generates demand for domestically produced and non-tradable goods and services. This virtuous circle can also have positive spill-over effects on investment and employment in the rest of the economy. Improved employment and income opportunities in agricultural and rural non-farm economic activities will also reduce the pressure for rural workers to migrate to urban centres in search of jobs, thereby mitigating the negative social and environmental effects of agglomeration (LDCR 2013: ch.2; 2015: ch.1).

Agriculture is not only the most important economic sector in LDCs, but it is also a way of life for the great majority of the LDC citizens. Therefore, the challenge is not only to mobilize resources for the modernization of agricultural activities, but also to adapt the traditional behaviour patterns of rural populations. This adaptation process is necessary for the emergence and strengthening of linkages between agricultural, manufacturing and service activities. It is likely to take time and must be managed carefully to avoid serious social frictions (DTIS Ethiopia).

The constraints on agricultural upgrading and rural diversification differ widely across and within LDCs, depending, *inter alia*, on crop patterns, soil quality, geological and hydrological conditions, land tenure systems, plot sizes, or the incidence of pests and crop and livestock diseases. Climate conditions and exposure to the impact of climate change also vary across countries. Formulating general policies to support rural transformation is challenging. Furthermore, the scope for policy makers in one country to learn from the agricultural policy making experiences of other countries is more limited than in industrial policy. However, factors that are common to many LDCs include: chronic underinvestment in agricultural machinery and equipment, inefficient cultivation and harvesting techniques, poor-quality seeds, inappropriate animal husbandry techniques and insufficient protection against pests or animal disease. Low levels of mechanisation, limited use of irrigation (especially in African LDCs), and poor transport and storage facilities are additional challenges for agricultural and rural upgrading in LDCs (LDCR 2014: ch.6; 2015: ch.2).

## 2. Policies for higher agricultural output and income

In many rural areas in LDCs, there may be potential to raise agricultural income by expanding the area of cultivated land. This could be achieved by easing seasonal labour constraints, or by improving or extending agricultural infrastructure such as irrigation and drainage systems. In general, however, efforts aimed at generating higher quality and greater quantities of agricultural outputs must include measures that:

- Lead to higher yields per hectare;
- Help raise labour productivity in farming and livestock breeding;
- Reduce post-harvest losses;
- Foster the diversification of production and promote a shift towards higher-value crops;
- Strengthen linkages with processors; and
- Encourage more commercialized farming.

### 2.1 Increasing yields and labour productivity

Higher productivity in farming requires improvements in agricultural practices, better access to essential inputs such as fertilizers, pesticides and high-quality seeds, and the use of advanced farming techniques and equipment, taking into account local circumstances, and climate and soil conditions (LDCR 2015: ch.2).

Increased literacy and numeracy, vocational skills, financial literacy and business skills are the building blocks of rural structural transformation. Policy measures to develop

such skills must begin with strengthening rural primary school education for children, and offering access to rural adult education, especially for women. Public support is also required for training in agricultural production and storage techniques for small-scale farmers. Moreover, public policy has a role to play in agricultural upgrading by providing adequate funding for agricultural research and development (R&D), and strengthening agricultural extension services (LDCR 2015: ch.2 and ch.5). A cost-efficient way of organizing agricultural research can be the creation of (sub)regional centres of excellence, such as agro-ecological zones or the identification of strategic food commodities. Such centres should pay special attention to farm-level production technologies, as well as post-harvest technologies (LDCR 2009: ch.3; LDCR 2015: ch.5; DTIS Ethiopia).

Many skills acquired and developed over generations in rural agricultural and artisanal activities merit preservation. However, these skills must be further refined. They should be complemented by the necessary skills for upgrading agricultural production through the use of modern farming techniques and equipment. This is likely to support the social acceptance and environmental sustainability of structural change, as well as agricultural upgrading and rural diversification.

Post-harvest losses, quality deterioration and the contamination of agricultural produce can be reduced with better transport and storage facilities, especially for small-scale farms. More efficient collection and marketing systems, including the development of appropriate standards for the collection and classification of agricultural output quality can further support agricultural upgrading. Improvements in these areas require policy support in the form of infrastructure, awareness-building and regulation.

In most countries, governments can help raise agricultural incomes by organizational and financial support for the acquisition of essential inputs. Better access to and lower costs of inputs such as high-quality seeds, fertilizers or pesticides can go a long way to increase agricultural productivity (LDCR 2015: ch.5). Greater use of locally appropriate inputs to increase agricultural productivity and environmental sustainability can be fostered through extension services, input subsidy schemes, and the organization of collective purchases. These may be especially beneficial for women and other disadvantaged producers (LDCR 2015: ch.4 and ch.5). Public provision of annual in-kind microgrants of productive inputs may be necessary for the poorest farmers in remote areas. These grants could be phased out over an extended period of time as the needs of poor, rural farmers evolve (LDCR 2015: ch.5).

## **2.2 Diversification, crop upgrading and international certification**

New opportunities for increasing farm incomes will arise as domestic demand shifts towards higher value crops as poverty is reduced and non-farm rural activities expand. Efforts to support the diversification of farming products can also benefit from rapidly increasing demand in export markets for products based on environmentally-friendly and organic agriculture. Therefore, facilitating the flow of market information to farmers and helping them to secure internationally recognized certifications for agricultural produce could provide significant mutual benefits for farmers and the environment. Efforts should be directed to both public certifications, in line with World Trade Organization (WTO) Sanitary and Phytosanitary Standards (SPS) and Technical Barriers to Trade (TBT) agreements, and private certifications of organic and sustainable production and compliance with fair-trade standards. Capacity building for producers and government facilitation of certification processes can be important measures in this context (LDCR 2015: ch.3 and ch.5; DTIS Ethiopia).

## **2.3 Strengthening cross-sectoral linkages and commercialisation**

Linkages between agriculture and other sectors are important for farmers, as well as producers in other economic activities, especially when industrial strategy builds on the domestic processing of agricultural raw materials. A consistent and reliable supply of agricultural inputs is a decisive factor for the efficiency and competitiveness of processing firms. In this regard, the provision of advisory services to farmers to strengthen their business administration and organizational skills may be helpful for both rural producers and industrial processors. These advisory services can generate higher demand for farmers and stabilize and improve input supplies for processors (DTIS Ethiopia).

Effective linkages that benefit both farmers and domestic processors of agricultural products can be supported by the establishment of Rural Transformation Centres (RTCs) in combination with industrial parks (UNIDO 2014). Farmers can be encouraged to sell their outputs at such centres, and these centres can, in turn, provide inputs such as fertilizers, seeds, or animal feed and medication in exchange. This could contribute to a less fragmented and better organized, agricultural supply demand-driven and quality-oriented.

To strengthen downstream linkages, farmers must be made more aware of the critical importance of reliable supplies and better-quality products. They should also be notified of the advantages of long-term commercial arrangements with actors in downstream sectors, such as agro-processing, textiles and leather fabrication or tourism and hospitality services (DTIS Ethiopia). Governments should develop and implement a coherent, medium-term strategy to accelerate the commercialization of a large part of

agricultural production, and raise the quality of outputs, and ensure compliance with internationally recognized product standards. As part of such a strategy, enhanced agricultural extension services should include training in business administration.

In many cases, the commercialization of agriculture may be facilitated by larger farm units, which offer important economies of scale. These may find expression not so much in higher physical yields per unit of land or per worker, but in better access to essential inputs at lower costs. Larger operating units also facilitate adequate storage, quality assurance, marketing, and access to finance (LDCR 2015: ch.5; DTIS Ethiopia).

However, exclusive reliance on large-scale agricultural production may not be effective for poverty eradication in the rural areas of LDCs, as its impact on employment creation (outside of peak agricultural seasons) is generally limited, and agricultural wages tend to be low.<sup>32</sup> Therefore, sufficient land should remain available for small-scale agricultural producers to provide all households with incomes above the poverty line. Extension services should be organized in such a way that they also benefit small, family and women farmers (LDCR 2015: ch.4 and ch.5). In order to achieve both economic and social objectives in rural areas, it is necessary to establish socially acceptable balance between commercialized farming in large production units, and small-scale and family farms. The interest in maintaining the social benefits of small-scale production, while overcoming the market disadvantages faced by small producers highlights the key role for producers' associations and cooperatives (LDCR 2015: ch.5).

To further develop the commercial potential of farming and livestock breeding, and to strengthen vertical integration within domestic value chains, governments may consider promoting contract farming, which enables agricultural producers to enter into legally binding agreements with processors. However, the feasibility of contract farming depends on the willingness or interest of agricultural producers in LDCs to enter into contractual obligations with processors. Moreover, these contracts should be subject to institutional monitoring to avoid situations in which buyers misuse their negotiating position and often stronger bargaining power at the expense of producers (LDCR 2015: ch.3 and ch.4; DTIS Ethiopia).

### **3. The role of rural cooperatives and producers' associations**

Government support to the creation and upgrading of cooperatives and producers' associations can make an important contribution to rural economic transformation. Cooperatives and market-oriented producers' associations are potentially important instruments to generate horizontal linkages between farmers. The benefits of cooperative and producer's organizations typically include: higher agricultural productivity, economies

of scale and the facilitation of post-harvest handling. By pooling resources, small-scale farmers are able to obtain better access to seeds, fertilizers, storage, and transportation, as well as grading and packaging services. Cooperatives and producers' associations can also play a key role in product upgrading and diversification, including through common efforts to improve management and organizational know-how, and business administration.

Cooperatives or producers' associations offer possibilities for sharing modern farming equipment among their members and can facilitate the creation of linkages with other sectors. They can also help small farmers and women obtain better access to agricultural inputs, new technologies, training, information, and finance. Moreover, they can strengthen small producers' bargaining power vis-à-vis larger urban clients, such as agro-processing firms or urban retailers. In this regard, cooperatives and producers' associations become important elements for rural development. Governments may promote cooperatives and producers' associations by streamlining procedures for their establishment, facilitating their financing, and channelling interventions through them (LDCR 2013: ch.5; LDCR2014: ch.6; LDCR2015: ch.5).

#### **4. Development of rural non-farm activities**

There is complementarity between agricultural upgrading and building productive capacities in non-farm activities in rural areas (LDCR 2013: ch.3). The mechanization of agriculture has a negative employment effect, which must be offset to the largest extent possible through a parallel expansion of rural non-farm economic activities and employment. With increased employment in non-farm- activities, and greater poverty reduction, demand for both staple and higher-value foods will increase, thus allowing both higher agricultural productivity and diversification into non-staple crops (LDCR 2014: ch.6). Non-farm activities are particularly important in generating productive employment in seasons of low agricultural labour demand (LDCR 2015: ch.1).

Again, considerable additional capital investments for these new rural activities, and related access to long-term financing (← ch.IV.D), are indispensable for the diversification of rural economies away from agriculture, the generation of non-farm incomes and a rapid reduction of rural poverty.

Greater infrastructure investment in rural areas can provide a non-agricultural source of income for the rural population by generating employment opportunities in labour-intensive construction and maintenance activities, and local procurement of materials and other inputs. The demand effects they can help to initiate a virtuous circle of agricultural upgrading and rural diversification. The demand created by rising rural incomes can become an important driver of rural transformation when it triggers a

supply-side response in food and other basic consumer goods that can be produced with domestically available skills (LDCR 2015: ch.3).

Agro-processing creates an important synergy between agriculture and non-farm activities. It is particularly beneficial in generating employment and business opportunities for women (LDCR 2015). The development of local food processing and packaging industries and transport services can also support agricultural upgrading by increasing access to urban and export markets (LDCR 2014). With appropriate incentives, export crops can create opportunities for increased agricultural incomes and agro-processing through integration into global and regional value chains. In countries with existing tourism sectors or the potential to develop them, tourism can also provide useful forward linkages for organic agriculture. It is noteworthy that several of the countries with the largest organic subsectors also have substantial tourism sectors (LDCR 2015: ch.3).

Since the need for increasingly skilled workers in rural non-farm activities will rise as the transformation process advances, governments must provide sufficient vocational training possibilities for the specific non-farm activities in each location. In the early phases of rural transformation construction-related skills (and electricians and mechanics) will be required in rural areas (LDCR 2015: ch.5).

## 5. Capital formation and access to finance

### 5.1 Investment in rural infrastructure and farm equipment

The infrastructure investment needed for human development and economic transformation in rural areas of LDCs is considerable. It encompasses the construction of schools and health facilities, improvements in water and electricity provision, irrigation and drainage systems, roads and information and communications technology (ICT) infrastructure. Feeder roads to local market towns are particularly important and can contribute significantly to consumption growth and poverty reduction (LDCR 2014: ch.6).

Rural electrification is an important driver of diversification in rural areas (← ch.III.A). It enables the extension of ICT networks, which is the basis for mobile phone-based payments systems that reduce transaction costs. Electricity is essential for the use of mobile phone applications for the dissemination of information on locally-appropriate farming techniques (LDCR 2015: ch.5). Decentralized systems and renewable energy technologies have greatly increased the potential of rural electrification (LDCR 2017: ch.3).

Higher yields, diversification and stronger linkages to processors all depend on the upgrading of farmers' capital equipment. Addressing chronic underinvestment in

agriculture is therefore a prerequisite for rural transformation in most, if not all, LDCs (LDCR 2016: ch.5). This applies to both public infrastructure investment and private investment in modern tools and equipment. The latter often needs to be fostered through public support for investment policies. Private infrastructure investment could be channelled towards the construction of feeder channels for irrigation systems, electric power stations and cables for upgraded technology. In addition, policies that facilitate access to long-term finance to support infrastructure investment is essential, especially for small farmers and women.

To increase productivity and the quantity and quality of agricultural output, higher investment in irrigation and drainage systems, transport and energy infrastructure, and mechanization is required. Since ownership of larger equipment is unlikely to be viable or affordable for individual small farmers, this may require fostering local rental markets or collective ownership schemes through cooperatives or producers' associations (LDCR 2013: ch.5; LDCR 2014: ch.6; LDCR 2015: ch.5)

## **5.2 Appropriate access to finance**

Increased capital investment in agriculture and non-farm activities is possible only if farmers and rural enterprises gain better access to affordable finance. Most of the measures recommended for government support to capital accumulation more generally (← ch.II.D) are also highly relevant for agriculture and rural development. Yet, agricultural finance must be tailored to the seasonal needs arising from the agricultural production cycle and the specific risks involved. Policy measures in support of agricultural credit are of particular importance for small-scale and women farmers and may also be instrumental in strengthening cooperatives.

A prerequisite for credit financing is the ability of farmers to prepare viable business plans. This signals the importance of public support for training in financial literacy and basic business skills (LDCR 2015: ch.5). Another requirement for credit financing is the presence of banking facilities in rural areas. Measures should be enacted that induce banks to extend their branch networks. In the absence of appropriate commercial bank services, the task of improving access to financial services and credit falls mainly on agricultural or rural development banks, and community credit cooperatives. These are instrumental in collecting rural savings. Often, they are able to provide credit at a lower cost as they tend to be in a stronger position than affiliates of urban commercial banks to assess the creditworthiness of rural borrowers, and agriculture- and location-specific risks (LDCR 2013: ch.5). Cooperatives, producers' associations and women's networks can also act as intermediaries or guarantors for borrowing by members, or by facilitating credit-and-loan arrangements among members.

Farmers should be enabled to turn their agricultural production into collateral with the help of insurance and warehouse receipt schemes (LDCR 2015: ch.5). With insufficient bank presence in rural areas, post offices can assume an important role as providers of financial services and act as financial intermediaries.

In contrast, there is weak evidence that microcredit schemes have positive effects. They often have excessively high interest rates and are far from being a panacea. In some cases, conditional interest subsidies of microcredit can make this a viable solution (LDCR 2015: ch.5). However, given the very high interest rates charged by microcredit providers, the subsidies that are needed to bring the cost of credit to farmers down to an affordable level may easily exceed the effective cost of a direct provision of conditional lending by public institutions. Therefore, rural public banks that are mandated to finance selected pioneer projects in rural farming and non-farm activities with long-term loans at low cost should be considered. Such banks ought to be equipped with refinancing facilities at the national development bank or the central bank and could be supported by external development banks' lending in foreign currency when this is required for the acquisition of capital equipment. Moreover, governments could promote the creation and expansion of rural credit cooperatives.

## **6. Strengthening the contribution of women**

One element of policies aimed at advancing rural structural transformation is addressing the constraints that arise from gender inequality. Since women comprise half of the rural labour force, the response to incentives and other forms of government support aimed at increasing agricultural production and marketable agricultural surpluses can be enhanced by measures that help overcome the multiple constraints on their productive potential. Women typically have to carry the double burden of productive activities and care work, which increases their time constraints for productive work and skills upgrading and limits their mobility. Across LDCs, this is compounded by the disproportionate burden that women face in unpaid agricultural work, inequality in access to education and training, as well as discrimination in land ownership and inheritance. Furthermore, these disadvantages limit women's access to credit, as they are less able to complete application formalities and to provide land as collateral.<sup>33</sup> Targeted interventions to support women in all these areas are therefore necessary.

## B. Tourism

### Main relevant SDG targets:

- 8.3: Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services
- 8.9: By 2030, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products
- 12.b: Develop and implement tools to monitor sustainable development impacts for sustainable tourism that creates jobs and promotes local culture and products
- 14.7: By 2030, increase the economic benefits to small island developing States and least developed countries from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism



### 1. The rationale for development of the tourism sector

A number of LDCs and small island developing States (SIDS) hold significant potential as international tourism destinations. The development of their tourism sector can directly contribute to structural transformation and poverty reduction as tourism services are labour intensive and offer possibilities for economic diversification. Equally important

is the possible indirect impact of tourism through linkages with other sectors and the generation of foreign currency earnings that help finance the import of capital goods and technology needed for building productive capacities in other sectors.

The rapid expansion of global travel and tourism, especially from some large and relatively-advanced developing countries, with a growing middle class, offers new opportunities for LDCs and SIDS to make innovative tourism offers based on country- and regional-specific attractions. In some SIDS, where the scope for industrial development is very limited, tourism can be a significant driver of growth (*Economic Development in Africa Report* (EDAR) 2017: ch.2).

Tourism can provide considerable paid employment opportunities for both skilled and unskilled workers. The sector employs high shares of women and young people, and has a high potential for contributing to poverty reduction, especially in rural areas (LDCR 2013: ch.4 and ch.5). This contribution increases the more farms and non-farm small and medium-sized enterprises (SMEs) adapt to becoming suppliers for tourism establishments and benefit directly from tourist demand for locally produced goods. Through such linkages, tourism can support poor rural communities and women, who are often well placed to provide tourist-relevant products. Women appear to face better working conditions in tourism than in any other sector, although the gender pay gap in the tourism sector in LDCs is higher than in other countries (EDAR 2017: ch.3).

It must be recognized, however, that there is a risk of social tension when rural communities observe their habitat and traditions under threat from the development of modern tourism (EDAR 2017: ch.3; DTIS Ethiopia). Conflicts may also arise between tourism and the preservation of different forms of natural or cultural heritage, and in some cases, there may be trade-offs between industrial development and the expansion of tourism. Moreover, the use of considerable public resources for investments that are typically required to attract foreign tourists, compete with demands, which support the building of productive capacities in other sectors. For all these reasons, the potential net benefits of policy support for the development of tourism must be examined carefully, and any tourism strategy should be developed on the basis of a strong partnership between the public sector, private investors and service suppliers, and the local communities concerned (EDAR 2017: ch.3 and ch.6).

## 2. Elements of a tourism support strategy

Each LDC should identify the trends in international tourism, which may offer opportunities for structural transformation, given their specific circumstances. Where net benefits can be expected for structural transformation and poverty reduction, the sector should be integrated into national development strategies and into poverty reduction programs

for the communities concerned. A national tourism masterplan and a national tourism agency should be established as part of a broader strategy to achieve the Sustainable Development Goals (SDGs). Policy support must also be geared towards the generation of a maximum number of linkages with sectors such as transport services, food production, construction, and textiles and furniture manufacturing. Policies should also be designed in such a way that they minimize import leakages (LDCR 2013: ch.4; EDAR 2017: ch.2 and ch.6; DTIS Ethiopia; DTIS Gambia).

The tourism strategy must consider the interest of the communities in the proximity of tourist sites to preserve their social and cultural identity. It should also stimulate private initiatives by building awareness within the local population. The strategy should also aim to identify potential domestic operators for tourism-related activities, which can be important income and employment generating opportunities (DTIS Gambia).

The most obvious precondition for attracting international tourism is an atmosphere of security and peace. In addition, convenient and affordable methods of transportation that enable easy access from abroad to the country and its main areas of touristic interest are important considerations. When governments require tourist entry visas, the application process should be kept as straightforward as possible and managed efficiently, for example, by offering e-visas or visas on arrival, where security requirements allow. Currency convertibility can also facilitate tourism development in LDCs (EDAR 2017: ch.4).

In many cases, international outreach activities to create awareness about the country as a tourist destination must be intensified. The national tourism agency should be mandated to provide reliable and high-quality information on the touristic strengths of a country. It should also undertake efforts to insert the country's tourist destinations into the programmes of large international tour operators. For certain LDCs, collaboration with neighbouring countries in the development of joint tourism offers may be helpful (DTIS Ethiopia).

The national tourism agency should also ensure that tourism offers are transparent for potential foreign clients and meet international quality criteria. Classification and certification of tourism establishments according to international standards is helpful in this regard (DTIS Ethiopia; DTIS Gambia). Tourism development strategies must be continuously adapted to changing travel behaviour and methods of trip planning and organization by tourists. For example, it is important to offer tourists the possibility of making on-line bookings and payments, and of identifying accommodation options through the social media. This is especially important for attracting young people who are entering the tourism market in great numbers (DTIS Djibouti; DTIS Ethiopia).

Governments should seek to invest in the conservation of areas of special cultural or natural interest and they should strengthen local capacities to manage such conservation (DTIS Mozambique). This can bring about enormous benefits for local communities.

Possibilities to expand tourism strongly depend on the development of transport infrastructure and connectivity, including accessibility by air from abroad, country-wide connections and access to specific local facilities. This is an especially timely consideration, given that many international tourists now travel under certain time pressures (DTIS Ethiopia). Another key element of policy support for tourism must be investment in water, power and telecommunication infrastructure. Water and electricity supply must be reliable, and both public and private investments are necessary to meet international sanitation and hygiene standards. Internet connectivity, mobile communications coverage and the possibility of processing international payment cards are important requirements for international tourism development. Appropriate public infrastructure is important not only for the convenience of tourists, but also a prerequisite for private investment, including FDI in hotels and restaurants around sites of touristic interest. Infrastructure investment is indispensable for the extension and upgrading of hospitality services.

At an early stage of tourism development, i.e. until the tourism industry has developed a market dynamism of its own, fiscal incentives and financial support (← ch.II.D), as well as public-private joint ventures with foreign hotel chains, could support investment in hospitality, especially in the construction of superior hotels and accommodation facilities (DTIS Djibouti; DTIS Ethiopia; and DTIS Gambia). FDI and the involvement of foreign-managed companies can make important contributions to LDCs' capacity for providing tourist services, through of the provision of capital. FDI can also be a source of sector-specific know-how and knowledge transfer. However, FDI in the tourism sector brings with it the same challenges as in other sectors, especially the need to avoid enclave-type investment, with little or no linkages with the rest of the local economy.

Given the complementarity between the viability of private investments and the effectiveness of public investments in support of tourism, there is a special need for the careful and well-targeted coordination of infrastructure development with the provision of incentives for private actors. Transportation infrastructure is necessary for visitors to reach the tourist sites, and accommodation is necessary for tourists to remain in the country, thereby generating sources of income and employment (DTIS Ethiopia). The likelihood that tourism can make a meaningful contribution to structural transformation can be increased with the help of proactive government policies for fostering enterprise development in the tourism sector. One possibility is the provision of incentives for foreign investors to link up with local firms, including micro and small enterprises.

A vigorous, well-coordinated effort must be put into place to train more skilled and semi-skilled workers in hospitality professions. Extension and upgrading of professional training in all tourism-related activities and at all occupational levels is a prerequisite for matching the skills of a sufficiently large part of the local labour force, especially those of women and young people, with job profiles in the tourism sector that respond to the demands of international tourists. Government initiatives aimed at using tourism for structural transformation should therefore, in accordance with the evolving requirements of the sector, support vocational training and apprenticeships in relevant professions, as well as internships in countries where the tourism sector is more advanced. This should also include training of potential trainers by foreign professionals (EDAR 2017: ch.3; DTIS Djibouti; DTIS Ethiopia).

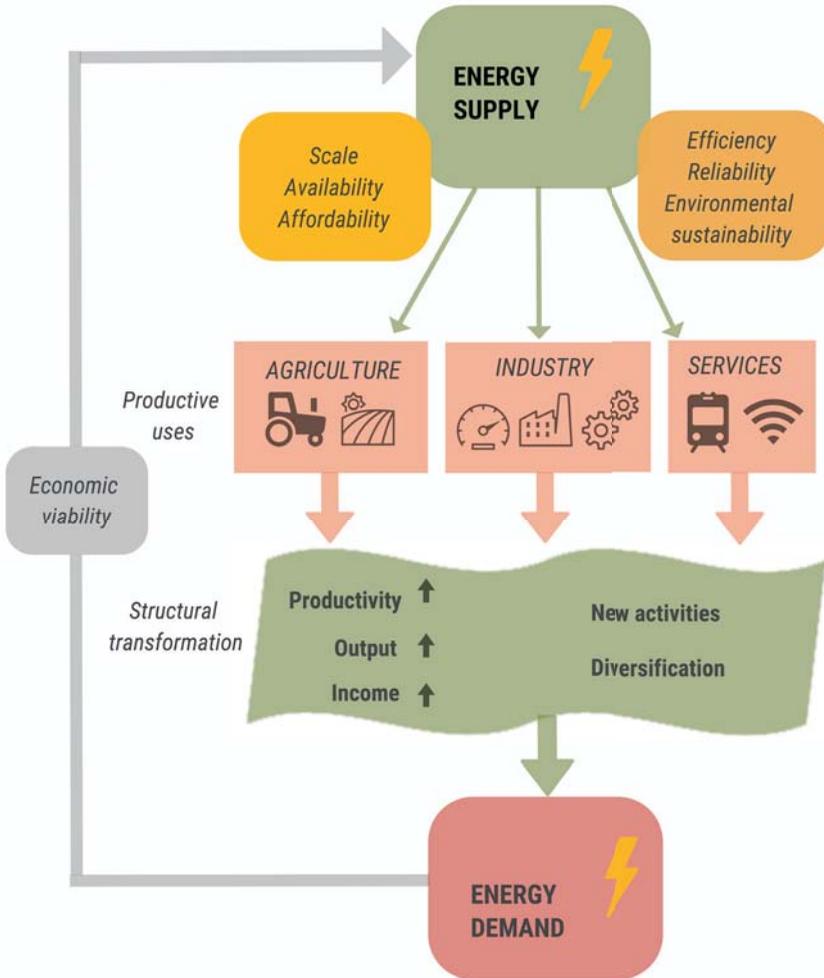
## C. Energy supply

### Main relevant SDG targets:

- 7.1: By 2030, ensure universal access to affordable, reliable and modern energy services
- 7.2: By 2030, increase substantially the share of renewable energy in the global energy mix
- 7.b: By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing States and landlocked developing countries, in accordance with their respective programmes of support
- 8.3: Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services
- 9.2: Promote inclusive and sustainable industrialization and, by 2030, significantly raise industry's share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries
- 9.4: By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities

The energy sector comprises the extraction of energy commodities and carriers; their processing, transformation, refining, manufacturing and distribution; and the production, transmission and distribution of electricity. Energy production and use in LDCs is still heavily reliant on traditional biomass, such as fuelwood and charcoal, which account for 59 per cent of total use. Therefore, energy policies must focus not only on increasing the overall supply and its distribution across the entire economy, but also on the composition of energy sources (LDCR 2017: ch.1).

## ENERGY-TRANSFORMATION NEXUS



The generation and distribution of energy is an economic activity that involves both the public sector and the private sector in a combination that differs considerably across countries. Everywhere, the public sector is the provider of large infrastructure, such as large power plants and grid networks (← ch.III.A). In many LDCs, there is often a state monopoly in energy distribution, reflecting the difficulty of commercially viable electricity distribution in the presence of high costs and limited demand. However, household stand-alone systems and devices in rural areas are typically provided by private firms (LDCR 2017: ch.4). To make private investments in electricity distribution financially viable, the revenues from the private investor would have to fully cover the costs and generate a profit. The entry of the private sector into LDC energy sectors can therefore result in tariff increases and/or high subsidy payments if governments with weak negotiating capacity enter into disadvantageous purchasing agreements with independent power producers (LDCR 2017: ch.4 and ch.6).

The energy sector directly contributes to GDP by generating value added, jobs and, in some LDCs, export earnings. Through exports of fossil fuels, the energy sector in a few LDCs,<sup>34</sup> is a major source of value added, foreign currency earnings and public revenues, although it contributes relatively little to employment due to the capital intensity of extractive industries. In most LDCs, however, the sector is limited largely to the supply of electricity and fuels for domestic use and transportation, which represents only a small share of value added and employment, while imports of refined petroleum products are a major foreign currency expenditure.

Access to energy has a direct impact on the standards of living of the population. In LDCs, two thirds of total energy consumption is for residential use. Yet, 62 per cent of people in LDCs are without access to electricity and the share of people without access to modern fuels for cooking and heating is even higher (LDCR 2017: ch.1).

Given their effects on other productive sectors, from the perspective of structural transformation, scaling up electricity generating capacity and grid extension, and upgrading are of central importance. However, an energy-transformation nexus is a two-way relationship: while access to electricity is essential for structural transformation, the productive use of electricity generates the demand needed to make investments in electricity access viable. Thus, the benefits of the energy-transformation nexus will be greater, the more successful and complementary policies are put into place to support new, higher value-added activities, technological upgrading and business development (LDCR 2017: ch.6).

Nearly half of all firms in LDCs identify electricity as a major reason for their underutilization of existing productive capacities (LDCR 2017: ch.2). More reliable, affordable and efficient energy supplies are vital for the expansion of existing production, and the adoption of new production techniques and technologies. Power supply helps to raise productivity

and facilitate the introduction of new and higher valued activities. Therefore, sector-specific support for the energy sector must focus on improving transformational energy access and engaging the energy-transformation nexus for output and productivity growth, and employment creation (← ch.III.A).

The complexities of the energy sector make sound planning, transparency and policy coordination essential. Such planning needs to be based firmly on local circumstances and resource potential. The planning process should steer the energy mix towards a progressively more diversified and balanced combination of energy sources. This must include a shift towards a greater share of renewable sources. Gradually internalizing environmental externalities, including those that stem from local pollutants (notably particulates) and greenhouse gas emissions, is desirable in the long term. However, this should not preclude developmental opportunities linked to the use of fossil-fuel technologies, where these would otherwise continue to be the best option.<sup>35</sup>

Financial sustainability is a critical factor for the viability and quality of electricity systems. However, the level and pattern of electricity tariffs needs to be aligned with social objectives, such as affordability in a context of widespread poverty, and industrial and sectoral policy priorities (← ch.III.A). Incentives and regulation can play an important role in this regard. Changes in tariff design, if carefully crafted and backed by political will, can gradually offer a means of matching tariff structures to the structure of electricity supply costs (LDCR 2017: ch.6). An important consideration in this context is that the recurrent costs of renewable energy technologies are a much smaller part of the total costs than those of traditional technologies.

Improved access to energy is also important for rural development (← ch.V.A). The ongoing emergence of scalable, renewable-energy technologies and decentralized electricity generation by mini-grids and their associated cost reductions, offer new possibilities for broadening electricity access in rural areas. The modular nature of solar photovoltaic and wind generators offers possibilities to accelerate their initial deployment, while leaving room for gradual capacity increases as demand rises (LDCR 2017: ch.3). Yet, leveraging electrification for rural transformation is likely to require complementary interventions to facilitate the adoption of technologies that were previously unavailable (LDCR 2017: ch.6).

Mini-grids may also play a role in peri-urban areas and informal urban settlements as a stepping stone to grid connection. In areas where transmission capacity is a constraint, they can provide a means of establishing a local distribution network that can later be connected to the wider grid. Grid connection requires the adoption of technical standards compatible with the overall grid to ensure interoperability. Equally, investors in mini-grids need clarity about the likelihood and time frame required for grid connection, as well as information on its financial implications.

In the case of wind and solar energies, attention must be paid to the need for complementary storage systems, given the intermittent nature of their generation. While the costs of storage technologies have declined rapidly over the last few years and may soon make battery storage a feasible option, this is not yet the case in all LDCs. Therefore, in the near term, continuity of supply may entail a combination of variable renewable sources with pumped hydro, or with diesel or biofuel generation. Solar thermal energy may also become a viable option in the future, combining renewable generation with storage of thermal energy to allow greater flexibility in the time profile of energy supply.

### Sectoral policies to achieve the SDGs



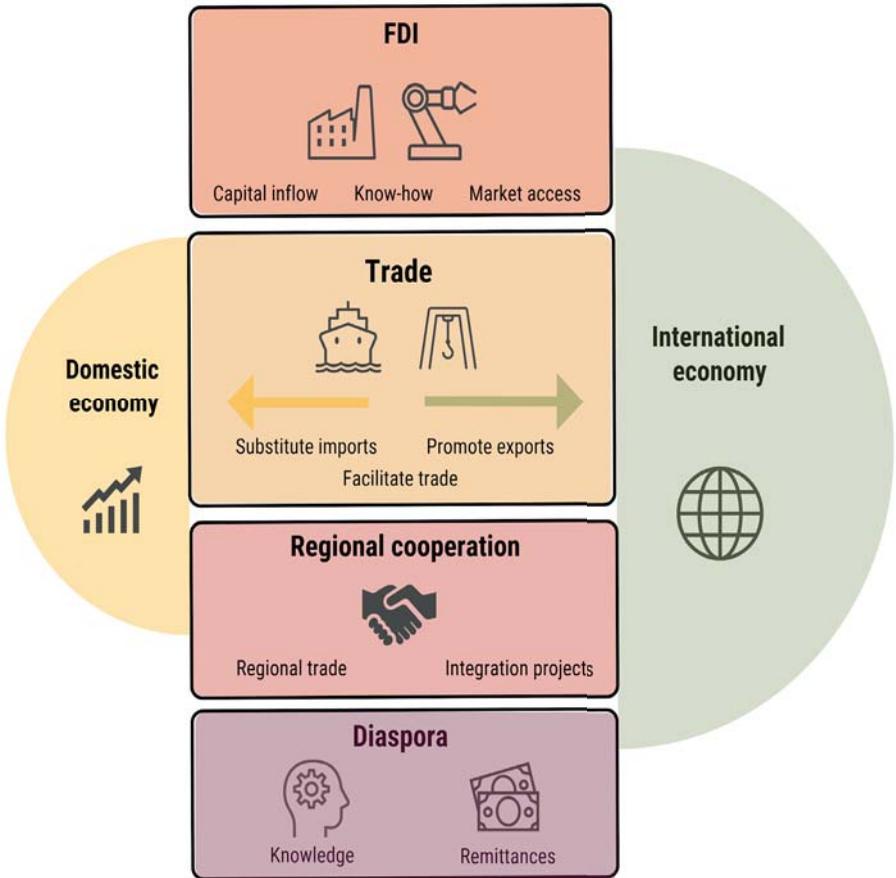
## D. Summary of sectoral policy options

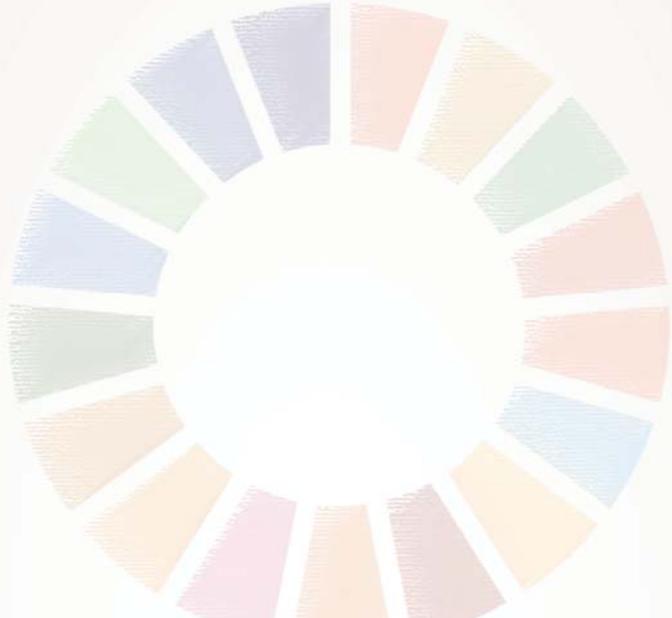
<b>Agriculture</b>				
<b>Intermediate objective</b>	<b>Policy measure</b>	<b>Relevant SDG/ target</b>		
To enhance the creation of productive capacities and address underinvestment in agriculture	<ul style="list-style-type: none"> <li>• Invest in rural water, ICT, transport and energy infrastructure, giving preference to renewable energy technologies</li> <li>• Take measures to facilitate investment by farmers in modern agricultural machinery and equipment</li> </ul>	2		
		7.1		
		8.2/8.3/		
		8.1		
To strengthen the foundation for generating higher agricultural incomes	<ul style="list-style-type: none"> <li>• Where possible, expand the area of cultivated land by establishing or extending irrigation and drainage, and easing seasonal labour constraints</li> <li>• Support farmers to raise yields per hectare, raise labour productivity, lower post-harvest losses and strengthen linkages with processors</li> <li>• Support farmers to diversify their production and shift to higher-value crops</li> <li>• Provide improved education services in rural areas, including for adults and women to improve literacy and numeracy, vocational skills, financial literacy and business skills</li> <li>• Organize agricultural extension services in such a way that they also benefit small, family and women farmers</li> <li>• Use rural cooperatives and producers' associations as agents for the implementation of agricultural policy and the provision of support</li> </ul>	1.1/1.2		
		2.3/2.4		
		4.3/4.6/		
		4.7		
		6.4/6.5		
		8.1/8.2/		
		8.3/8.10		
		10.1/10.2		
		To increase productivity in farming and livestock breeding	<ul style="list-style-type: none"> <li>• Facilitate the access of agricultural producers to essential, high-quality inputs and equipment, in line with local circumstances and climate and soil conditions, including through the organization of collective purchases</li> <li>• Consider the use of input subsidy schemes or the public provision of in-kind microgrants of productive inputs, especially for women and other disadvantaged producers</li> <li>• Step up organizational and financial support for agricultural R&amp;D and its dissemination through improved agricultural extension services and training for farmers, paying special attention to the needs of small-scale, family and women farmers</li> <li>• Facilitate access to modern equipment through targeted subsidies and financing support for selected social groups</li> </ul>	2.3/2.4
				6.4/6.5
8.3/8.10				
9.3				
10.1/10.2				
To optimize the size and pattern of agricultural production units	<ul style="list-style-type: none"> <li>• Provide advisory and managerial support to farmers, considering crop-specific and local agro-ecological conditions, as well as the social and environmental context</li> <li>• Enlarge farm sizes where necessary for stronger production linkages with processors, but leave sufficient land available for small-farm agriculture to provide all rural households with incomes above the poverty line</li> <li>• Strengthen rural cooperatives and producers' associations by providing guidelines for their establishment and operating principles</li> <li>• Facilitate the financing of rural cooperatives and producers' associations by providing training programmes, managerial assistance and advantageous financing conditions</li> </ul>			2.3/2.4
				8.1/8.2/
		8.3/8.4		
		10.2		
		To reduce post-harvest losses and the deterioration in quality of agricultural products	<ul style="list-style-type: none"> <li>• Take measures to improve transport and storage facilities, especially for small-scale farmers</li> <li>• Make collection and marketing systems more efficient, and promote the development of appropriate standards for the collection and quality classification of agricultural output, through awareness building and regulation</li> </ul>	2
8.2/8.3				
12.3				

Intermediate objective	Policy measure	Relevant SDG/ target	
To strengthen intra- and inter-sectoral linkages and the commercialization of agriculture	<ul style="list-style-type: none"> <li>• Provide advisory services to farmers to strengthen their business administration and organization</li> </ul>	2 8.2/8.3	
	<ul style="list-style-type: none"> <li>• Depending on the specific circumstances, provide support to the creation of larger agricultural production units</li> <li>• Promote the creation and expansion of rural cooperatives and producers' associations</li> <li>• Promote contract farming and monitor such arrangements to protect the interest of agricultural producers with very limited market power</li> <li>• Establish Rural Transformation Centres (RTCs) in combination with industrial clusters, where farmers can be encouraged to sell their outputs and gain access to high-quality inputs, such as fertilizers, seeds, or animal feed and medication</li> <li>• Develop and implement a medium-term strategy to accelerate the commercialization of a large portion of agriculture, and to raise quality and ensure compliance with internationally recognized product standards, including through enhanced extension services and training in business administration</li> </ul>	10.1/10.2	
To increase the scope and value of agricultural exports	<ul style="list-style-type: none"> <li>• Promote internationally recognized certification of agricultural products, including both public and private certifications, through capacity building for producers and government facilitation of certification processes</li> </ul>	2.4 8.1/8.2 17.11	
	<b>Rural development</b>		
To accelerate the development of rural non-farm activities, employment and income generation	<ul style="list-style-type: none"> <li>• Enable the start of new formal SMEs in rural areas and the expansion of existing ones by providing easier access to finance, simplified and cheaper procedures for registry, and by offering basic training in business administration</li> </ul>	1.1/1.2 2.a 4.3 5.5	
	<ul style="list-style-type: none"> <li>• Initiate a virtuous circle of agricultural upgrading and rural diversification through employment generation in the construction and maintenance of rural infrastructure and related local procurement, and the resulting local income and demand effects</li> </ul>	5.a 7 8.2/8.3/ 8.5/8.10	
	<ul style="list-style-type: none"> <li>• Support the creation and expansion of agro-processing activities in rural areas and link them to export trade and tourism activities</li> </ul>	9.1/9.3 10.1	
	<ul style="list-style-type: none"> <li>• Provide sufficient vocational training opportunities for relevant non-farm activities, in consideration of the local context</li> </ul>		
	<ul style="list-style-type: none"> <li>• Improve rural ICT and energy infrastructure, including for the local production and distribution of renewable energies</li> </ul>		
	To raise capital investment in agriculture and non-farm activities	<ul style="list-style-type: none"> <li>• Improve access to affordable finance, especially for small and women farmers and in remote rural areas</li> </ul>	1.4 5.a
		<ul style="list-style-type: none"> <li>• Strengthen the possibilities of rural cooperatives and producers' associations to share modern farming equipment</li> </ul>	8.3/8.10 9.3
<ul style="list-style-type: none"> <li>• Facilitate access to finance for small and women farmers, rural cooperatives and producers' associations</li> <li>• Enable agricultural or rural development banks, postal saving banks, and community credit cooperatives to play a stronger role in financial intermediation and the long-term financing of investment in rural productive capacities</li> </ul>			

Intermediate objective	Policy measure	Relevant SDG/ target
To meet the needs of farmers and rural non-farm economic agents for financial and payments services	<ul style="list-style-type: none"> <li>Take regulatory measures or provide incentives to induce commercial banks to extend their branch networks into rural areas and to provide more seasonal and long-term financing options for farmers</li> </ul>	1.4 2.3 5.a
	<ul style="list-style-type: none"> <li>Promote the establishment of rural financial institutions and the development of financial instruments tailored to the specific needs arising from the agricultural production cycle</li> </ul>	8.1/8.2/ 8.3/8.10 9.3
	<ul style="list-style-type: none"> <li>In the absence of the appropriate provision of financial services by commercial banks, support the provision of finance by public agricultural banks, and rural development banks</li> </ul>	
	<ul style="list-style-type: none"> <li>Support the development of financial services by the post office, and community credit cooperatives</li> </ul>	
	<ul style="list-style-type: none"> <li>Adjust regulation to enable farmers to use their agricultural output as collateral with the help of insurance and warehouse receipt schemes</li> </ul>	
To combat the discrimination of women in rural areas and improve the effectiveness of public support measures for rural transformation	<ul style="list-style-type: none"> <li>Undertake legal and institutional reforms to eliminate the disadvantages faced by rural women, particularly with regard to land and inheritance rights, and access to education, training and finance</li> </ul>	5
<b>Tourism</b>		
To integrate tourism development into the overall strategy for socially acceptable and environmentally sustainable structural transformation and poverty reduction	<ul style="list-style-type: none"> <li>Establish a tourism development masterplan, subject to consultation with stakeholders, as an anchor document for the selection of priority projects and for the design of a tourism promotion strategy</li> </ul>	8.1/8.2/ 8.3/8.9 12.b 14.7
	<ul style="list-style-type: none"> <li>Design and implement a well-researched tourism marketing strategy, focused on specific target groups</li> </ul>	8.1/8.2/ 8.3/8.9
To attract additional foreign tourists and respond to changing trends in global tourism	<ul style="list-style-type: none"> <li>Set up a national tourism agency for the dissemination of reliable information through selected media about travel connections and country-specific tourist attractions</li> </ul>	12.b 14.7
	<ul style="list-style-type: none"> <li>Minimize visa-related bureaucracy, provide online-booking services and invest in the improvement of air transport accessibility</li> </ul>	
	<ul style="list-style-type: none"> <li>Seek cooperation with tourism-related institutions in neighbouring countries to develop complementary tourism offers</li> </ul>	
To raise private investment in tourist accommodation facilities and hospitality services	<ul style="list-style-type: none"> <li>Closely coordinate the provision of fiscal incentives for private investment in tourist establishments with the building of tourism-related infrastructure</li> </ul>	8.1/8.2/ 8.3/8.9/
	<ul style="list-style-type: none"> <li>Facilitate the access of potential domestic tourism service providers to long-term credit, through preferential loan conditions and credit guarantees</li> </ul>	8.1 10.4
	<ul style="list-style-type: none"> <li>Encourage joint ventures from local firms and international hotel operators to attract foreign capital and sector-specific know-how</li> </ul>	12.b 14.7
To ensure that the provision of hospitality and other tourism services meet international standards	<ul style="list-style-type: none"> <li>Use foreign managerial and organizational know-how at an early stage in the development of tourism activities</li> </ul>	8.9 12.b
	<ul style="list-style-type: none"> <li>Establish a certification scheme for skills and establish standards for tour guides, hotel staff and interpreters</li> </ul>	14.7
To maximize the direct impact of tourism on employment and poverty reduction	<ul style="list-style-type: none"> <li>Provide sector-specific vocational skills training, especially to women and young people, based on close cooperation between public vocational education institutions, private sectoral institutions and private operators to match training with job profiles and entrepreneurial options in the tourism sector</li> </ul>	4.3/4.4/ 4.5 4.b 5.5 8.9

Intermediate objective	Policy measure	Relevant SDG/ target
To maximize local value addition in tourism services by generating intersectoral linkages and preventing import leakages	• Coordinate support to tourism development with policies that support other service activities, agriculture and manufacturing, especially in rural areas	2.3 2.a
	• Encourage the creation of linkages through information dissemination and awareness-building	8.2/8.3/ 8.9 9.3
To ensure the continuity and financial sustainability of public policies for tourism development	• Set up a mechanism for tourism tax collection and redistribution among the relevant national and local agencies	8.9 10.4
	<b>Energy</b>	
To improve transformational energy access	• Make scaling up electricity generating capacities a policy priority and support the emergence of an energy-transformation nexus	7 8.1/8.2/
	• Combine grid extension, decentralized power generation, mini-grid development and stand-alone solutions for dispersed rural populations	8.3 9.2/9.4/
	• Identify priority areas for mini-grid and stand-alone home system deployment, considering community size, dispersion, energy demand and the potential for productive use	9.5
	• Phase in the production of renewable energies as new capacity is added and outdated plants are replaced	
	• Provide incentives to energy producers and consumers to gradually switch to renewable energies	
To ensure that the provision of energy meets changing levels and patterns of demand and responds to the evolving technological environment and the demands of environmental sustainability	• Regularly review long-term energy planning frameworks, and reassess the appropriateness of the plan against the progress achieved in structural transformation	7 8.2/8.3 9.2/9.4
	• Enable possibilities to connect mini-grids or integrate them into an overall grid at a later stage, and pay close attention to system-wide interdependence and the diversification of the energy mix	
To support the gradual electrification of rural areas and to generate electricity demand that is in line with supply capacity and the need to make mini-grids viable	• Provide in-kind microgrants of electrical equipment for use in economic activities for which there is local demand	2.a 7.1
	• Encourage rural firms and cooperatives to initiate the processing of agricultural crops or engage in other non-agricultural activities linked to farming	7.b 8.2/8.3 11.a
To advance the exploitation of lower-cost energy sources and to create greater possibilities for diversification	• Use available options to enhance the regional integration of LDC energy markets	7.2/7.3 12.2





## VI. EXTERNALLY-ORIENTED POLICIES

### A. Policies in support of trade integration

#### Main relevant SDG targets:

- 8.1: Sustain per capita economic growth in accordance with national circumstances and, in particular, at least 7 per cent gross domestic product growth per annum in the least developed countries
- 8.2: Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors
- 8.3: Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services
- 9.2: Promote inclusive and sustainable industrialization and, by 2030, significantly raise industry's share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries
- 10.c: By 2030, reduce to less than 3 per cent the transaction costs of migrant remittances and eliminate remittance corridors with costs higher than 5 per cent
- 17.11: Significantly increase the exports of developing countries, in particular with a view to doubling the least developed countries' share of global exports by 2020

## 1. A comprehensive strategy to make trade work for structural transformation

### 1.1 Coherence between trade and industrial policy

The importance of making external trade and trade policy central elements of least developed countries' (LDCs) strategies for structural transformation has already been underlined in this Compendium (← ch.I.B). The crucial role of trade policy in the context of industrialization strategies has also been emphasized (← ch.IV.C). It should be stressed that trade development in support of structural transformation does not only depend on trade policy in the sense of setting rules, incentives and disincentives for the cross-border flow of goods and services. Trade development also depends on all other policies referred to in this Compendium which aim at expanding, upgrading and diversifying productive capacities. It is therefore essential that governments pay due attention to achieving coherence among these different areas of trade policy (UNCTAD 2016a: 50).

Most importantly, to maximize the benefits of trade for structural transformation, trade policy should be linked to industrial policy (← ch.IV.C.4). Since the building of productive capacities and export capacity takes time and cannot progress simultaneously in all manufacturing sub-sectors, trade integration must be gradual and selective. On the one hand, export growth and import substitution can be important drivers for the expansion of manufacturing activities. On the other hand, trade performance often depends on industrial performance and the expansion of productive capacities (UNCTAD 2016a: 53) (← ch.IV.C.4).

Consideration should be given to the creation of a National Trade Council as a coordinating entity to oversee the design and implementation of a medium-term trade strategy. Based on consultations with stakeholders in government, public administration and the private sector, this trade council should identify priorities, and ensure coherence and consistency across different policy areas over time (UNCTAD 2016a: 76). This can help the private sector to develop their own business plans and strategies. A national LDC trade strategy should focus on enhancing the competitiveness of domestic enterprises and access to markets. It should also contribute to building export capacity and reducing trade transaction costs (UNCTAD 2016a: 60 and 76).

Trade in manufactures is very sensitive to exchange rate movements. Therefore, avoiding instability and the overvaluation of the domestic currency is a prerequisite for the success of industrial policies. Appropriate exchange rate management is essential to prevent the “Dutch disease” as a result of sharp increases in commodity export earnings or capital inflows. Exchange rate management can even become an instrument of trade management itself when the central bank is able to keep the exchange rate at a slightly

undervalued level. This strengthens the international competitiveness and profitability of domestic manufacturing activities, while discouraging imports (UNCTAD 2016a: 64) (← [ch.II.C.2](#); ← [ch.IV.C.4](#)).

## 1.2 Use and preservation of policy space

LDCs should exploit their policy space for strategic integration into the international economy to the largest extent possible. It is true that national economic policy space is increasingly constrained by international rules and commitments. However, with respect to trade-related policy instruments, there are many flexibilities in the provisions of World Trade Organization (WTO) Agreements in favour of LDCs (*The Least Developed Countries Report* (LDCR) 2016: ch.3). Many of them grant LDCs that are signatories to these agreements or in the process of accession to WTO longer transition periods for phasing in certain reforms. Other flexibilities, for example those under the WTO Agreements on Trade-related Investment Measures (TRIMs) and Subsidies and Countervailing Measures (SCM), give LDC governments the possibility to use policy instruments, which are no longer available to governments of other countries, to support structural transformation in LDCs. These are some of the export promotion and import protection instruments that, in the past, have played a central role in the development process of most of today's industrialized countries. Countries that have leveraged these policy instruments include many late industrializing countries, such as those in East and Southeast Asia. LDC governments should also consider the scope for using tariffs as an instrument of trade policy. In many cases, tariffs applied by LDCs are far below their bound rates under WTO commitments. However, conditionalities attached to official development assistance (ODA) or provisions of bilateral free trade agreements sometimes exclude the use of this instrument (LDCR 2010: ch.5; LDCR 2014: ch.6). Moreover, membership in customs unions may also reduce the trade policy autonomy of individual LDCs because such membership implies common external tariffs.

In any case, LDCs should use the available policy space to the largest possible extent for strategic integration into the international economy. It is, however, important that trade policy instruments are used in a manner that evolves flexibly over time. New, promising activities may merit timebound infant industry support, while maturing sectors could be gradually opened up in consideration of the ability of domestic firms to compete with foreign producers (LDCR 2010: ch.5).

International negotiations at the multilateral, plurilateral or bilateral level towards agreed trade rules and trade agreements are an important element of trade policy (UNCTAD 2016a: 73). LDCs have duty-free, quota-free (DFQF) access to most high-income developed countries' markets. However, they do not have DFQF access to many

fast-growing developing countries, some of which including China and India, are also increasingly important sources of foreign direct investment (FDI). LDC governments should therefore continue efforts to obtain preferential access to these countries' markets. Another important part of the trade policy agenda is to deal with non-tariff measures, primarily through quality upgrading and the strengthening of regulatory mechanisms and institutions (→ ch.VI.A; → ch.VII.F).

In shaping their external economic relations, LDC governments may be well advised to maintain their policy autonomy to the largest possible extent, in order to strategically support their productive sectors. Even though improved, legal market access obtained through preferential trade agreements with industrialized countries may initially seem like a quick gain, the potential of future, more sustainable, gains from trade will be reduced when options for policies to support upgrading and diversification are significantly curtailed. LDC governments should be prudent in trade negotiations and not fall into the trap of “buying” market access by giving up a degree of development policy autonomy, in other words, by shrinking their own policy space.

### **1.3 Promoting exports**

As exports of manufactures can be an important driver for the expansion of industrial capacities, LDCs should, to the largest extent possible, use their trade policy space, including all the flexibilities provided under multilateral trading rules, to pro-actively promote exports (LDCR 2014: ch.6; LDCR 2016: ch.3). Related instruments include: WTO-compatible export subsidies for infant industries, the public provision or subsidization of trade finance, and the provision by public trade promotion agencies of information on international market opportunities and related marketing support (LDCR 2014: ch.6) (← ch.IV.C). A national Export Promotion Agency, operating in close cooperation with private sectoral associations at home and partners abroad can enhance the export capacity of local firms (Diagnostic Trade Integration Study (DTIS) Ethiopia). Programmes that enable domestic producers to make better use of preferential market access, and to meet international quality standards are also important for LDCs (DTIS Ethiopia) (→ ch.VI.A.3).

### **1.4 Managing imports**

Structural transformation can also be supported on the import side by a differentiated tariff policy. A trade regime in support of achieving structural transformation and the Sustainable Development Goals (SDGs) should provide selective, temporary protection to sectors that are at an early stage of development and have the potential to create employment and advance structural change by increasing exports or substituting imports,

or both. Where possible, selective use of import tariffs should assume an important role because fiscal space in LDCs to use subsidies or other types of public expenditure as incentives to promote new activities in support of structural transformation is very limited. In contrast, most LDCs have considerable scope to use tariff instruments more actively, given the large gap between their bound and applied tariff rates (LDCR 2010: ch.5; LDCR 2014: ch.6).

Such a trade regime should allow for the duty-free import of certain goods, while imposing relatively high customs duties or import taxes on others. It should exempt intermediate inputs to domestic production, as well as machinery and equipment from import duties. This should make these goods more affordable for domestic enterprises and agricultural production units. Intermediate import supply enterprises or agencies at the sectoral level could help to further reduce the cost of essential imported inputs for agricultural or manufacturing activities.

In contrast, tariffs should be imposed on certain goods for which productive capacities already exist, or are being developed. This is especially important in sectors that are considered to be of strategic importance for structural transformation (← ch.I.C.4; ← ch.IV.A). This way new or infant industries can be shielded, temporarily and during a reasonable period of learning and experimentation, against overwhelming competition from internationally well-established or foreign firms (LDCR 2010: pg.185) (← ch.IV.C). As initially protected sectors mature, this protection should be phased out and shifted, again temporarily, to new emerging industries.

High tariffs or specific excise taxes may also be used to discourage imports of luxury goods. Here, the reason for the introduction of custom duties would be to avoid excessive trade deficits and manage scarce foreign currency earnings. In other cases, tariff and non-tariff measures may be justified to protect domestic agriculture against heavily subsidized imports from developed countries, and to increase food security (LDCR 2010: ch.5).

For LDCs that are members of the WTO, in order to make more active use of WTO measures to promote their infant industries, the rules have to be interpreted flexibly. This would give LDCs more policy space to shift from their heavy dependence on commodities to more diversified and higher value-added production. This would also enable producers in LDCs to take full advantage of their preferential access to the markets of developed countries and integrate more favourably into the global economy (LDCR 2010: ch.5).

## 2. Policies towards FDI and GVCs

### 2.1 Optimization rather than maximization

Export activities in LDCs are strongly influenced, and often dominated, by foreign-owned enterprises and global value chains (GVCs) (← ch.IV.C). FDI and the participation of domestic producers in GVCs can foster the building of productive capacities, create employment, and facilitate access to global markets. However, the benefits for structural transformation do not emerge automatically. They depend on the type of FDI, the upgrading path of domestic firms within GVCs, and their linkages with other parts of the economy. Thus, there is a need for carefully crafted policies to optimize FDI and GVC participation, as an integral element of strategies to promote structural transformation. The effective coordination of these policies with other trade and industrial policies is essential.

Part of the institutional arrangement should include the development of national investment commissions, which are mandated to disseminate information on FDI and GVC possibilities, and offer one-stop administrative services for interested foreign partners. These commissions should remain engaged with foreign partners during the entire duration of the investment process. Importantly, these institutions ought to also be mandated and equipped with the necessary analytical competences to monitor and evaluate the performance of FDI (DTIS Ethiopia).

Governments should be aware of the risk of entering into excessive wage and tax competition in order to attract FDI, given that many other countries also compete for similar investments. Low wages weaken domestic demand and, thus, domestic forces of growth. This increases a country's dependence on exports for output expansion, employment creation and structural transformation. The interest of attracting FDI should therefore not lead LDC governments to neglect the fact that wage increases at a rate below productivity growth are not only compatible with stable or falling unit labour costs, they are also the main domestic driver of demand growth (← ch.IV.C).

### 2.2 Balancing fiscal costs with benefits of FDI

The granting of generous fiscal incentives to attract FDI may lead to a situation where future tax revenue from the FDI-based activities is too small to offset the substantial initial costs, which improvements in infrastructure in support of FDI often entail (LDCR 2014: ch.6). LDC governments should consider that tax advantages may not always be the most important determinant of FDI. This is especially valid for LDCs that can count on a large domestic resource base. Especially in extractive industries, FDI is attracted by the availability of natural resources, and the choice of locations is much narrower than in manufacturing activities (*Economic Development in Africa Report (EDAR) 2014: ch.4*).

In any case, incentives and other policies to attract FDI should be limited and timebound. They should be kept under review and modified as necessary, considering the evolving needs and circumstances of the national economy. The benefits of attracting FDI should be weighed against the fiscal costs of FDI promotion and against possible downside risks in terms of reducing domestic investment. This is a risk often connected with FDI in manufacturing sectors. FDI policies should also consider the risk of perpetuating existing production structures, which is a possible effect of FDI in extractive industries (LDCR 2014: ch.6). In their efforts to attract FDI, governments must ensure that incentives for foreign investors are not overly generous and detrimental to local entrepreneurship and investment (EDAR) 2014: ch.4)<sup>36</sup> (← ch.IV.C). Such fiscal privileges should always be made conditional on new investments in strategic sectors, and they should be granted only for activities when they are decisive for the investment decisions of foreign companies.

### **2.3 FDI in extractive industries and resource rents**

Although FDI flows into manufacturing and services sectors have accelerated in recent years, capital-intensive extractive industries still account for the bulk of FDI inflows to LDCs (EDAR 2014: ch.2 and ch.4). FDI in these activities can be a tool for using the exploitation and export of natural resources to promote structural transformation. Natural resource rents constitute a potentially major source of public revenue in a number of LDCs. In their attempts to attract FDI to the extractive industries, governments of LDCs that are exporters of fuel and minerals must therefore pay due attention to the appropriation of a fair share of resource rents (LDCR 2014: ch.6).

When commodity rents are included in profit remittances by transnational corporations (TNCs), they are lost for capital accumulation in the country or origin. Even if TNCs reinvest such profits in the same activities, this is rarely in the interest of sustainable development the exporting country, because it tends to perpetuate commodity dependence and accelerates the exploitation of non-renewable resources, rather than contributing to diversification and industrial upgrading (UNCTAD 2011: ch.5; LDCR 2010: ch.6).

Royalties or taxes should be determined as a proportion of company sales, given the problems associated with profit-based taxation resulting from creative accounting practices on the part of — typically foreign — mining companies (LDCR 2010: ch.6). Policymakers in LDCs should learn from the most successful experiences when negotiating the level of taxation or royalties with TNCs in extractive industries. They would certainly benefit from technical assistance in this regard (UNCTAD 2009: ch.III).

## 2.4 Manufacturing FDI and participation in GVCs

For FDI in nascent manufacturing and services to support the process of structural transformation, appropriate policies and incentives to ensure that they contribute to economic diversification and technology transfer must be in place as part of the overall development strategy. The possibility to draw on locally available raw materials and other inputs can serve as important motivation for foreign manufacturers, provided that local producers of such inputs can meet the expectations of foreign firms regarding quality, safety, productivity and timeliness of delivery (DTIS Ethiopia) (← ch.III.D).

Local content requirements have frequently been used by successfully industrializing countries as a tool to force linkages between FDI and domestic firms. Despite a growing number of restrictions on the use of such tools through WTO rules and bilateral trade and investment agreements, there remains significant scope for LDCs to apply such requirements (Ramdoo 2016). However, reasonable local content requirements must be coherent with the overall industrialization strategy, to ensure that they contribute to the kind of structural transformation intended, and that local supplies are reliable and of acceptable quality. Governments may also try to optimize the impact of FDI by imposing technology transfer requirements, which are not restricted by WTO rules, but maybe included in bilateral agreements.

In a global economy where GVCs increasingly dominate the international trade of manufactures, both policy support for international trade integration and the business strategies of small and medium-sized enterprises (SMEs) in developing countries must be geared towards marketing local firms as partners in GVCs. While GVCs provide considerable opportunities for LDCs to integrate into the global economy at relatively low technology thresholds, they imply the need to give up a certain degree of managerial autonomy within firms, and policy autonomy on the part of governments (DTIS Ethiopia).

Still, governments should help to ensure that the benefits from participation in GVCs are distributed fairly. Proactive measures need to be taken to support domestic firms during their participation in negotiations with powerful, international lead firms. Policies should also facilitate continuous skills and process upgrading in domestic firms and the emergence of linkages between local firms participating in GVCs and other local firms. This can include the forging linkages to support the substitution of imported inputs with domestic production (EDAR 2011: ch.5).

Special attention needs to be given to decent working conditions, as the asymmetric power relationship between domestic firms participating in value chains as suppliers and the TNCs leading them tends to create downward pressure on working conditions. By no means should the relaxation of labour and other regulatory standards be an option for attracting FDI or relationships within GVCs (LDCR 2014: ch.6).

### 3. Operational challenges in international trade integration

#### 3.1 Making better use of preferential market access

Various Diagnostic Trade Integration Studies (DTIS) on LDCs have confirmed the need to integrate trade into development strategies. In merchandise trade, LDCs benefit from DFQF access to the largest foreign markets for most of their exports, thanks to such initiatives as the European Union's Everything But Arms (EBA) programme and the African Growth and Opportunity Act (AGOA). Most LDCs also enjoy preferences under the Generalized System of Preferences (GSP) in a number of other developed countries, and under the Global System of Trade Preferences among Developing Countries (GSTP).

However, in most LDCs producers have been capturing the benefits of these preferences only to a limited extent. This is partly due to a lack of awareness of the opportunities offered, sometimes due to supply capacity constraints. To enhance the contribution of external trade to growth and structural transformation, LDCs governments should take measures to better inform domestic firms about the market opportunities in preference-giving countries and enhance their ability to make full use of DFQF market access to developed and developing countries. This includes an expansion of export supply capacities, both quantitatively and qualitatively, and an enhancement of the international competitiveness of domestic producers (LDCR 2014: ch.6; LDCR 2016: ch.5).

#### 3.2 Upgrading to international quality standards

In order to strengthen the role of exports as a driver of structural change, increased efforts are necessary on the part of both governments and producers to ensure that potential export products meet both formal and informal international quality standards. Accelerated development and upgrading of the standardization, quality assurance and accreditation architecture, in accordance with international standards, is critical in this context.

Informal standards may be inferred from the conditions in specific goods markets, whereas formal standards result from contractual obligations vis-à-vis individual buyers. They may also be legally imposed by the authorities of importing countries. The WTO Agreements on Sanitary and Phytosanitary Standards (SPS) and Technical Barriers to Trade (TBT) try to ensure that official standard requirements do not create unnecessary obstacles to international trade. WTO members are required to notify other members before adopting new measures if these are likely to affect international trade. For timely access to current information on changes in official standards set by potential importing countries, LDCs should make use of the ePing information platform provided by the Committee for Development Policy (CDP) (United Nations 2017b).

Upgrading product quality to international standards is particularly difficult for small local firms and smallholder farmers. They have little or no experience with systems in which production is dedicated to formal marketing channels, contracts are precise and enforced, proper handling is essential, and accidental or deliberate adulteration of products is unacceptable. These considerations become progressively more challenging, as the building of productive capacities involves moving up the value chain from raw to processed and finished goods.

The involvement of foreign investors, and the use of their knowledge and experience may help to upgrade average product quality to enhance competitiveness in international markets. However, domestic institutions also play a central role in quality upgrading. Sectoral producers' associations are best suited to identify sector-specific quality problems, to facilitate the spread of skills and technologies among producers, and to share quality-related market information.

LDCs are advised to establish national and sectoral institutions for the testing, inspection and certification of product quality. Furthermore, they should take public action to raise the awareness and sensitivity of producers to the crucial importance of meeting international product standards, and enable producers to comply with these standards. Compliance with such standards is not only a necessary condition for LDC-based companies to successfully compete in global markets, it is also a prerequisite for attracting additional FDI by companies that are willing to source locally available raw materials or intermediate goods.

Frequent challenges in this context include the establishment of an internationally accredited certifying body, and the dissemination of comprehensive information about technical, packaging and labelling standards in foreign markets. It is also important to strengthen the level of awareness and knowledge of management systems and their certification among potential exporters in LDCs (DTIS Ethiopia).

### **3.3. Trade facilitation and customs reform**

#### ***(a) The contribution of trade facilitation to structural transformation***

Firms in LDCs tend to face much higher costs for engaging in exports and require more time to reach destination markets than their competitors in other developing countries. They are also hampered on the import side when the delivery of foreign inputs involves high domestic transaction costs and is unreliable and excessively time-consuming. Such disadvantages are partly due to the geographical location of many LDCs, and partly also due to the unnecessarily cumbersome documentation requirements and other shortcomings in customs procedures, trade logistics and transport services.

The operational constraints resulting from convoluted trade and transit procedures, delayed cargo discharge and costly temporary storage tend to discourage domestic firms from engaging in activities that are either directed at export, and/or have a large import content. As SMEs ship relatively small volumes, which implies high fixed costs for the movement of goods, they suffer disproportionately from these kinds of barriers to trade (UNCTAD 2016a: ch.5; DTIS Ethiopia; DTIS Mozambique).

Successful participation in international trade, especially in GVCs, depends not only on production costs, but also on reliability and speed. The efficiency of border management and the quality of transport and logistics services, and trade facilitation, can contribute considerably to strengthening the international competitiveness of LDC firms (LDCR 2016: ch.5). One aspect of trade facilitation is the accelerated reform of customs and transit procedures (DTIS Mozambique). Another is improved trade logistics, transport infrastructure, and cargo transport services (DTIS Ethiopia).

Apart from facilitating the participation of SMEs from LDCs in international trade, trade facilitation also has repercussions on the functioning of the developmental state. It helps to increase and enhance revenue collection and reduces the operational costs of customs administration and border agencies. It can also serve as a means to combat illicit financial flows based on trade mis-invoicing, which can have a serious impact on domestic resource mobilization (UNCTAD 2016b: 12; UNECA 2014).

### ***(b) A framework for trade facilitation reforms***

Since various ministries oversee different relevant aspects of trade facilitation, there is a need for a lead agency that establishes agreed priorities and steers the implementation of reforms (DTIS Ethiopia; DTIS Niger). Equally important are consultation and coordination among the different stakeholders in government, public administration and private business (DTIS Niger). This may take place in a National Trade Facilitation Committee, as mandated in the Trade Facilitation Agreement (TFA) of the WTO. Such a committee should oversee needs assessments and discuss the details of the design and implementation of reforms (DTIS Mozambique; DTIS Niger).

Since trade is, by definition, an international activity, trade facilitation can only be achieved in international cooperation among governments and border agencies. LDCs that are members of the WTO must undertake trade facilitation in the framework of the TFA, and others should be inspired by the provisions of that agreement. But LDCs should make use, where necessary, of the Agreement's clauses for special and differential treatment (SDT) for phasing in the required reforms (LDCR 2016: ch.3; all DTIS).

In many LDCs, trade facilitation efforts are strongly influenced by the need to cope with the country's characteristic as a landlocked or transit country. Therefore, there a strong

component of bilateral and regional cooperation and harmonization in trade facilitation (DTIS Niger; DTIS Senegal). LDCs can advance trade facilitation through the alignment of national reforms with neighbouring countries or regional programmes, such as in the Common Market for Eastern and Southern Africa (COMESA).

Trade facilitation in such frameworks has several advantages, such as:

- Mutual recognition among neighbouring countries of rules and standards reduces the need for border controls and is highly recommended for functioning customs transit systems (DTIS Niger; DTIS Ethiopia). This is of growing importance since with the intensification of trade flows, several landlocked countries have become transit countries;
- Creation of bilateral or regional information points and joint border posts (see below) helps to avoid duplication and reduces the costs and time of business operations; and
- Bilateral or regional implementation of certain measures that involve significant fixed costs, such as single electronic windows (see below) or testing procedures could be more efficient than parallel national actions (DTIS Ethiopia).

### *(c) Areas of trade facilitation reform*

#### **(i) Legal reform and simplification**

Some trade facilitation measures initially require an adaptation of national legislation and regulations to international norms and standards (DTIS Mozambique). But often it is not the lack or inadequacy of rules that complicate trade transactions. Rather, it is the insufficient or fragmented implementation of the existing rules that most complicates trade facilitation (DTIS Niger).

An obvious consideration from the point of view of reducing trade transaction costs at the operational level is to review customs fees and charges. To the extent that lower trade costs stimulate an expansion of trade and help to raise output growth, an initial loss of public revenue from lower administrative fees is likely to be more than compensated by higher public revenue in the future (DTIS Mozambique). In most countries, there is considerable scope to cut administrative costs, enhance transparency, and reduce clearance time by simplifying the customs and transport documentation necessary for import and export transactions, and by introducing one-stop border posts (EDAR 2009: ch.4; DTIS Ethiopia; DTIS Gambia; DTIS Mali).

#### **(ii) Digitalization and automation**

The efficiency of customs management can be strongly increased through computerization. It would be useful to advance the digitalization of documents and the

automation of customs, transport and transit management systems in the framework of a multi-year information technology (IT) strategy (DTIS Niger). This would also allow considerable improvements to be made in the collection and exchange of customs related data. Yet, the effective use of digital systems presupposes a more robust and stable supply of electricity. Furthermore, the harmonization of systems among neighbouring countries is essential to support the automation of customs management (DTIS Djibouti; DTIS Ethiopia; DTIS Mali) (← ch.III.A).

A further step towards more efficient customs procedures is their centralization in a single electronic window (SEW). This helps to improve the collection of duties and taxes, enhance cargo security, facilitate risk assessment, and reduce clearance time (all DTIS). Joint border posts with neighbouring countries are a further step in trade facilitation.

Obviously, computerization and the automation of customs management requires investment in hardware and software. In addition, better equipment is also often required for cargo examination (DTIS Mozambique). Equally important, however, is the accompanying training of customs officials in the use of such equipment (all DTIS). Additional training for senior customs managers should also help raise awareness of best practices and reduce corruption (DTIS Mozambique). For such training, LDCs should make use of international support for capacity building for trade facilitation reforms, as provided for in the TFA (DTIS Mozambique).

### **(iii) Authorized Economic Operators**

Introducing or expanding Authorized Economic Operator (AEO) schemes, possibly in cooperation with neighbouring transit countries, would reduce the administrative burden on customs authorities, and at the same time make an important contribution to increasing the efficiency of firms that are involved in international trade with a relatively high dependence on imported inputs. Such schemes give special status to trusted firms, which must provide certain guarantees, authorizing the release of imported inputs to be separated from customs clearance (DTIS Mozambique; DTIS Ethiopia).

### **(iv) Transport and transit facilities**

It is often not customs duties, but rather high transport and logistics costs, weak cross-border infrastructure, incoherent regulations and inefficient customs procedures that hamper intraregional trade and the extension of regional value chains in LDCs (EDAR 2013: ch.4).

The transaction costs of external trade can also be markedly reduced by improvements in transport systems, including upgrading the quality and security of long-distance roads, and building or upgrading railway connections between industrial agglomerations and

ports (DTIS Ethiopia; DTIS Gambia). Moreover, with the help of regulation, incentives and disincentives, governments should encourage road transport operators to invest in better quality and sufficiently large vehicles to avoid counterproductive overloading (DTIS Ethiopia; DTIS Gambia). Strengthening competition in the transport sector can also reduce transport costs considerably, as witnessed by the experience of several African countries (EDAR 2009: ch.5; DTIS Ethiopia).

Infrastructure improvements are necessary to enable the use of the multimodal transport system, which can significantly accelerate both import and export transactions. It saves administrative costs and reduces transport risks, because it requires less documentation, allows door-to-door transport without the need for transshipment, requires less documentation and facilitates transit. Governments can support the use of the multimodal transport system by creating the necessary transport and storage facilities — or support the provision of such facilities by private entities — and reform the relevant administrative and customs regulations (DTIS Ethiopia; DTIS Mali). Such measures would provide benefits for both importing and exporting countries, and both landlocked and transit countries (DTIS Mozambique).

For producers in landlocked countries, trade transactions involve greater uncertainties and risks of supply interruptions. Therefore, producers in these countries are obliged to hold large stocks of inputs, which increases the cost of production and reduces competitiveness. In this regard, simplified customs procedures and well-functioning trade corridors from/to sea ports in neighbouring coastal countries are of vital strategic importance for producers in landlocked countries. Efficiency in the management of cargo movements along these corridors is a key determinant of the costs involved in export and import activities (EDAR 2009: ch.4; DTIS Ethiopia). In addition, electronic cargo tracking is a tool for reducing the risk of contraband and deviated cargo. Furthermore, it lowers the need for convoys along transit corridors. Transit procedures can be rendered more efficient when they are brought within the scope of SEW systems (DTIS Ethiopia; DTIS Gambia).

For transit economies there is a potential to benefit from explicitly integrating transit trade into their development strategy. Then, transit corridors can generate income directly while serving national traffic. As an element of industrial policy, they can also provide opportunities for the insertion of domestic firms in regional manufacturing activities (DTIS Mozambique).

## B. Seeking regional and South-South cooperation

### 1. Rationale for integrating bilateral, regional and South-South cooperation into LDC development strategies

Export opportunities for LDCs do not lie only in the global market and in the more advanced countries. They also exist in neighbouring and other developing countries. In many cases these opportunities are likely to be easier to grasp, especially for smaller and domestically-owned firms in LDCs. This is an important reason for governments to engage in regional cooperation. Regional integration among developing countries also widens the scope of private sector activities and their diversification in terms of investment, production and factor mobility. It can also prepare the ground for LDCs to integrate into the wider global economy (EDAR 2009: ch.1). Another reason why LDC governments should seek bilateral or regional cooperation with neighbouring countries is the possibility to enlarge their policy space and pursue a strategy of developmental regionalism (LDCR 2011: ch.3).

Developmental regionalism aims at accelerating internal economic development and integration among the countries participating in regional cooperation agreements, while at the same time pursuing integration into the world economy as a regional trading bloc (LDCR 2011: ch.3; EDAR 2009: ch.1). In the holistic vision of developmental regionalism, LDCs will benefit most from bilateral and regional policy cooperation when they engage not only in trade liberalization, but link trade policy with pro-active investment, technology, finance and employment policies. It implies that governments in neighbouring developing countries coordinate their national policies around common development goals, leverage the potential for joint policy action, and invest in regional public goods (LDCR 2013: ch.5).<sup>37</sup> Another reason for LDCs governments to engage in active regional cooperation with neighbouring countries is the possibility of enlarging their policy space, through developmental regionalism, to strengthen their voice and representation in international forums (LDCR 2011: ch. 3 and ch.4).

In addition to stepping up cooperation efforts with neighbouring countries, LDC governments may also actively seek closer cooperation with developing countries in other geographical regions, including countries at similar stages of development. This offers opportunities for policy learning and identifying promising new policy instruments and institutions to develop productive capacities. Policy learning can be institutionalized through the regular organization of seminars and round tables, the sponsoring of internships and visits of LDC officials in key development planning institutions and ministries, and the facilitation of academic exchange on development policies and

strategies between research institutions and universities in LDCs and partners in other developing countries (LDCR 2011: ch.3).

## **2. Harnessing regional dynamics for structural transformation: Developmental regionalism**

In most cases, regional cooperation mainly aims at expanding intraregional trade in goods and services through the conclusion and implementation of preferential trade agreements and the facilitation of customs procedures. In most LDCs, cooperation in these areas certainly merits further strengthening and could also be extended trade in agricultural goods (DTIS Niger). Improved access to the markets of neighbouring countries can be an important complement to industrial and enterprise policies during the early stages of structural transformation. Given the pace of population and income growth in developing countries, demand for basic manufactures tends to rise faster there than in developed countries. In addition, quality demands and standardization requirements tend to be less stringent, consumer preferences more similar to those in the domestic market, and transport costs lower than in global trade.

Moreover, the orientation of development strategies to regional markets enlarges the economic space within which learning and upgrading can take place. Developing value chains across borders and among neighbouring countries widens the possibilities for firms to reap the benefits of greater specialization and scale. This regional market orientation creates opportunities for a greater number of SMEs to expand and upgrading their capabilities into higher value and more diversified industrial and service activities (EDAR 2013: ch.4). Integration with regional neighbours also involves greater competition and may also facilitate entry into GVCs, especially for countries that are landlocked and have limited resources and domestic markets (Huria and Brenton 2015; DTIS Ethiopia).

However, the relatively low degree of effective regional integration achieved in sub-Saharan Africa despite numerous regional trade agreements suggests that it is essential for LDCs to engage in bilateral and regional policy cooperation that goes far beyond trade liberalization. This may include more ambitious forms of intervention in areas such as industrial, enterprise, energy and infrastructure policy (EDAR 2009: ch.5). For regional cooperation within Africa, the New Partnership for Africa's Development (NEPAD), launched in 2001, provides a framework for such extended regional cooperation, which identifies possible economic clusters in different regions as well as strategic activities that can support these clusters with specific milestones and outputs.

### 3. Proactive regional cooperation

#### 3.1 Regional cooperation centred on infrastructure and institutional development

In LDCs, regional value chains and cross-border linkages among firms are unlikely to emerge without proactive policy measures. The provision of public goods at the regional level, and appropriate administrative and physical infrastructure offers major opportunities for the achievement of economies of scale (EDAR 2013: ch.4). Coordinated or common planning and, where applicable, financing can be conducive to greater efficiency of major infrastructure projects.

Efficient cross-border road and railway connections are indispensable for an expansion of regional trade and economic integration. Necessary improvements in transport and logistics infrastructure are closely connected with measures for trade facilitation, such as the simplification of administrative procedures combined with some basic investment in trade facilitation technologies, including measures to increase transparency in border procedures (← ch.VI.A.3).<sup>38</sup> Moreover, harmonizing national regulations with those in neighbouring countries would help to increase competition in the transport sector and reduce transport costs. Therefore, LDCs should seek to provide an appropriate and transparent regulatory environment for trade in transport services by pursuing domestic reforms and entering into binding commitments with partner countries to harmonize regulation and remove policies that stifle competition or create inefficiencies in the provision of transport services (DTIS Mozambique). This is of particular importance for landlocked and transit LDCs, where the greater efficiency of transit corridors generates savings in trade costs, and may also stimulate the emergence of regional linkages in manufacturing activities (DTIS Mozambique).

In some cases, depending on geographical and geological circumstances, bilateral or regional cooperation may also extend to the bilateral or regional planning and financing of projects in energy, water, and telecommunications infrastructure. Large projects in these areas often exceed the financing capacity of a single LDC, but may become viable when their cost and financing is shared among several beneficiary countries (EDAR 2009: ch.2).<sup>39</sup>

Common planning, financing and use of infrastructure investment in the energy sector would facilitate the regional integration of LDC energy markets, thereby allowing for the more intensive exploitation of lower-cost energy sources and increasing the scope for diversification, both geographically and across energy sources. Taking into consideration differences in countries' natural endowments, importing electricity from neighbouring countries through regional power pools may be preferable for some LDCs, whereas

others may use their potential to develop electricity export capacities (LDCR 2017: ch.6; DTIS Ethiopia).

It is also important to note that common physical infrastructure requires bilateral or regional cooperation at the planning and construction stages, as well as appropriate institutions and financing arrangement for their maintenance.

### **3.2 Regional orientation of industrial and enterprise policies**

Regional industrial and enterprise policies can support structural transformation by harmonizing and coordinating the industrial and sectoral strategies of countries participating in the regional associations (EDAR 2011: ch.4). Such cooperation requires the identification of mutual interests in building productive capacities and advancing structural transformation. For this purpose, information networks should be established to provide accurate and up-to-date information on each country's policy priorities for structural transformation. These networks could also be used to share information on national laws and regulations, investment opportunities, technological and market potential, the availability of inputs and, possibly, policy experiences. The development of industrial associations at the regional level can play an important role in creating cross-border sectoral supply chains and knowledge linkages.

Public policies can also support the conclusion of industrial collaboration agreements and licensing agreements. These policies can also foster cooperation in engineering and technical services and research and innovation programmes (EDAR 2009: ch.4). Governments should consider supporting the creation of technology-sharing consortia at the bilateral, regional or wider South-South cooperation level among countries at similar stages of technological development (LDCR 2010: ch.4). Participation in technology-sharing consortia is more efficient than the generation and use of proprietary knowledge and technology at the firm level and in each country individually. In such a consortium each firm benefits from the combined innovation activities of the entire consortium. Joint adaptive research and the exchange of technology (rather than through pure licensing), would provide firms in the consortia with a degree of protection against free-riding, and could nurture and facilitate the greater use of new technological knowledge by enterprises in LDCs. Policy support for participation in such consortia may take the form of financial support for participating domestically-owned firms and a degree of protection against the risk and uncertainty associated with the financing of any innovation activity. Financial support should be directly linked to collaborative research and development (R&D). This research should primarily focus on the adaptation of foreign technologies to local conditions, and be conducted at a higher level than could normally be achieved in the context of an individual LDC (LDCR 2010: ch.4).

Regional cooperation can also be beneficial for agricultural upgrading, both by increasing yields towards regional best-practice levels, and by strengthening agricultural R&D, as exemplified by the International Rice Research Institute in South East Asia (LDCR 2014: ch.6). In relation to upgrading and diversification of agriculture, governments may consider measures such as joint adaptive research with neighbouring countries, regional storage facilities, and regionally-coordinated investment programmes (EDAR 2009: ch.3).

While government engagement in regional cooperation can prepare the ground for effective regional integration, the latter only becomes effective through increased cross-border linkages in productive and commercial activities at the firm level. Dialogue between governments and private sector associations in the design and implementation of regional cooperation projects remains essential. Moreover, private sector initiatives for cross-border technical and financial cooperation, including corporate integration through mergers, should be facilitated and actively supported by LDC governments as part of their policies for industrialization and agricultural upgrading.

## C. Harnessing diasporas for building productive capacities and poverty reduction

### 1. Migrant remittances

#### 1.1 The rationale for policies to enhance the development impact of migrant remittances

Migrant remittances to LDCs have grown considerably in recent decades and can be expected to do so in the future. In 2016, international migrant remittances to developing countries are estimated to have reached \$432 billion (compared to an estimated total of \$143 billion in official development assistance (ODA) (United Nations 2017a). Remittances are a relatively stable source of foreign currency inflows and in some countries, they exceed merchandise export earnings.

Remittances sent by migrants to their home countries play an important role in alleviating poverty in individual families and communities, where they are mainly used for current consumption. They also can contribute to building productive capacities, when they are used for small productivity-enhancing investments, healthcare and education-related expenses, or the financing of investment (LDCR 2012: ch.5).

From a macroeconomic perspective, the importance of remittances lies in their contribution to the financing of imports or external debt service, and their potential to improve the recipient country's creditworthiness. However, poorer migrants and their

families are often obliged to rely on informal channels for the transfer of remittances. Therefore, in most LDCs, a significant portion of remittance flows often by-pass the formal financial sector, thus reducing their macroeconomic benefit.

The challenge for LDC governments aiming at enhancing the developmental role of remittances is to increase the use of formal transfer channels, the overall amount of remittance inflows, and the share of remittances that are made available for financing investment in productive capacities. The latter must target remittances from migrants' current income, as well as diaspora savings held abroad, so that these resources can be harnessed as financial assets in their countries of origin (UNCTAD 2009: ch.V).

## **1.2 Encouraging the use of formal channels for remittance flows at lower costs**

In many LDCs, formal transmission channels can be made more attractive by regulatory reforms that allow and encourage a greater number of domestic financial institutions to participate in remittance transfers. These include savings and loan cooperatives, credit unions and post offices. Their participation in remittance services can have several positive effects (LDCR 2012: ch.5; EDAR 2016: ch.4). First, greater competition among regulated financial institutions in the provision of remittance services tends to reduce their cost for end users, thus encouraging additional remittance flows. Second, it can facilitate remittance flows to poorer recipients and remote rural areas. Third, receivers of remittances could also obtain easier access to other financial services. Fourth, the intermediation of remittances through the formal banking system can be facilitated. Finally, transfers through formal financial channels are officially recorded, therefore the impact of these transfers on the recipient country's balance of payments and external creditworthiness can be strengthened. Furthermore, the use of formal remittance transfer services can facilitate the prevention of fraud and money laundering (UNCTAD 2009: ch.V).

Competition could also be intensified by allowing public financial institutions to provide remittance services and compete, or cooperate, with private sector providers. Public remittance service providers could offer remittance-related services at a lower cost, especially if they are affiliated with existing institutions like a development bank or the central bank, and use post offices instead of opening up their own branches (LDCR 2012: ch.5)

Another set of possible measures to reduce remittance transfer costs relates to the use of new technologies for financial transfers. Internet- and mobile-telephony-based methods of transmitting funds have created opportunities for branchless banking and improved rural access to financial services (EDAR 2016: ch.4). Yet, such methods also pose new challenges for regulation, banking supervision and consumer protection (LDCR 2012: ch.5).

The facilitation of remittances is an issue that concerns both sending and receiving countries. In addition to reforming the institutional framework for remittances at home, LDCs should seek bilateral agreements and aim to harmonize regulation, especially with countries from where remittances originate (LDCR 2012: ch.5) (→ ch.VII.C).

### 1.3 Mobilizing diaspora savings

The creation of special financial instruments for members of the diaspora could be helpful to attract remittances that are not meant for current consumption. These could also facilitate transfers, which refer to the shift of existing financial assets owned by diaspora members back to their countries of origin (LDCR 2012: ch.5). Adjusting banking regulation to create opportunities for migrants to keep a bank account in foreign currency in their home countries, without prohibitive charges and with possible exemptions from wealth and income taxes, could be helpful in this regard. For the individual holders of such accounts, this would provide protection against the risk of currency devaluation. For the economy as a whole, it would provide relatively stable access to foreign currency through domestic banking and financial intermediation (EDAR 2016: ch.4). Another possibility for making more remittances available to finance productive capacities is the creation of education and housing accounts for migrants and their families in countries of origin, which could have a higher rate of return on deposits than ordinary savings accounts.

The government can also leverage remittances and diaspora savings for development finance more directly. This could be achieved through the issuance of government bonds, which are tailored to nationals living abroad (UNCTAD 2009: ch.V; LDCR 2012: ch.5). It has been estimated that such diaspora bonds could mobilize about one tenth of annual diaspora savings — over \$50 billion — to finance development projects (World Bank 2015). Several countries have been successful in issuing these types of bonds, which have sparked the interest of diaspora members to support economic development in their home countries.<sup>40</sup> This way, governments that otherwise have no, or only very costly access to international financial markets, may borrow in foreign currency, including at a lower cost. These bonds can provide a higher return to members of the diaspora than traditional international savings accounts abroad, where most diaspora savings are typically held (LDCR 2012: ch.5; EDAR 2016: ch.4). To reach a sufficient number of migrants and keep the cost of issuing such bonds low, it may be useful for LDCs to explore the possibility of collectively issuing diaspora bonds, which can be supported by regional development banks of a group of countries (LDCR 2012: ch.5).

As remittance flows have proven to be relatively stable over time, they can also serve as future-flow receivables for the securitization of long-term syndicated loans, or to a

lesser extent, government bonds.<sup>41</sup> Such securitization tends to lower interest rates and extend debt maturity, and may improve access to long-term development finance (LDCR 2012: ch.5; EDAR 2016: ch.4).

These policies to harness diaspora savings for investment must be part of prudential and carefully designed regulatory regimes, which should be adapted to a country's degree of financial development (LDCR 2012: ch.5). Moreover, remittances and diaspora bonds create significant foreign currency inflows that must be taken into consideration in macroeconomic management, especially in the management of the exchange rate (EDAR 2016: ch.4; Ratha 2013).

## 2. Attracting diaspora knowledge and entrepreneurship

The potential for FDI by firms owned by LDC citizens living abroad, though likely to be limited in scale, may have strong development benefits. This type of investment strategy could combine the advantages of domestic investment and FDI (LDCR 2012: ch.5; LDCR 2014: ch.6). LDCs may also draw on the potential of diasporas as a source of managerial, technical and market know-how for their home countries. Migrant entrepreneurs from LDCs can be instrumental in developing productive capacities, building knowledge-based economic activities, and supporting the development of light industries by using their international contacts or the innovation capabilities they have acquired abroad.

Evidence from a number of countries suggests that diaspora knowledge networks (DKNs) can play a critical role in strengthening the domestic knowledge base (LDCR 2012: ch.5). DKNs consist of groups of highly-skilled expatriate professionals who are interested in helping to advance structural transformation in their countries of origin. As knowledge is neither costless nor easily transferrable, proactive policies are required for this mechanism to work. In this regard, LDCs should learn from economies that have benefited most from DKNs, such as Bangladesh, China, India, Republic of Korea, Taiwan Province of China, Turkey and Vietnam (LDCR 2012: ch.5). In any case, when designing policies to harness diaspora knowledge and entrepreneurship for the transfer of knowledge, it is useful to consult with diaspora associations to take into account the willingness of emigrants to engage, and understand their professional priorities and desired forms of participation.

## D. Taking the lead in aid management

Achieving the SDGs in LDCs hinges upon substantial increases of foreign aid, and the improved effectiveness of existing and potential inflows (→ ch.VII). The effectiveness of aid depends, inter alia, on how well it is aligned with the domestic development strategies. In this regard, enabling the coherent and coordinated exercise of policy options presented in this Compendium is essential. LDC governments and institutions should seek to take the lead in aid management policies at the country level, as pioneered, for example, by Mozambique, Rwanda, Uganda and the United Republic of Tanzania.

This is necessary to ensure country ownership of externally supported programmes and projects, and it can also help to increase government's assertiveness in expressing their preferences vis-à-vis development partners. Furthermore, it can support the greater harmonization of assistance strategies among donors, increase the predictability of aid, with donors making multi-year aid commitments, and increase mutual accountability. The introduction of jointly agreed monitoring indicators at the country level in relation to donor practices seems to be a powerful way to reduce transaction costs, and promote alignment and harmonization. Adequate aid management policies at the country level, through an institution specifically dedicated to this task, can help to build trust and develop more balanced development partnerships (LDCR 2008: ch.3; LDCR 2009 ch.1).

## Externally-oriented policies to achieve the SDGs

### PRINCIPLES

- Integrate sectoral and trade policies
- Strive to preserve and make the most of developmental policy space
- Avoid entering into excessive wage and tax competition for FDI
- Seek gradual and strategic integration into the global economy
- Strengthen regional cooperation and integration



## E. Summary of externally-oriented policy options

Policies in support of trade integration		
Intermediate objective	Policy measure	Relevant SDG/ target
To strengthen the contribution of trade policy to structural transformation and achieving the SDGs	<ul style="list-style-type: none"> <li>Ensure the coherence of all trade policy measures with industrial and sectoral policies, possibly through a National Trade Council that oversees the design and implementation of a medium-term trade strategy, based on consultations with stakeholders in government, public administration and the private sector</li> </ul>	1.1 8.1/8.2/ 8.3/8.5 9.2 17.11
To manage international trade integration in a manner that is consistent with a country's stage of development and progress over time	<ul style="list-style-type: none"> <li>Strive to preserve development policy autonomy for trade management and the use of fiscal and regulatory instruments to protect and support nascent domestic industries</li> <li>Seek to obtain extended preferential access to major, fast-growing developing country markets</li> <li>Use the trade policy space available, including all the flexibilities for LDCs under multilateral trading rules, to the largest possible extent to pro-actively promote exports, e.g. through WTO-compatible export subsidies for infant industries or the subsidization of trade finance</li> </ul>	8.1/8.3/ 8.5/8.6 9.2/9.3 17.11/ 17.14/ 17.15
To protect the competitiveness of domestic firms in tradeables sectors, ensure the productive use of scarce foreign currency, and prevent the build-up of counterproductive trade deficits	<ul style="list-style-type: none"> <li>Avoid currency overvaluation and instability by discouraging imports of luxury goods by imposing high customs duties or specific excise taxes on such items</li> </ul>	8.1/8.3 17.11/ 17.13/ 17.14
To support domestic firms, especially SMEs in their effort to increase their exports	<ul style="list-style-type: none"> <li>Create or strengthen national or sectoral export promotion agencies, operating in close cooperation with private sectoral associations at home and partners abroad</li> <li>Enable public institutions and support private sectoral associations to strengthen their concerted efforts to enhance knowledge among producers of market access conditions and trends in relevant international markets</li> </ul>	8.3 9.2/9.3
To enhance the competitiveness of domestic firms and support the take-off of new firms and activities in strategic sectors	<ul style="list-style-type: none"> <li>Exempt imports of machinery and equipment and inputs for current production in targeted sectors from customs duties</li> <li>Use publicly-sponsored intermediate input supply enterprises to facilitate the access of farms and SMEs to imported inputs and to lower the cost of such inputs</li> </ul>	8.1/8.2/ 8.3 17.11
To shield new or infant industries for a reasonable period of time against overwhelming competition from internationally well-established foreign firms	<ul style="list-style-type: none"> <li>Use the existing scope for applying import duties on goods for which productive capacities exist, or are being created, in sectors that are considered to be strategic for structural transformation, and have a reasonable chance to become internationally competitive</li> </ul>	8.3 10.2/ 10.4 17.15
To support the gradual substitution of imported inputs by domestic production		
To protect domestic agriculture and increase food security	<ul style="list-style-type: none"> <li>Use tariff and non-tariff protection against competition from heavily subsidized imports from developed countries</li> </ul>	1 2

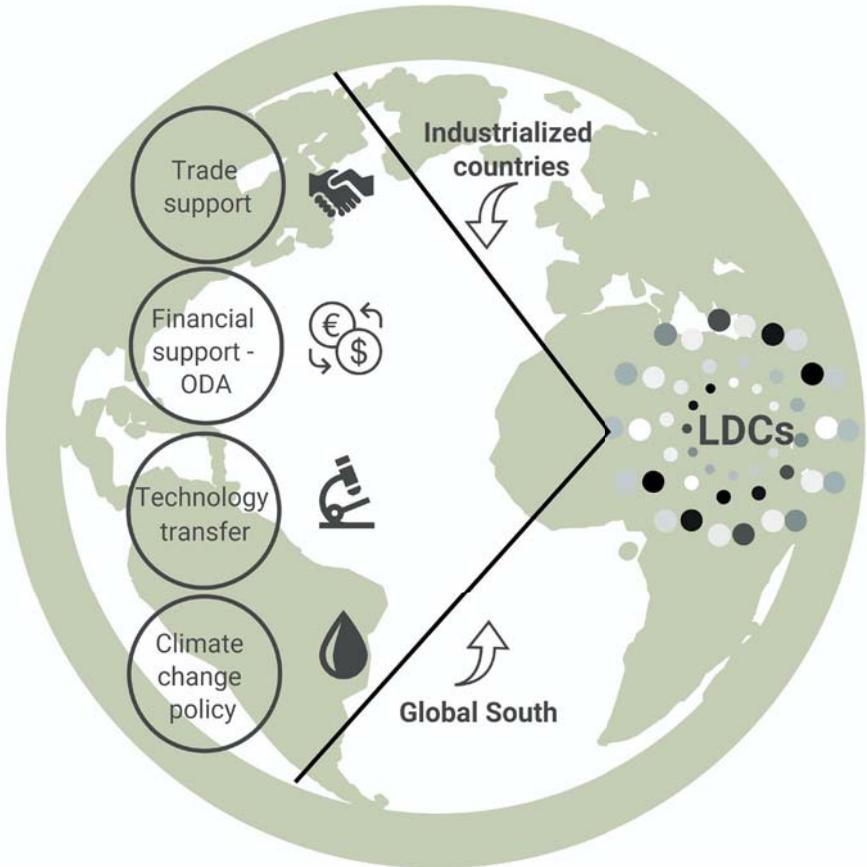
<b>Policies towards FDI and GVCs</b>		
<b>Intermediate objective</b>	<b>Policy measure</b>	<b>Relevant SDG/ target</b>
To strategically attract additional FDI <sup>1</sup>	<ul style="list-style-type: none"> <li>• Strengthen the technical and financial capacities of national investment commissions for:                             <ul style="list-style-type: none"> <li>– The dissemination of well-targeted information on investment opportunities; and</li> <li>– The provision of one-stop-services for potential foreign investors</li> </ul> </li> <li>• Avoid entering into excessive wage and tax competition with other countries that compete for FDI</li> </ul>	2.a 8.2/8.3/ 8.5/8.8 9.2 10.1/10.4 17.5/ 17.15
To optimize the effectiveness of FDI promotion policies	<ul style="list-style-type: none"> <li>• Ensure that policies are compatible with the promotion of domestic entrepreneurship</li> <li>• Weigh the benefits of attracting FDI against fiscal costs of FDI promotion and possible risks in terms of reducing domestic investment</li> <li>• Provide incentives only for new investments in activities where investment would not be forthcoming without such incentives</li> <li>• Keep fiscal incentives for FDI under review and adapt them considering the evolving needs and circumstances of the national economy</li> <li>• Focus FDI promotion policies on investment in subsectors with the greatest potential for linkages with domestic firms</li> </ul>	8.2/8.3 8.5 9.2 10.4 17.5/ 17.14/ 17.15
To optimize the impact of FDI on the building of productive capacities and the achievement of the SDGs	<ul style="list-style-type: none"> <li>• Use all available policy space to gear FDI to the creation of production, knowledge and technology linkages between foreign investors and domestic firms that have the potential to cooperate with the quality and reliability required</li> <li>• Monitor and evaluate the effectiveness of FDI policy instruments and the performance of individual FDI projects in terms of their linkages with the local economy, and adjust instruments accordingly</li> </ul>	8.1/8.3/ 8.5/8.6/ 8.8 9.2 9.b
To strengthen backward and forward linkages between FDI and the local economy	<ul style="list-style-type: none"> <li>• Encourage foreign companies to draw on locally available raw materials and intermediate goods</li> <li>• Make the provision of fiscal privileges to foreign companies conditional on fulfilling reasonable local content and technology requirements</li> <li>• Promote joint ventures between foreign investors and local firms that are well integrated into domestic supply chains</li> </ul>	9 10.4
To prevent domestic firms participating in GVCs from getting locked into low-skill, labour-intensive activities and allow them to upgrade to higher-value-added segments	<ul style="list-style-type: none"> <li>• Provide targeted support to firms that are participating in GVCs for value-chain upgrading</li> </ul>	8.2/8.3 9.3/9.5 9.b 17.14
To ensure that local firms and their workers obtain a fair share of the gains from participation in GVCs	<ul style="list-style-type: none"> <li>• Support domestic firms participating in GVCs in negotiations with international lead firms</li> <li>• Ensure that foreign firms and domestic partners in GVCs offer decent working conditions and observe international labour and environmental standards</li> </ul>	4.4 8.3/8.5/ 8.8 9.2/9.3/
To use licensing to foreign companies in the extraction and export of non-renewable natural resources as a basis for structural transformation	<ul style="list-style-type: none"> <li>• Ensure that the state appropriates a fair share of rents from the extraction of those resources</li> <li>• Determine royalties or taxes on extractive industries as a proportion of sales value, rather than profits</li> <li>• Where indicated, renegotiate drilling and mining licences, drawing on the experience of other countries and technical assistance from independent experts</li> </ul>	8.3 10.4 17.14/ 17.15

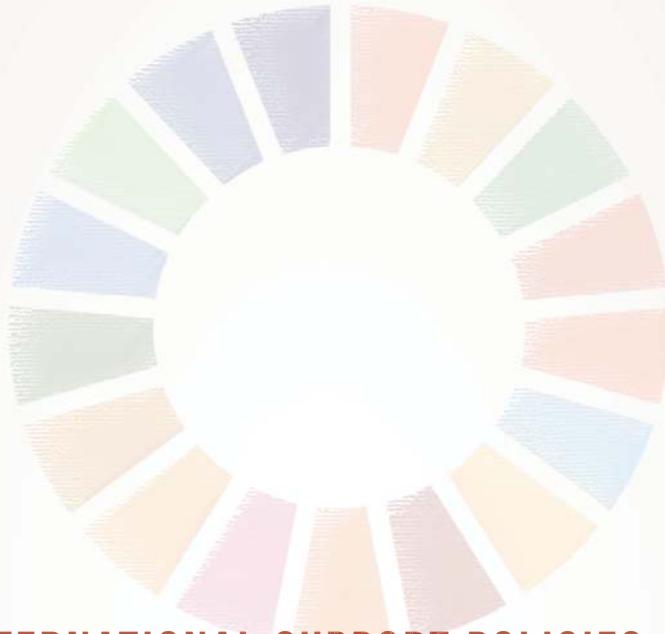
**Policies to overcome practical challenges in international economic relations**

Intermediate objective	Policy measure	Relevant SDG/ target
To augment the impact of preferential market access on structural transformation	<ul style="list-style-type: none"> <li>• Systematically build awareness among SMEs of opportunities and disseminate information on possible export markets</li> </ul>	8.1/8.2/ 8.3
	<ul style="list-style-type: none"> <li>• Provide financial support and strategic guidance to SMEs and sectoral associations to improve their international visibility</li> </ul>	17.11/ 17.12
To enhance the international competitiveness of domestic producers	<ul style="list-style-type: none"> <li>• Raise awareness, through the relevant public and private entities, of the importance of product quality, compliance with international product standards and conformity assessment through outreach and extension work in industry and agriculture</li> </ul>	4.3/4.5 4.b 8.1/8.2/ 8.3
	<ul style="list-style-type: none"> <li>• Support the provision of systematic technical and managerial training at all levels of the domestic supply chain to improve product quality, factory layout and product and process development in line with international standards</li> </ul>	9.2 17.11
	<ul style="list-style-type: none"> <li>• Improve national quality infrastructure through investments in facilities, equipment and competencies for product testing, certification and inspection, with priority given to setting up or strengthening SPS and TBT enquiry points</li> </ul>	
	<ul style="list-style-type: none"> <li>• Take a systematic approach to branding, geographical indications and other types of product labelling</li> </ul>	
To support compliance with international environmental standards	<ul style="list-style-type: none"> <li>• Provide business advisory centres, and seek assistance for such services from international specialized agencies, and United Nations agencies such as UNEP, UNIDO National Cleaner and Production Centres, and UNCTAD Empretec Centres</li> </ul>	4.3/4.5 8.2/8.3 9.2 17.11
To undertake trade facilitation reforms in a way that is supportive of structural transformation and coherent across ministerial responsibilities	<ul style="list-style-type: none"> <li>• Create a lead agency, such a National Trade Facilitation Committee, to steer reforms in consultation with, and through coordination among, different stakeholders in the government, public administration and private sector</li> </ul>	8.3 8.a 17.11
	<ul style="list-style-type: none"> <li>• Relate reforms to the WTO-TFA and make use of its clauses for SDT</li> </ul>	
	<ul style="list-style-type: none"> <li>• Seek harmonization of customs, transport and transit procedures with neighbouring countries</li> </ul>	
To reduce transaction costs and the time needed for importing and exporting, and to raise the efficiency of customs administration	<ul style="list-style-type: none"> <li>• Review customs fees and charges</li> </ul>	8.3
	<ul style="list-style-type: none"> <li>• Simplify customs and transport documentation for import and export transactions</li> </ul>	17.11
	<ul style="list-style-type: none"> <li>• Introduce one-stop border posts and joint border posts with neighbouring countries</li> </ul>	
To increase and enhance customs-related revenue collection, reduce the costs of customs administration and combat trade misinvoicing	<ul style="list-style-type: none"> <li>• Facilitate documentation requirements and raise the efficiency of customs procedures, trade logistics and transport services</li> </ul>	8.3 10.4
To increase the efficiency of customs procedures at the border, reduce the work load of customs administrations, and help raise the productivity of firms engaged in international trade	<ul style="list-style-type: none"> <li>• Invest in modern ICT equipment to operate with digitalized documentation, computerized procedures and automated systems for trade data collection and exchange</li> </ul>	8.3 10.4 17.11
	<ul style="list-style-type: none"> <li>• Support computerization by increasing and stabilizing the provision of electricity</li> </ul>	
	<ul style="list-style-type: none"> <li>• Promote customs automation through the electronic processing of transactions and payments</li> </ul>	
	<ul style="list-style-type: none"> <li>• Centralize customs procedures in a SEW system</li> </ul>	
	<ul style="list-style-type: none"> <li>• Introduce or extend AEO schemes, possibly in cooperation with neighbouring countries</li> </ul>	

Intermediate objective	Policy measure	Relevant SDG/ target
To enable the effective use of enhanced ICT equipment, raise awareness of best practices and prevent corruption	<ul style="list-style-type: none"> <li>• Provide adequate training to customs officers</li> </ul>	4.3/4.7 4.b 8.3 17.14
To accelerate and secure the shipment of imported inputs and domestic production for export	<ul style="list-style-type: none"> <li>• Invest in the extension, upgrading and protection of long-distance transport connections between industrial centres and ports</li> <li>• Encourage the use of the multimodal transport system, by providing the necessary transport and storage infrastructure</li> <li>• Support the provision of such facilities by private entities, and reform relevant administrative and customs regulations as required</li> </ul>	7.b 8.2/8.3 9.1 17.11
To facilitate trade operations of producers in landlocked countries, and enhance the benefits of transit traffic for transit countries	<ul style="list-style-type: none"> <li>• Closely link the improvement of transit trade into countries' overall strategies for structural transformation, and integrate transit traffic and electronic tracking into AEO and SEW systems</li> </ul>	7.b 8.3 9.a
<b>Strengthening regional and South-South cooperation</b>		
To enlarge development policy space and learn from the policy experience of other developing countries	<ul style="list-style-type: none"> <li>• Identify common development goals and possibilities for joint policy action and the provision of public goods at the bilateral or regional level</li> <li>• Institutionalize regular contacts, and the exchange of information and experiences with policy makers, business organizations and academia from neighbouring and other partner countries, including developing countries</li> </ul>	8.1 8.3 17.6
To achieve economies of scale and facilitate the financing of large-scale infrastructure	<ul style="list-style-type: none"> <li>• Identify possibilities for common planning, financing, and the realization, use and maintenance of large infrastructure projects in transport, energy and telecommunications</li> </ul>	2.a 7.b 8.3 9.1
To widen the opportunities for the private sector to expand their activities, diversify and acquire knowledge through international market relations	<ul style="list-style-type: none"> <li>• Pursue further trade agreements that facilitate the emergence of regionally integrated markets, cross-border linkages and regional value chains</li> </ul>	17.6 17.11
To physically and administratively enable regional markets to develop and cross-border linkages to emerge	<ul style="list-style-type: none"> <li>• Create appropriate administrative, institutional and infrastructure conditions, and use existing regional fora and institutions to engage in bilateral and regional policy cooperation in the areas of industrial, enterprise, energy and infrastructure policy</li> <li>• Combine necessary improvements in cross-border transport and logistic systems with measures for trade facilitation, regulatory reforms, and the regional harmonization of regulations to increase competition in the transport sector. This is of particular importance for landlocked and transit LDCs</li> </ul>	9.1 17.6 17.11
To use regional transformation dynamics to support the expansion and diversification of productive capacities	<ul style="list-style-type: none"> <li>• Create regional networks for the flow of information regarding each country's priorities in structural transformation, national laws and regulations, investment opportunities, technological and market potential, and availability of inputs</li> <li>• Support the conclusion of cross-border, industrial cooperation agreements, licensing agreements, cooperation in engineering and technical services, and research and innovation programmes</li> <li>• Encourage the development of industrial associations at the regional level and provide financial support to domestically-owned firms participating in technology-sharing consortia at the bilateral, regional or wider South-South cooperation level</li> <li>• Link the provision of such support to the adaptation of foreign technologies to local conditions for their use in agricultural and new industrial activities</li> </ul>	8.1/8.2/ 8.3 9.1 17.6 17.9

Intermediate objective	Policy measure	Relevant SDG/ target
To facilitate the regional integration of energy markets and the more extensive exploitation of lower-cost and alternative energy sources	<ul style="list-style-type: none"> <li>• Explore and use all possibilities for common planning, financing, use and maintenance of large-scale energy infrastructure</li> </ul>	7
<b style="color: #c00000;">Harnessing diaspora support</b>		
To encourage additional remittance flows	<ul style="list-style-type: none"> <li>• Reduce remittance costs and facilitate remittance flows to rural areas</li> <li>• Adjust banking and telecommunications regulation to enable the use of internet-based transfers</li> </ul>	1 2.3 4 10.c
To reduce transmission costs, and facilitate remittance flows to rural areas	<ul style="list-style-type: none"> <li>• Adjust regulation to increase competition among remittance service providers by encouraging the participation of savings and loans cooperatives, credit unions, public financial institutions and post offices</li> </ul>	8.3/8.10 9.3 10.5 10.c 15.a
To raise the share of remittances available for building productive capacities	<ul style="list-style-type: none"> <li>• Promote financial instruments that are well-suited for members of the diaspora, such as foreign currency accounts in receiving countries and diaspora bonds</li> </ul>	8.1 17.3/17.4
To leverage diaspora capabilities and entrepreneurship for the building of productive capacities	<ul style="list-style-type: none"> <li>• Reach out to diaspora associations and promote the creation of DKNs</li> </ul>	2.3 4.7 17.6/17.16
<b style="color: #c00000;">Aid management</b>		
To raise the effectiveness of foreign aid in the pursuit of the SDGs by ensuring greater country ownership, building of trust and the establishment of more balanced development partnerships	<ul style="list-style-type: none"> <li>• Take the lead in aid management policies at the country level, possibly through an institution specifically dedicated to this task</li> </ul>	8.3 10.4 17.15





## VII. INTERNATIONAL SUPPORT POLICIES

### A. SDG 17: Revitalize the Global Partnership for Development in LDCs

International action in support of development efforts in least developed countries (LDCs) is the very rationale for the existence of the LDC category and a major theme throughout the 2030 Agenda for Sustainable Development. This call to action culminates in Sustainable Development Goal (SDG) 17 to strengthen the means of implementation of the Agenda. Indeed, achieving the SDGs will not be possible without a strong and concerted effort by the international community to provide additional financial and technical support to the LDCs. All the development policy options suggested in the preceding chapters of this Compendium merit support through international assistance. Furthermore, the feasibility of many policy options depends on the level and effectiveness of such support.

Despite relatively fast economic growth during the first decade of the new millennium, and the existence of international trade support measures, LDCs remain highly dependent on external finance in the form of grants and loans to alleviate their balance-of-payments and public budget constraints (*The Least Developed Countries Report* (LDCR) 2014: ch.6). The first aspect of the international financing challenge for LDCs is related to the imperative to increase the level of fixed capital formation for structural transformation (← ch.I.B). The additional foreign currency required for the import of

capital goods that are necessary for investment in productive capacities will exceed the growth of foreign currency earnings that can be reasonably expected from LDC exports. The second financing challenge relates to the necessary increase of public expenditure for infrastructure upgrading and the enhanced provision of public services and fiscal incentives. Given the current, limited capacity of LDC governments' to raise public revenue, this will not be feasible.

Private financial flows, in the form of credit or foreign direct investment (FDI), may help finance these deficits, but the larger part of financing will have to come from official development assistance (ODA). Therefore, increasing aid flows and optimizing the allocation, management and delivery of ODA is essential for LDCs (LDCR 2016: ch.5). Additional efforts by the international community in helping the LDCs to achieve the SDGs are also necessary. These efforts include international trade support measures, the facilitation of technology transfer, and strategies to support climate change adaptation.

## B. Official development assistance

### Main relevant SDG targets:

- 1.a: Ensure significant mobilization of resources from a variety of sources, including through enhanced development cooperation, in order to provide adequate and predictable means ..., in particular LDCs, to implement programmes and policies to end poverty
- 7.b: By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing States and landlocked developing countries, in accordance with their respective programmes of support
- 9.a: Facilitate sustainable and resilient infrastructure development in developing countries through enhanced financial, technological and technical support to African countries, least developed countries, landlocked developing countries and small island developing States
- 10.b: Encourage official development assistance and financial flows, including foreign direct investment, to States where the need is greatest, in particular least developed countries, African countries, small island developing States and landlocked developing countries, in accordance with their national plans and programmes
- 17.2: Developed countries to implement fully their official development assistance commitments, including the commitment by many developed countries to achieve the target of 0.7 per cent of ODA/GNI to developing countries and 0.15 to 0.20 per cent of ODA/GNI to least developed countries; ODA providers are encouraged to consider setting a target to provide at least 0.20 per cent of ODA/GNI to least developed countries
- 17.4: Assist developing countries in attaining long-term debt sustainability through coordinated policies aimed at fostering debt financing, debt relief and debt restructuring, as appropriate, and address the external debt of highly indebted poor countries to reduce debt distress

## 1. Quantity and geographical distribution of ODA

ODA is the main source of external financing for LDCs, amounting to around \$46 per person, and nearly 4.8 per cent of gross national income (GNI), on average, in 2016. In that year, net ODA from member countries of the Development Assistance Committee (DAC) of the Organisation for Economic Cooperation and Development (OECD) to all developing countries reached a new peak of \$142.6 billion. By contrast, according to preliminary data, at an amount of \$43 billion, ODA disbursed to LDCs fell in 2016, after a rise in 2015. Thus, the commitment of the Addis Ababa Action Agenda to reverse the decline in the share of LDCs in total ODA remains to be fulfilled (LDCR 2016: ch.5; United Nations 2017a: 67).

In the coming years, most donor countries must substantially raise their ODA to LDCs to enter into the United Nations target range of 0.15 to 0.20 per cent of GNI. In 2014–2015, this proportion stood at only 0.09 per cent on average. Moreover, in 2015, only seven countries met the ODA lower target, with five donors meeting or exceeding the upper target of 0.20 per cent of GNI (United Nations 2017a: 67). Achieving the SDGs by accelerating structural transformation in LDCs would also be greatly enhanced by greater predictability and stability of aid flows, which facilitate medium-term budgeting and investment planning (LDCR 2016: ch.5).

ODA appears to be most effective in small economies, and there is also a strong tendency for smaller countries to receive a greater amount of ODA than larger countries, both in per-capita terms and relative to GNI. Both geographic and sectoral aid allocations are strongly influenced by the needs of recipient countries, and — especially in the case of bilateral donors — by donors' strategic and political considerations (LDCR 2016: ch.3 and ch.4; Inter-Agency Task Force 2016).<sup>42</sup> The impact of ODA on the SDGs would be greater if per capita ODA flows benefitted the neediest countries most (LDCR 2016: ch.5). There is a growing consensus that aid effectiveness could be enhanced by eliminating the tying of aid and reducing the fragmentation of flows among sources and destinations (LDCR 2015: ch.5).

## 2. Distribution of ODA by purpose

The ODA flows that are most supportive to building productive capacities and structural transformation are those that go — directly or indirectly — into economic infrastructure and capital formation in firms. Yet, the sectoral allocation of ODA has not placed a strong emphasis on building productive capacities (LDCR 2015: ch.5; LDCR 2016: ch.3). Under the guidance of the Millennium Development Goals (MDGs), with their focus on social and human development targets, multilateral and bilateral aid commitments became increasingly concentrated in social infrastructure and social services, as well

as governance (LDCR 2010: ch.2). The expectation that financing of investment in productive sectors would be taken care of by private capital inflows has proved to be false. LDCs remain largely excluded from access to international capital markets, and FDI flows have been concentrated in only a few LDCs and in extractive industries, where they contribute little to structural transformation (*Economic Development in Africa Report* (EDAR) 2014: ch.4) (← ch.VI.A).

There can be no doubt that increasing ODA to health, education and other social purposes is central for the eradication of poverty, and partly also contributes to the building productive capacities. However, the key to accelerating the building of productive capacities is to more effectively orient ODA towards fixed capital formation in productive sectors, in line with national development strategies (LDCR 2016: ch.5). This is the only way to reduce the dependency on aid flows for social purposes in the future.

The World Trade Organization (WTO)-led Aid-for-Trade (AfT) initiative recognizes that the expansion and upgrading of LDCs' productive capacities is a prerequisite for reaping the benefits from international trade. It also recognizes that these capacities will not emerge automatically from market forces alone. Rather they arise from the interplay of entrepreneurship, public policy and international action. This highlights the importance of increasing aid-for-trade disbursements aimed at value addition and economic diversification, as stipulated in the Istanbul Programme of Action for the Least Developed Countries for the Decade 2011-2020 (IPoA) (United Nations 2017a; LDCR 2016: ch.3).

## C. Leveraging South–South financial cooperation

Regional and sub-regional development banks should play a larger role in supporting LDCs and financing developmental regionalism. They can be particularly valuable for small countries and LDCs, which are unable to exert much influence on global institutions. There are a number of advantages of regional and sub-regional development banks. First, because of their regional ownership structure, regional development banks can facilitate a stronger voice for developing country borrowers, as well as enhance regional ownership and control. Second, they can be more effective because they tend to govern through more informal channels among peers, rather than imposing conditionality. Third, information asymmetries are smaller at the regional level, given proximity as well as close economic and other ties.

Regional and sub-regional development banks may be particularly suitable for the provision of regional public goods such as infrastructures, energy, or telecommunications networks. Building such infrastructure can play a decisive role in regional integration,

especially when it is part of broader regional cooperation policies including trade liberalization and industrial policies. It then enables LDC producers to benefit from larger markets and industrial development from cross-border production networks. Regional development banks, in this context, appear to be the most appropriate institutions to oversee the financing and implementation of such large-scale investments projects.

To expand the lending capacity of regional development banks without relying on additional capital from developed countries, other developing countries that have accumulated significant financial resources in Sovereign Wealth Funds (SWFs), should consider strengthening the role of regional financial institutions in their respective geographical regions by channelling a share of the financial resources presently managed by their SWFs towards these regional financial institutions. It is important that Southern partners actively cooperate to use this new model for mutual benefit. South–South financial cooperation should be viewed as a complement, rather than a substitute for traditional North–South cooperation (LDCR 2011: ch.4).

## D. Other forms of cooperation in development finance

### Main relevant SDG targets:

- 10.c: By 2030, reduce to less than 3 per cent the transaction costs of migrant remittances and eliminate remittance corridors with costs higher than 5 per cent
- 17.3: Mobilize additional financial resources for developing countries from multiple sources

Many LDCs are dependent on exports of primary commodities, and therefore, highly vulnerable to the instability of international commodity prices. To reduce the adverse impacts of commodity price volatility on these countries the international community should design innovative commodity-price stabilization schemes and strengthen the possibilities of countercyclical financing for LDCs. Through these countercyclical financing mechanisms, the international community could ensure that quick loan disbursements can be made when commodity price shocks occur. These disbursements should be made at highly concessional terms, with low policy conditionality. Moreover, their repayment should be indexed to the borrowing country's capacity to pay.

The proliferation of financing institutions and windows, together with limited progress towards donor coordination and harmonization, has given rise to an increasingly complex development finance architecture for LDCs. The introduction of an LDC finance facilitation mechanism (FFM), as proposed in the LDCR 2016, could help to improve access to development and climate finance for LDCs. A FFM could serve as a centralized

source of information on donor requirements, priorities and preferences. It could also monitor the constantly evolving architecture of development finance. A FFM could greatly enhance the efficiency of the process by which investment needs are identified by each country and ensure that they are matched with funders' priorities. In addition, it could reduce funding delays and uncertainties, lessen the administrative burden on LDCs associated with securing investment financing, and support the movement towards greater country ownership and more country-led development strategies, as envisioned in the 2030 Agenda (LDCR 2016: ch.5). The FFM could support the preparation of funding applications and the fulfilment of reporting requirements.

Development finance in LDCs could also be enhanced, and public revenue raised, by efforts to tackle illicit financial flows. Tax avoidance and the lack of transparency in international financial transactions are global issues that can only be solved at the multilateral level (EDAR 2016: ch.IV) (← ch.II.B; ← ch.VI.A). Development partners should cooperate with LDCs in tracking illicit financial flows and offer additional technical assistance on how to deal with the causes and symptoms of illicit financial flows. This could be achieved, for example, by addressing trade misinvoicing through the introduction of automated customs systems that allow importing and exporting countries to compare and exchange information about the value, quality and quantity of exports and imports. Development partners could offer technical assistance to set up special administrative units to combat illicit financial flows, and foster the cooperation of such units across countries (EDAR 2016: ch.IV).

Furthermore, international cooperation and policy action from the international community can help to enhance the impact of migration and remittances on building productive capacities in LDCs, especially in those with a large diaspora (← ch.VI.C). Regularizing the status of many migrants and their fostering their eligibility to open bank accounts in remittance-sending countries would reduce the possibility for informal transferring institutions to exploit the status of migrants and increase the volume of remittances transferred through formal institutions, thereby lowering transfer costs (LDCR 2012: ch.5). It may be worthwhile to pursue efforts to improve the situation of migrants with the help of bilateral agreements between major host and home countries (LDCR 2012: ch.5)

Countries hosting migrants can also help to strengthen the motivation for and the amounts of migrant remittances by offering tax breaks on the sums remitted. Such tax breaks could be considered as development assistance for the receiving countries. This could be an innovative and indirect way of delivering aid to the private sector. An added advantage of this would be the enhanced transparency of remittances, which would facilitate the identification of remittances for illegitimate purposes (UNCTAD 2009: ch.V).

Regarding the mobilization of domestic financing for development, technical assistance related to taxation and tax collection, including the collection of public revenue from commodity rents, can have an important impact (United Nations 2017a: ch.3) (← ch.II.B; ← ch.VI.A).

## E. Achieving and maintaining debt sustainability

Resolving the remaining debt problems of LDCs, which create constraints on mobilizing the resources needed to achieve the SDGs, should be a matter of priority. Considering the additional public expenditure and imports that are necessary to achieve the SDGs in the coming years, maintaining both public and external debt sustainability is a considerable challenge for LDCs.

The joint World Bank–International Monetary Fund (IMF) Debt Sustainability Framework for low-income countries is designed to help low-income countries achieve debt sustainability on their new borrowing from concessional official loans. It also influences the lending decisions of creditors. Indeed, it is not only borrowers, but lenders as well, who have a responsibility for maintaining debt at sustainable levels (EDAR 2016: ch.5). In this regard, more efforts need to be made by the international community to improve the arrangements for coordination between public and private sectors, and between debtors and creditors, to facilitate fair burden sharing (United Nations 2015b: para. 99).

The existing Debt Sustainability Framework may be unduly restrictive because it does not differentiate sufficiently between capital and recurrent public spending. The Debt Sustainability Framework for low-income countries should have a built-in surveillance system for monitoring the uses of debt, ensuring that countries are borrowing to finance productive investments rather than consumption, and that borrowing contributes to the achievement of the SDGs. The existing framework also puts too much emphasis on broad debt indicators such as the debt-to-gross domestic product (GDP) or debt-to-exports ratio. Due to the instability of international commodity prices and, therefore, export earnings, these broad indicators may present a distorted picture of a country's longer-term payment capacity, especially in countries where extractive industries controlled by transnational corporations (TNCs) generate considerable earnings, but provide only modest public revenues (EDAR 2016: ch.5).

In the case of LDCs, debt sustainability analysis should be refocused on the relationship between public debt service payments on both domestic and external debt, on the one hand, and government revenues, on the other. It is also necessary to consider the possible implications for the increasing number of public-private partnerships in

infrastructure in a country's debt sustainability analysis. A considerable risk of such partnerships relates to their treatment as off-budget transactions, with contingent liabilities that can become a fiscal burden in the future (EDAR 2016: ch.5) (← ch.II.D).

Moreover, greater emphasis should be placed on payment caps on debt service to deal with temporary liquidity bottlenecks. Payment caps could include proportional reductions in debt service payments to all creditors, including commercial creditors. These debt service limits should be part of binding collective action clauses. For debt problems of a longer-term nature, the international community should seek an agreement on a general framework for sovereign debt restructuring processes (EDAR 2016: ch.5).

## F. International trade support measures

### Main relevant SDG targets:

- 2.b: Correct and prevent trade restrictions and distortions in world agricultural markets, including through the parallel elimination of all forms of agricultural export subsidies and all export measures with equivalent effect, in accordance with the mandate of the Doha Development Round
- 8.a: Increase Aid for Trade support for developing countries, in particular least developed countries, including through the Enhanced Integrated Framework for Trade-related Technical Assistance to Least Developed Countries
- 10.a: Implement the principle of special and differential treatment for developing countries, in particular least developed countries, in accordance with World Trade Organization agreements
- 17.10: Promote a universal, rules-based, open, non-discriminatory and equitable multilateral trading system under the World Trade Organization, including through the conclusion of negotiations under its Doha Development Agenda
- 17.11: Significantly increase the exports of developing countries, in particular with a view to doubling the least developed countries' share of global exports by 2020
- 17.12: Realize timely implementation of duty-free and quota-free market access on a lasting basis for all least developed countries, consistent with World Trade Organization decisions, including by ensuring that preferential rules of origin applicable to imports from least developed countries are transparent and simple, and contribute to facilitating market access

### 1. Preferential market access and rules of origin

Preferential market access is one of the most effective support measures in favour of LDCs. However, not all countries have adopted duty-free and quota-free (DFQF)

schemes for LDCs, and the benefits of existing preferences are often limited, resulting from insufficient supply capacity in the beneficiary countries (Cortez, Kinniburgh, and Mollerus 2014) (← ch.IV.A). Furthermore, there are several elements in the trade policies of importing countries that reduce the effectiveness of this instrument in pursuing the SDGs (LDCR 2016: ch.3).

First, DFQF schemes in developed countries often exclude sensitive products for which LDCs have export capacity, such as clothing, textiles and some agricultural products. This exclusion may concern only a few tariff lines, but given the high concentration of LDC exports, it may nevertheless have a strong impact on restricting the expansion of exports (LDCR 2016: ch.4). Achieving 100 per cent DFQF coverage would therefore represent an important step towards meeting the SDG target of doubling LDCs' share in global exports. Second, LDC products, notably agricultural goods, are subject to an increasing number of trade-restricting non-tariff measure (NTMs). Producers in LDCs countries depend on additional technical assistance to master the difficulties of complying with these NTMs (UNCTAD 2013c; LDCR 2016: ch.3).

Third, the more general trend towards lower tariff levels has led to preference erosion. To partly offset the effects of preference erosion, preference-granting partners should review their rules of origin in accordance with the WTO Ministerial Decision on Preferential Rules of Origin for LDCs. In this context, value-added rules could be liberalized to take account of the fragmentation of production and global value chains (GVCs), and to allow regional or global accumulation among beneficiary countries. This would help to encourage intra-regional trade in intermediate goods among LDCs and other members of regional trade arrangements (LDCR 2015: ch.5).

The terms of existing preferential arrangements for LDCs could also be improved by increasing their lifespan and predictability, to encourage longer-term investments in export sectors. Moreover, in order to enable LDCs to take advantage of the expansion of international trade in services, further progress is needed towards operationalizing the LDC services waiver. A number of LDCs, particularly small island developing States (SIDS) could benefit significantly from increases in the number of preference-granting countries in this area, and of the commercial value of preferences under the waiver (LDCR 2016: ch.5).

## 2. Strengthening special and differential treatment for LDCs

There are a substantial number of special and differential treatment (SDT) provisions for LDCs in WTO agreements. However, many of them are limited to vague principles or “best-endeavours” language, so their practical effect depends on the goodwill of other WTO members. This renders their implementation unreliable and unpredictable.<sup>43</sup>

Another factor undermining the usefulness of SDT provisions is their uneven utilization, which partly reflects a lack of awareness and technical knowledge on the part of some LDCs (LDCR 2010: ch.5; LDCR 2016: ch.3).

LDCs should be enabled and encouraged to use all the flexibilities they have under SDT and their tariff space to adopt a strategic trade policy within a broader set of policies aimed at developing their productive capacities and increasing employment opportunities. Such flexibilities should be firmly secured for them, and should not be diluted by regional trade agreements (RTAs) or WTO accession processes. Empowering LDCs to use these flexibilities should be made the overarching feature of the international community's support (LDCR 2010: ch.5).

The present SDT regime in the WTO should be strengthened to ensure that SDT measures become more meaningful and effective (LDCR 2016: ch.5). This requires SDTs to go beyond allowing LDCs longer implementation periods for obligations under WTO agreements. LDC obligations in any future WTO agreements should be tailored to their particular circumstances, and their goals to achieve the SDGs through structural transformation. The use of national and regional policy options suggested in this Compendium could further facilitate LDCs efforts to achieve structural transformation.

Moreover, there should be an unequivocal commitment to allow LDCs the maximum flexibility available under existing, and any future WTO agreements. In addition, the WTO accession process for LDCs should be accelerated and facilitated, and should not include conditions that extend beyond the obligations of existing LDC members (LDCR 2014: ch.6).

### **3. Removing anti-LDC distortions in the global trading system**

Trade liberalization, coupled with agricultural subsidies in developed countries, has seriously reduced the incentives for farmers in LDCs to produce and export agricultural products. It is important that developed countries remove trade-distorting agricultural subsidies on goods, most notably rice, sugar and cotton, that compete with production in LDCs for domestic or export markets. In addition, the international community should support LDCs to pursue a more proactive agricultural policy using all the policy instruments available, including tariff and NTMs, to increase their food security and stimulate production for export. These issues must be addressed as a matter of priority in the Doha Round negotiations (LDCR 2015: ch.5).

#### 4. Technical assistance to build institutional capacity and overcome supply-side constraints

LDCs government often make sub-optimal use of SDT provisions, for example the flexibilities under the WTO Agreements on Trade-related Investment Measures (TRIMs) and on Subsidies and Countervailing Measures (SCM). LDC producers are also often insufficiently informed about their possibilities to benefit from preferential market access, on the one hand, and the need to comply with NTMs, especially under the WTO Agreements on Sanitary and Phytosanitary (SPS) Measures and Technical Barriers to Trade (TBT), on the other (LDCR 2016: ch.3). This is often due to insufficient awareness of the existence and terms of these provisions, but also to a lack of supply and institutional capacity (← ch.VI.A).

To enable LDCs to make better use of trade preferences and WTO flexibilities in their favour, and to develop the capacities of producers to comply with non-tariff measures and international standards, the international community should step up their trade-related technical assistance as a major contribution to achieving the SDGs (LDCR 2014: ch.6; LDCR 2016: ch.5). Similarly, the donor community should fulfil the pledges for capacity-building assistance for trade facilitation reforms, as provided for in the Trade Facilitation Agreement (TFA) (Diagnostic Trade Integration Study (DTIS) Mozambique) (← ch.VI.A).

#### 5. South-South cooperation in foreign trade

In the mutual interest of preserving national policy autonomy, where necessary, and to enlarge relevant markets for goods and services through trade liberalization, where possible, Southern countries should design regional and bilateral trade agreements involving LDCs in such a way that they provide sufficient room and time for learning from experience, by both firms and governments. (LDCR 2011: ch.4) (← ch.VI.D). One area where Southern support for LDCs could be helpful is cooperation in developing a “sustainable development brand”. This includes technical assistance for its promotion and marketing. This could help LDCs to harness international trade in agricultural products for achieving SDG targets. It could help to develop a global niche market for small and medium-sized enterprises (SMEs) in LDCs, emphasizing diversity, distinctiveness and non-conformity, and appealing to principles of global solidarity and sustainability (LDCR 2015: ch.5).

## G. Facilitation of access to technology and know-how

### Main relevant SDG targets:

- 17.6: Enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation and enhance knowledge sharing on mutually agreed terms, including through improved coordination among existing mechanisms, in particular at the United Nations
- 17.7: Promote the development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries on favourable terms, including on concessional and preferential terms, as mutually agreed
- 17.8: Fully operationalize the technology bank and science, technology and innovation capacity-building mechanism for least developed countries by 2017 and enhance the use of enabling technology, in particular information and communications technology

Building technological capabilities is an essential component of sustainable development in LDCs, but international support for technological transfer has been limited and largely ineffective. It is true that LDCs benefit from a waiver of most obligations under the WTO Agreement on Trade-related Aspects of Intellectual Property Rights (TRIPS) until 2021 (and 2033 for pharmaceuticals), but the use of this waiver is often restricted by obligations included in bilateral and regional trade and investment agreements. Its use is further complicated by the low technological and institutional capabilities of LDCs (LDCR 2016: ch.3).

Under article 66.2 of TRIPS, developed countries are required to provide incentives for enterprises and institutions to promote technology transfer to LDCs. In practice, however, there have been very few effective measures taken in compliance with this obligation, and market-based channels have contributed little to narrowing the knowledge divide between LDCs and more technologically advanced countries (LDCR 2010: ch.3).

The United Nations Technology Bank for the Least Developed Countries was established in September 2017 as envisioned in SDG target 17.8, with a view to accelerate structural transformation in the LDCs by strengthening their science, technology and innovation (STI) capacities (UN-OHRLLS 2018). The Technology Bank should help to fill the gap in international support for the transfer of technology, but whether it will fulfil its stated objective will largely depend on the availability of adequate financing, as well as on its mode of operation. It could play an important role especially in the transfer of technologies not subject to intellectual property protection, and those where such protection reaches the end. Such technologies are often as relevant to LDC development as those subject to continuing intellectual property protection (LDCR 2016: ch.5).

Other measures by development partners are also needed to strengthen technological capabilities in LDCs. The kind of support stipulated in article 66.2 of the TRIPS Agreement could be advanced through better monitoring of developed countries' compliance with their obligations under this article. Developed countries could be required to report, in a standard format, comparable information on programmes and policies relating to activities to support technology transfer. LDCs could be invited to report on the contribution of such technology transfer to the establishment of a sound and viable technological base, and/or submit needs assessments indicating priority areas and sectors for technology transfer (LDCR 2016: ch.5).

Developed countries could focus their support on technologies whose transfer is unprofitable to technology owners, but has a high social return because these technologies correspond to local needs and contribute to technological upgrading and/or social development (LDCR 2016: ch.5).<sup>44</sup> Another area of focus is medium-level technologies oriented towards entrepreneurs. These medium-level technologies, which serve local markets, may better reflect the factor endowments characteristic of LDCs. Thus, they may be more suitable for LDCs than advanced and capital-intensive technologies, and be more readily absorbed (UNCTAD 2014; Foray 2009).

International measures to allow LDCs to harness the benefits of intellectual property for development, should also include the effective implementation of the Development Agenda of the World Intellectual Property Organization (WIPO) (LDCR 2014: ch.6).

The transfer of technology and technical skills for developing productive capacities in LDCs should also receive greater attention in policies of Southern countries in support of LDCs. Technologies available in Southern countries are often more suitable to the needs and skill levels of LDCs than cutting-edge technologies from the most advanced economies (LDCR 2011: ch.4).<sup>45</sup>

## H. Reviewing conditionality and respecting policy autonomy

### Main relevant SDG targets:

- 17.9: Enhance international support for implementing effective and targeted capacity-building in developing countries to support national plans to implement all the sustainable development goals, including through North-South, South-South and triangular cooperation
- 17.15: Respect each country's policy space and leadership to establish and implement policies for poverty eradication and sustainable development
- 17.18: By 2020, enhance capacity-building support to developing countries, including for least developed countries and small island developing States, to increase significantly the availability of high-quality, timely and reliable data disaggregated by income, gender, age, race, ethnicity, migratory status, disability, geographic location and other characteristics relevant in national contexts

LDCs' accession to the WTO should be facilitated and accelerated while fully respecting each country's policy space and leadership to establish and implement policies for poverty eradication and sustainable development (LDCR 2014: ch.6). LDC Governments face major constraints in exercising effective management in the design and implementation of their national development strategies, with associated consequences for country ownership and aid effectiveness. This is due in part to weak technical capacities, in part because of high levels of dependence on donor finance in combination with policy conditionality. As a result, aid often remains weakly aligned with country plans and budgets, with negative consequences for governance as well as for aid effectiveness (LDCR 2008: ch.3). Better alignment of ODA, international trade support measures, and technology transfer policies with recipient countries' development strategies, rather than donor concerns, is decisive for national-ownership of the development agenda (LDCR 2015: ch.5). It is also vital that aid modalities are oriented towards supporting domestic businesses and facilitating the formation of growth coalitions (LDCR 2009: ch.1).

To enable LDCs to increase aid effectiveness and assume country ownership, there is a need to review ODA conditionality (LDCR 2015: ch.5). LDC governments require sufficient policy space with regard to the management of external trade, the protection of their agricultural production, and the promotion of their emerging industrial sectors. This is necessary for policy pluralism and experimentation in the pursuit of the SDGs. Enhanced policy space for LDC governments can also enhance the strategic integration of LDCs into the global economy (LDCR 2010: ch.5; LDCR 2014: ch.6).

Compliance with international agreements, policy conditionalities attached to aid, and guidance by donors should not undermine the policy learning that is critical for building developmental state capabilities. To increase country ownership of development policies, it is also necessary to help LDCs build local research and policy analysis capacities, which can support the generation of policy alternatives and in particular “homegrown” solutions (LDCR 2008: ch.3).

## I. International support measures in response to climate change

### Main relevant SDG targets:

- 9.4: By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities
- 11.b: By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015–2030, holistic disaster risk management at all levels
- 13.1: Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries
- 13.a: Implement the commitment undertaken by developed-country parties to the United Nations Framework Convention on Climate Change to a goal of mobilizing jointly \$100 billion annually by 2020 from all sources to address the needs of developing countries in the context of meaningful mitigation actions and transparency on implementation and fully operationalize the Green Climate Fund through its capitalization as soon as possible
- 13.b: Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and small island developing States, including focusing on women, youth and local and marginalized communities

### 1. International financing

LDCs have very little responsibility for climate change, but they are particularly vulnerable to its impacts. The United Nations Framework Convention on Climate Change (UNFCCC) recognizes the necessity of financial and technical support for LDCs in their efforts to strengthen resilience to the impacts of climate change. However, while

numerous climate change funds have been established for adaptation, this has given rise to a complex architecture of bilateral and multilateral agencies. Some of the funds which exist remain seriously underfunded, and accessing funds is complex and time-consuming, particularly for countries, such as LDCs, with limited institutional capacity (LDCR 2016: ch.5).

The Least Developed Country Fund (LDCF) was established in 2001 to meet the particularly acute adaptation needs of LDCs. It has financed the preparation of national adaptation programmes of action (NAPAs), identifying priority activities for countries to address their urgent and immediate adaptation needs. Although climate finance has increased overall, the financing of this LDC-specific Fund is inadequate and insecure, and contributions to the LDCF fall far short of the cost of implementing the NAPAs (LDCR 2016: ch.5). Sustained and sufficient refunding of the climate funds, especially the LDCF, is essential for LDCs to achieve the climate-change-related targets of the SDGs.

Overall, major climate-finance reforms are needed to mobilize financing at a much larger scale. Funding should be commensurate with the adaptation and mitigation needs of LDCs. International efforts should also be made to enhance the access of LDCs to the existing funds, and to increase the effectiveness of delivery. It would be appropriate for international financial support to focus on providing the resources needed for the diversification of the economy away from sectors affected by climate change. International support should also include funds for productive domestic investment (LDCR 2014: ch.6).

## 2. Technology transfer

When building productive capacities for future growth, LDCs must minimize CO<sub>2</sub> emissions. However, their climate-change-relevant emissions will remain extremely low in international comparison. Therefore, LDCs should not be subject to CO<sub>2</sub> emission limits that could impede the use of existing productive capacities. It should be emphasized that international support to LDCs should be primarily focussed on strengthening the resilience of these economies to the inevitable impacts of climate change (LDCR 2014: ch.6).

For both mitigation and adaptation in LDCs, technology transfer plays a central role (LDCR 2016: ch.3). The Clean Development Mechanism (CDM) is a major instrument for climate-relevant technology transfer. It allows developed countries to meet their emissions-reduction obligations, in part by financing emissions-reducing projects in developing countries by using technologies unavailable in the host country. So far, such

projects have been overwhelmingly located in more advanced developing countries, and technology transfer was only involved in a minority of these projects (LDCR 2016: ch.3). One of the reasons why the benefits of the CDM for LDCs have been very limited is that this mechanism is primarily focussed on mitigation measures. The CDM should be modified to be more relevant for technology transfer, specifically for the climate-change adaptation needs of LDCs. Moreover, LDCs need technical assistance to strengthen their institutional capabilities to access this mechanism.

Under the 2001 Marrakesh Technology Framework of the UNFCCC, LDCs are invited to submit externally funded assessments of their technology needs assessments (TNAs) for mitigation and adaptation. Additionally, a Climate Technology Centre and Network (CTCN) has been created to respond to requests based on TNAs. So far, however, not all LDCs have submitted a TNA, and only few countries have prepared related technology action plans. Technology programmes for LDCs under the UNFCCC should be strengthened through increased funding and additional technical assistance for the elaboration of TNAs and proposals for technology-related activities to the CTCN, as well as for climate-related institutional capacity building.

## J. Summary of options for international development support to LDCs

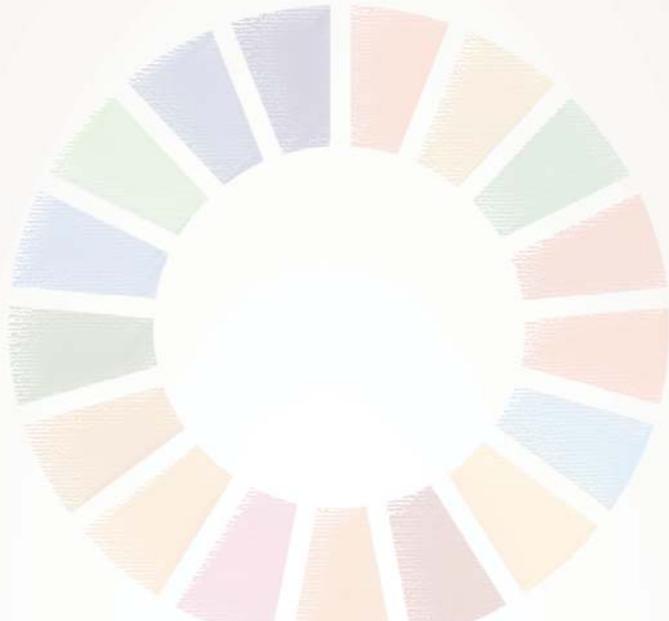
<b>Financial support</b>		
<b>Intermediate objective</b>	<b>Policy measure</b>	<b>Relevant SDG/ target</b>
To enable LDCs to achieve the SDGs, donors should strive to	<ul style="list-style-type: none"> <li>• Fulfil their commitments to raise ODA to LDCs to meet the international target of 0.15–0.20 per cent of donor countries GNI</li> <li>• Allocate at least 50 per cent of net ODA to LDCs</li> <li>• Make aid flows more stable and predictable</li> <li>• Consider the LDC criteria explicitly in their ODA allocations, and link their aid in a consistent way to recipient countries' needs or levels of development</li> </ul>	1.a 10.b 17.2
To help LDCs raise their fixed capital formation to the level required for sufficient employment creation, and the upgrading and diversification of production, and the enhancement of international competitiveness, development partners should	<ul style="list-style-type: none"> <li>• Make the expansion of productive capacities in ODA allocation an equal priority compared to social infrastructure and services, and give greater weight to aid for physical infrastructure and measures in support of investment in the productive capital stock, enterprise development and the improvement of domestic financial and knowledge systems</li> <li>• Align ODA allocations with the priorities of sectoral and horizontal policies in national development strategies</li> <li>• Combine ODA with philanthropic funds and other private financial flows that are suitable for long-term financing of development projects</li> <li>• Step up Aid for Trade for LDCs, including through the EIF, and broaden its focus to support the expansion, upgrading and diversification of export capacities, while fully recognizing the principle of country ownership</li> <li>• Support public-private partnerships for the long-term financing of infrastructure investment, especially in energy infrastructure, ensuring a fair allocation of the risks involved in such investments</li> </ul>	1.a 3.c 4.b 7.a 8.a 11.c 15.a 15.b 17.1/17.3
To facilitate access of LDCs to those types of external financing that are the most appropriate for each development project, the international community should	<ul style="list-style-type: none"> <li>• Give serious consideration to the creation of a Finance Facilitation Mechanism for LDCs</li> </ul>	17.3/17.4
To ensure external debt sustainability in LDCs, while providing sufficient external financing to enable LDCs to achieve the SDGs	<ul style="list-style-type: none"> <li>• Provide for a systematic debt management mechanism, or binding collective action clauses, with equal treatment of all creditors, including commercial creditors, that allow for:                             <ul style="list-style-type: none"> <li>– Temporary caps on total debt service payments, in cases of temporary liquidity problems; and</li> <li>– Debt-stock reduction in cases where a country faces a longer-term debt overhang</li> </ul> </li> <li>• Integrate a surveillance system into the Debt Sustainability Framework, to ensure that debt financing is for productive investments rather than consumption and contributes to the achievement of the SDGs</li> <li>• Refocus debt sustainability indicators on the ratio of public debt service payments to government revenues</li> </ul>	17.4/ 17.13/ 17.14/ 17.15/ 17.18

Intermediate objective	Policy measure	Relevant SDG/ target
To ensure that the exploitation and export of natural resources are both environmentally sustainable and beneficial for the building of productive capacities and achieving the SDGs, the international community should	<ul style="list-style-type: none"> <li>• Provide additional technical and financial assistance focussed on industrialization based on the processing of locally available natural resources</li> <li>• Strengthen the ability of LDCs to manage resource rents, through technical assistance in the (re-)negotiation of licensing contracts with TNCs</li> </ul>	9.2/9.3 17.3/17.5/ 17.6/17.8/ 17.9/17.14
To support LDCs in mobilizing public revenue for financing development and poverty reduction	<ul style="list-style-type: none"> <li>• Step up technical assistance related to taxation, tax collection and combatting illicit financial flows</li> </ul>	10.4 17.1/17.3
To diversify the external financing options for LDCs and to support Southern regional integration, regional and sub-regional development banks should	<ul style="list-style-type: none"> <li>• Be enabled to strengthen their long-term lending to LDCs</li> <li>• Extend the financing of regional public goods in support of regional integration of LDCs</li> </ul>	17.3/17.4/ 17.6
<b>Trade support</b>		
To enable LDCs to pursue strategic integration into the global economy, the international community should	<ul style="list-style-type: none"> <li>• Facilitate LDCs' accession to the World Trade Organization (WTO)</li> <li>• Encourage and empower LDCs to use all their policy space, including flexibilities provided under WTO rules, promote exports and protect their domestic agricultural production and strategically relevant infant industries</li> </ul>	2.b 9.2 10.1 17.10/17.11/ 17.12/17.14/ 17.15
To support LDCs in their efforts to achieve the SDGs through sustained structural transformation, development partners should	<ul style="list-style-type: none"> <li>• Further improve preferential market access for LDC exports, including 100 per cent DFQF access to the markets of all developed countries</li> <li>• Extend preferential market access to LDC services exports</li> <li>• Strengthen SDT for LDCs, including for trade in services</li> <li>• Tailor LDC obligations in any future WTO agreements to the circumstances and needs of LDCs</li> </ul>	9.24 17.10/17.11/ 17.12
To compensate for preference erosion and encourage intraregional trade in intermediate goods among LDCs and other members of regional trade arrangements, preference-giving countries should	<ul style="list-style-type: none"> <li>• Review rules of origin in line with the 2015 WTO Ministerial Decision on the issue</li> </ul>	9.2 17.10/17.11
To encourage longer-term investments in export sectors, preference-giving countries should	<ul style="list-style-type: none"> <li>• Increase the lifespan and predictability of preferential arrangements for LDCs</li> </ul>	9.2 17.12
To preserve incentives for farmers in LDCs, and incomes and employment in agriculture, developed countries should	<ul style="list-style-type: none"> <li>• Remove trade distorting agricultural subsidies on goods that compete with production in LDC for the domestic or export markets</li> </ul>	1.a 2.3 2.b
To enable LDCs to make better use of trade preferences and WTO flexibilities in their favour, the international community should	<ul style="list-style-type: none"> <li>• Step up trade-related technical assistance for capacity building in the public sector and among producers to comply with non-tariff measures and international standards, and to implement trade facilitation</li> </ul>	8.a 9.2 17.9/17.11

Intermediate objective	Policy measure	Relevant SDG/ target
To support LDC efforts to harness international trade in primary products for achieving the SDGs, appealing to principles of global solidarity and sustainability, the international community should	<ul style="list-style-type: none"> <li>• Provide technical assistance to promoting and marketing a "sustainable development brand" for agriculture-based LDC goods</li> <li>• Provide additional technical and financial assistance focussed on industrialization based on the processing of locally available natural resources</li> </ul>	2.a
		8.2 9.2 10.1 10.b 17.11
<b>Technology transfer</b>		
To fill the gap in international support for technology transfer	<ul style="list-style-type: none"> <li>• The international community should provide adequate financing to the United Nations Technology Bank</li> <li>• Signatories of the TRIPS Agreement should comply with their commitment to provide incentives for enterprises and institutions to promote technology transfer to LDCs</li> <li>• Developed countries should focus their support on technologies whose transfer is unprofitable to technology owners, but has a high social return because these technologies correspond to local LDCs' needs; and on medium-level technologies that correspond to the factor endowments and technology-absorption capacity of LDCs</li> <li>• Southern countries should support the transfer of agricultural and industrial technologies and knowledge available to them</li> </ul>	2.a 4.b 5.b 6.a 7.a/7.b 9.4 9.a/9.b/9.c 12.a 14.a 17.3/17.6/ 17.7/17.8/ 17.10/17.16
<b>Conditionality and policy space</b>		
To enable LDCs to use external trade as an instrument to achieve the SDGs, the international community should	<ul style="list-style-type: none"> <li>• Encourage and empower LDC governments to take full advantage of the flexibilities in their favour under WTO Agreements</li> </ul>	17.10/17.11/ 17.14
To support LDCs in the design and implementation of successful policies for poverty eradication and sustainable development, the international community should	<ul style="list-style-type: none"> <li>• Review policy conditionality attached to ODA and all other forms of development cooperation</li> <li>• Better align financial and technical assistance with the priorities of recipient LDCs' development strategies</li> <li>• Not undermine policy learning and experimentation, which are critical to building developmental state capabilities in LDCs</li> <li>• Help LDCs build local research and policy analysis capacity which can support the generation of policy alternatives, and in particular "homegrown" solutions</li> </ul>	1 2 10.1/10.4 17.1/17.9/ 17.14/17.15
To achieve the mutual interest of preserving national policy autonomy, and to enlarge relevant markets for goods and services through trade liberalization, where possible, Southern countries should	<ul style="list-style-type: none"> <li>• Design regional and bilateral trade agreements involving LDCs in such a way that they provide sufficient room and time for learning from experience, by both firms and governments</li> </ul>	17.6/17.11/ 17.14/17.15

<b>Climate change</b>			
<b>Intermediate objective</b>	<b>Policy measure</b>	<b>Relevant SDG/ target</b>	
To enable LDCs to achieve climate-related SDG targets	• International climate policies must specifically focus on the differentiated treatment of LDCs	1.5 2.4	
	• Development partners should increase technical assistance to LDCs to help them incorporate climate adaptation and mitigation needs into their national development strategies	2.a 4.7 7.2/7.3	
	• Technology programmes for LDCs under the UNFCCC should be strengthened through increased funding and additional technical assistance for the elaboration of TNAs and proposals for technology-related activities to the CTCN, as well as for climate-related institutional capacity building	7.a 8.4 10.b 11.b/11.c 12.1/12.6/ 12.8	
	• Ensure that the LDC Fund has adequate resources to finance these needs in full, and in a timely manner	12.a/12.c 15.2/15.3	
	• Developed-country parties to the UNFCCC should implement their commitment to jointly mobilize \$100 billion annually by 2020 to address the needs of developing countries, especially LDCs	15.b 17.3/17.6/ 17.7/17.14	
	To prevent global climate policies from impeding the achievement of other SDGs in LDCs	• LDCs should not be subjected to the imposition of CO <sub>2</sub> emission limits, given that their climate change relevant emissions will remain extremely low in international comparison	1.1/1.2 10.1 13
		• International financial support should include the provision of resources for the diversification of economy activities, away from the sectors most affected by climate change	17.3/17.17/ 17.15
• The CDM should be made more relevant for technology transfer specifically for the climate-change adaptation needs of LDCs			





## **NOTES AND REFERENCES**



## Notes

- 1 The DTIS updates referred to in this Compendium are those on Djibouti, Ethiopia, the Gambia, Mali, Mozambique, Niger and Senegal. The EIF is a global partnership between LDCs, donors and international agencies to help LDCs develop sustainable trade strategies. It is the multi-donor global Aid for Trade (AfT) programme exclusively designed for LDCs. The progress of AfT towards its desired results is assessed by a joint World Trade Organization(WTO)-Organisation for Economic Cooperation and Development (OECD) monitoring and evaluation framework (<https://www.enhancedif.org/>).
- 2 Extreme poverty is defined by the World Bank as income of less than \$1.90 a day (World Bank 2018).
- 3 In a large majority of LDCs, commodities accounted for more than two thirds of merchandise exports in 2013–2015 (LDCR 16: ch.1).
- 4 An indication of the remaining challenges in this area is the generally low ranking of LDCs in the World Bank's annual Doing Business Report or the Global Enabling Trade Report prepared by the World Economic Forum.
- 5 This has been exemplified by the early development of the Nordic countries and the successful cases of late industrialization in East Asia (LDCR 2009).
- 6 Data on informal sector activities in LDCs is sparse, but it can be estimated that informal-sector employment accounts for between 50 and 80 per cent of total GDP in LDCs and for up to 80 per cent of non-agricultural employment (EDAR 2015: ch.5; LDCR 2013: ch.3).
- 7 Botswana may be regarded a success story in this respect. The State has successfully captured a major share of mining rents, which it has then devoted to funding economic diversification (LDCR 2015: ch.1).
- 8 Research from the United Republic of Tanzania reveals that a large majority of people were willing to pay more taxes if the resources were clearly going towards improving basic public service provision. An innovative way to create a climate of trust and accountability between tax collectors and taxpayers and improve tax collection is through a taxpayers' charter, as recently introduced in Zambia. It is the product of consultations between the tax authorities, taxpayers and civil society and sets out mutual commitments from both the tax authorities and taxpayers.
- 9 It is estimated that Africa lost about \$854 billion in illicit financial flows between 1970 and 2008, an amount nearly equivalent to all official development assistance (ODA) received by Africa during that period (UNECA 2014).

- 10 Empirical research suggests that in developing countries with underutilized capacities, as is typically the case in LDCs, the rate of inflation above which real GDP growth could be compromised is in the order of 11–13 per cent (Khan and Senhadji 2001; LDCR 2014: ch.6).
- 11 For example, in Ethiopia, such measures were found to be successful in moderating price expectations and inflation (DTIS Ethiopia).
- 12 Among LDCs, Ethiopia is an example for a country that has reduced its vulnerability to external financial shocks by limiting its opening to capital inflows mainly to FDI and government borrowing on international bond markets and by controlling capital outflows (Alemu 2016). Angola, the Democratic Republic of the Congo and Mozambique, have implemented stronger controls on capital inflows than the sub-Saharan African average, while Burkina Faso, Guinea-Bissau and Senegal have put in place stronger-than-average controls on capital outflows (Massa 2016; LDCR 2015: ch.2).
- 13 In the Central African Republic, the Democratic Republic of the Congo, Guinea and Niger, less than 5 per cent of adults have an account at a formal financial institution.
- 14 Kenya's Equity Bank, the Commercial Bank of Africa in East Africa and UBA of Nigeria are examples of banks that have facilitated access to and reduced the cost of payments services in rural and urban areas (LDCR 2017: ch.6; EDAR 2015: ch.4).
- 15 In the Central African Republic, Chad and the Democratic Republic of the Congo, there is only one branch per 100,000 adults, compared to more than 30 in some other African developing countries with higher per capita income (EDAR 2015: ch.4).
- 16 An example of supplier's credit is when an input supplier provides inputs such as fertilizers to a farmer (or members of a farming group) on credit, with the understanding that repayment will be made after the harvest. This has been successfully used in the agricultural sector in Ghana and Mozambique (Beck et al. 2011; EDAR 2013: ch.3).
- 17 There are many examples in economic history and even today, where central banks have assumed such a developmental role and directly financed structural transformation and the building of productive capacities (Epstein 2005). Direct and indirect financing by the central bank played an important role in the industrialization and the post-war era of reconstruction in many developed countries, such as Belgium, France, Germany, Italy, the Netherlands and the United Kingdom (UNCTAD 2013b: ch.III; O'Connell 2012), as well as in advanced developing countries at earlier stages of their development. A recent example is the Bank of England, which

after 2008, when commercial banks were not inclined to extend long-term lending, provided low-cost refinancing for extended periods to commercial banks. Such lending was linked to their lending performance, for example increased net lending to SMEs (Bank of England, 2013). The Bank of Japan launched a similar initiative in 2010 (UNCTAD 2013b: ch.III). It is true that such measures taken in recent years by central banks in developed countries were a response to the exceptional circumstances of the financial crisis or persistent recession when traditional monetary policies to stimulate economic activity were ineffective. However, there are strong arguments in favour of using this kind of central bank policy systematically also under the structural circumstances which prevail in LDCs.

- 18 This was the role played by development banks in Japan, the Republic of Korea and Taiwan, Province of China (Chandrasekhar 2016).
- 19 In some cases, firms that are part of global value chains (GVCs) may obtain foreign currency credit from lead firms in their respective value chains or the links with foreign banks that these lead firms may provide. This possibility is, however, open only to a very small number of firms in LDCs and also depends on central bank regulation governing private capital inflows.
- 20 At the household level, there are also shortages in cooking fuels. However, these mainly impact on human wellbeing and only indirectly on structural transformation.
- 21 In African LDCs these amount, on average, to 33 per cent of the water supply (DTIS Ethiopia).
- 22 By 2017, Uganda was the only LDC that reported the adoption of cost-reflective tariffs for electricity (LDCR 2017: ch.5).
- 23 High illiteracy levels and the pervasiveness of infrastructural deficiencies in many LDCs countries will keep a number of small commercial operations in the informal sector. These small firms should not be forced to bear the burden of formalization (UNCTAD 2009: ch.III).
- 24 This was successfully implemented in Benin in 1995 and has contributed to improving the business environment in the country. Dramatic reductions in entry costs to the formal sector are possible as evidenced by the experience of Equatorial Guinea, where average entry costs were reduced by around 95 per cent in one year by simplifying administrative procedures (UNCTAD 2009: ch.III).
- 25 For a list of industrial policy instruments used in a number of economies that have successfully industrialized in the past, see LDCR 2009: ch.4.
- 26 This can go as far as setting up demonstration enterprises, which can show the viability and profitability of new activities, as exemplified by the Production Development Corporation (CORFO) and Fundación Chile (LDCR 2007: ch.2).

- 27 Under the World Trade Organization (WTO) Agreement on Trade-Related Investment Measures (TRIMs), the use of local procurement programmes is restricted for signatory countries to this Agreement (LDCR 2007: ch.2).
- 28 There are various examples where this practice was applied in developed countries at earlier stages of their industrial development. For instance, before the First World War and in the inter-war period, the Bank of England took equity stakes and participated directly in the management of industrial firms in the textiles, metallurgy, shipbuilding, aluminium, rayon and wood-pulp sectors (UNCTAD 2013b: 133). Similarly, the Bank of Italy became involved in the financing and indirect management of different industrial firms (O'Connell 2012).
- 29 This was the role played by development banks in Japan, the Republic of Korea and Taiwan Province of China (see, for example, Chandrasekhar 2015: 27).
- 30 Such instruments have been used by a number of African countries, including Cameroon, Chad, the Congo, Ethiopia, Ghana, Guinea, Mauritania, Mozambique, Nigeria, Sierra Leone and Zambia. These experiences suggest that the success of export restrictions in increasing domestic value addition depends on their combination with other policy measures to enhance productive capacities, such as those discussed in this Compendium (EDAR 2014: ch.4).
- 31 These concerns are confirmed by an analysis of LDC export patterns, which shows that these countries indeed remain locked into the lower levels of GVC processing and that there are very few examples of product upgrading (LDCR 2007: ch.1; EDAR 2013: ch.4).
- 32 In Malawi, the reduced differential protection of large estates dramatically shifted the structure of agricultural production, allowing smallholders to diversify rapidly into cash crops, thus increasing their share of burley tobacco production by up to 70 per cent. It also enabled small holder farmers to benefit from increased trade in food crops (LDCR 2015: ch.5).
- 33 According to FAO estimates, providing women with the same access to productive resources as men could increase yields on their farms by 20–30 per cent, raising total agricultural output by 2.5–4 per cent (FAO 2011).
- 34 As of 2016, these were Angola, Chad, South Sudan, the Sudan and Timor-Leste.
- 35 This is justifiable by the principle of common but differentiated responsibilities, and the negligible contribution of LDCs to climate change.
- 36 In Mozambique there has been an increasing recognition that fiscal incentives for FDI, especially in extractive industries, should be assessed in terms of costs, benefits, efficiency and fairness. In particular, the incentives provided tend to target

big investors, thereby putting small, local firms at a disadvantage. Similarly, in Zambia, the fiscal regime favours large investors with investments of \$500,000 and above. In addition, the corporate income tax rate on mining (30 per cent) is less than that on manufacturing (35 per cent), which is not consistent with the policy of promoting diversification and transformation towards manufacturing. In Lesotho, an attempt by the Government to promote manufacturing investment by offering incentives to manufacturing businesses created a bias against local investors who were mostly in services (EDAR 2014: ch.4).

- 37 Various examples of regional cooperation, particularly in Asia, illustrate the potential of regional cooperation to support structural transformation. These include cooperation between China, the Republic of Korea and Japan on developing new technologies, the catalytic role of the Asian Development Bank, and the Brunei Darussalam–Indonesia–Malaysia–Philippines Association of Southeast Asian Nations (ASEAN) Growth Area. Another important example is the common development of economic corridors within the Greater Mekong Subregion by Cambodia, Lao People’s Democratic Republic and Myanmar, coordinated by the Asian Development Bank (LDCR 2013: ch.5; EDAR 2013: ch.4).
- 38 With its Automated System for Customs Data (ASYCUDA) programme, UNCTAD has been at the forefront of the effort to help developing countries to modernize their customs administration.
- 39 For example, Burundi, Rwanda and the United Republic of Tanzania have pooled their resources to finance the construction of a regional railway network across the three countries (EDAR 2009: ch.4).
- 40 For example, the State Bank of India, has raised over \$11 billion since 1991, and Sri Lanka has raised about \$580 million since 2001 through the issue of development bonds. Among LDCs, Ethiopia launched its second diaspora bond in 2011, the Renaissance Dam Bond, the proceeds of which were used to fund the construction of the Grand Renaissance Dam at an estimated cost of \$4.8 billion. The Renaissance Dam bond was issued at a patriotic discount, i.e. an interest rate lower than the benchmark, which is typically the 10-year United States treasury bond or other comparable bonds (EDAR 2016: ch.4).
- 41 To expand the use of remittances and other future flows as collateral to leverage external financing at lower costs and longer maturities, the African Export-Import Bank launched its Financial Future-Flow Pre-Financing Programme in 2001. In 2013, 5 per cent of its loans emanated from that Programme. It has led to various future-remittance-flow collateral-backed loans in Ethiopia, Ghana and Nigeria (EDAR 2016: ch.4).

- 42 United Nations General Assembly resolution 67/221 has also called upon development partners to consider the LDC criteria explicitly in their ODA allocations, but donors have been reluctant to link their aid in a consistent way to recipient countries' needs or levels of development (Alonso 2015).
- 43 An example is 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 General Agreement on Trade in Services (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” (LDCR 2016: ch.3).
- 44 Such technologies might include, for example, those needed for the production of drugs and vaccines for tropical diseases.
- 45 An example of South-South collaboration for skills transfer is India's Barefoot College and Vocational Training Centres. This initiative provides illiterate or semi-literate rural women from several LDCs with training and skills to install, maintain and repair solar home systems, as well as basic business, financial and digital literacy (LDCR 2017: ch.6).

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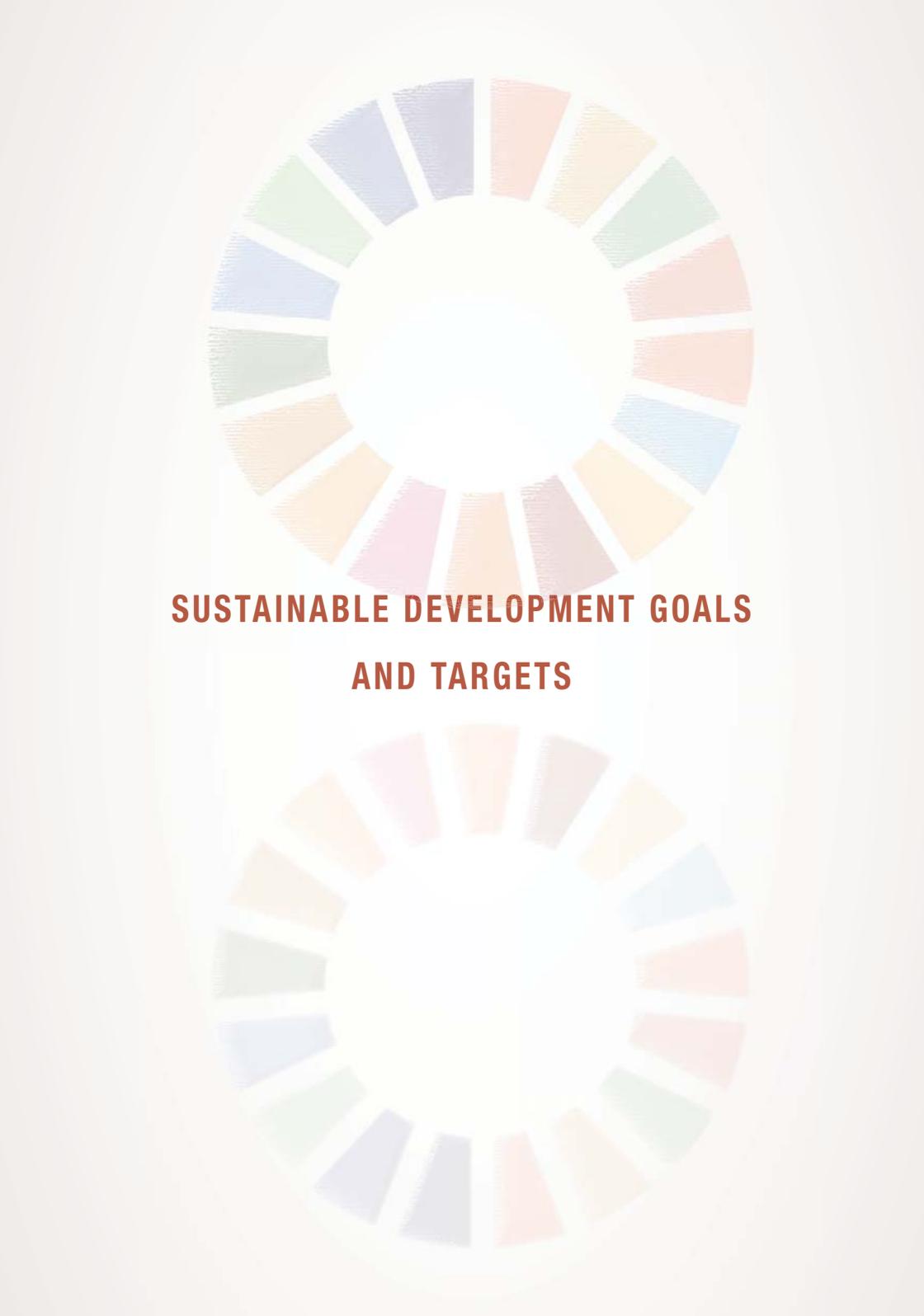
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- 2017 Diagnostic Trade Integration Study of Ethiopia (Update)
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- 2015 Diagnostic Trade Integration Study of Niger (Update)
- 2013 Diagnostic Trade Integration Study of the Gambia (Update)
- 2013 Diagnostic Trade Integration Study of Senegal (Update)

The background of the page features a large, faint, circular graphic of the Sustainable Development Goals (SDG) wheel. The wheel is composed of 17 colored segments, each representing a goal, arranged in a circle around a central white circle. The colors include shades of blue, green, orange, and purple. The text is centered over this graphic.

**SUSTAINABLE DEVELOPMENT GOALS  
AND TARGETS**



## **Goal 1. End poverty in all its forms everywhere**

1.1 By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than \$1.25 a day

1.2 By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions

1.3 Implement nationally appropriate social protection systems and measures for all, including floors, and by 2030 achieve substantial coverage of the poor and the vulnerable

1.4 By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance

1.5 By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters

1.a Ensure significant mobilization of resources from a variety of sources, including through enhanced development cooperation, in order to provide adequate and predictable means for developing countries, in particular least developed countries, to implement programmes and policies to end poverty in all its dimensions

1.b Create sound policy frameworks at the national, regional and international levels, based on pro-poor and gender-sensitive development strategies, to support accelerated investment in poverty eradication actions



## **Goal 2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture**

2.1 By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round

2.2 By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons

2.3 By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment

2.4 By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality

2.5 By 2020, maintain the genetic diversity of seeds, cultivated plants and farmed and domesticated animals and their related wild species, including through soundly managed and diversified seed and plant banks at the national, regional and international levels, and promote access to and fair and equitable sharing of benefits arising from the utilization of genetic resources and associated traditional knowledge, as internationally agreed

2.a Increase investment, including through enhanced international cooperation, in rural infrastructure, agricultural research and extension services, technology development and plant and livestock gene banks in order to enhance agricultural productive capacity in developing countries, in particular least developed countries

2.b Correct and prevent trade restrictions and distortions in world agricultural markets, including through the parallel elimination of all forms of agricultural export subsidies and all export measures with equivalent effect, in accordance with the mandate of the Doha Development Round

2.c Adopt measures to ensure the proper functioning of food commodity markets and their derivatives and facilitate timely access to market information, including on food reserves, in order to help limit extreme food price volatility



### **Goal 3. Ensure healthy lives and promote well-being for all at all ages**

- 3.1 By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births
- 3.2 By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under5 mortality to at least as low as 25 per 1,000 live births
- 3.3 By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases
- 3.4 By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being
- 3.5 Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol
- 3.6 By 2020, halve the number of global deaths and injuries from road traffic accidents
- 3.7 By 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes
- 3.8 Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all
- 3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination
- 3.a Strengthen the implementation of the World Health Organization Framework Convention on Tobacco Control in all countries, as appropriate
- 3.b Support the research and development of vaccines and medicines for the communicable and non-communicable diseases that primarily affect developing countries, provide access to affordable essential medicines and vaccines, in accordance with the Doha Declaration on the TRIPS Agreement and Public Health, which affirms the right of developing countries to use to the full the provisions in

the Agreement on Trade-Related Aspects of Intellectual Property Rights regarding flexibilities to protect public health, and, in particular, provide access to medicines for all

3.c Substantially increase health financing and the recruitment, development, training and retention of the health workforce in developing countries, especially in least developed countries and small island developing States

3.d Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks



#### **Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all**

4.1 By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes

4.2 By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education

4.3 By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university

4.4 By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship

4.5 By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations

4.6 By 2030, ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy

4.7 By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development

4.a Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all

4.b By 2020, substantially expand globally the number of scholarships available to developing countries, in particular least developed countries, small island developing States and African countries, for enrolment in higher education, including vocational training and information and communications technology, technical, engineering and scientific programmes, in developed countries and other developing countries

4.c By 2030, substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries and small island developing States



## **Goal 5. Achieve gender equality and empower all women and girls**

5.1 End all forms of discrimination against all women and girls everywhere

5.2 Eliminate all forms of violence against all women and girls in the public and private spheres, including trafficking and sexual and other types of exploitation

5.3 Eliminate all harmful practices, such as child, early and forced marriage and female genital mutilation

5.4 Recognize and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies and the promotion of shared responsibility within the household and the family as nationally appropriate

5.5 Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life

5.6 Ensure universal access to sexual and reproductive health and reproductive rights as agreed in accordance with the Programme of Action of the International Conference on Population and Development and the Beijing Platform for Action and the outcome documents of their review conferences

5.a Undertake reforms to give women equal rights to economic resources, as well as access to ownership and control over land and other forms of property, financial services, inheritance and natural resources, in accordance with national laws

5.b Enhance the use of enabling technology, in particular information and communications technology, to promote the empowerment of women

5.c Adopt and strengthen sound policies and enforceable legislation for the promotion of gender equality and the empowerment of all women and girls at all levels



## **Goal 6. Ensure availability and sustainable management of water and sanitation for all**

6.1 By 2030, achieve universal and equitable access to safe and affordable drinking water for all

6.2 By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations

6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally

6.4 By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity

6.5 By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate

6.6 By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes

6.a By 2030, expand international cooperation and capacity-building support to developing countries in water- and sanitation-related activities and programmes, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies

6.b Support and strengthen the participation of local communities in improving water and sanitation management



## **Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all**

- 7.1 By 2030, ensure universal access to affordable, reliable and modern energy services
- 7.2 By 2030, increase substantially the share of renewable energy in the global energy mix
- 7.3 By 2030, double the global rate of improvement in energy efficiency
- 7.a By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology
- 7.b By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing States and landlocked developing countries, in accordance with their respective programmes of support



## **Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all**

- 8.1 Sustain per capita economic growth in accordance with national circumstances and, in particular, at least 7 per cent gross domestic product growth per annum in the least developed countries
- 8.2 Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors
- 8.3 Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services

8.4 Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10Year Framework of Programmes on Sustainable Consumption and Production, with developed countries taking the lead

8.5 By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value

8.6 By 2020, substantially reduce the proportion of youth not in employment, education or training

8.7 Take immediate and effective measures to eradicate forced labour, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labour, including recruitment and use of child soldiers, and by 2025 end child labour in all its forms

8.8 Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment

8.9 By 2030, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products

8.10 Strengthen the capacity of domestic financial institutions to encourage and expand access to banking, insurance and financial services for all

8.a Increase Aid for Trade support for developing countries, in particular least developed countries, including through the Enhanced Integrated Framework for Trade-related Technical Assistance to Least Developed Countries

8.b By 2020, develop and operationalize a global strategy for youth employment and implement the Global Jobs Pact of the International Labour Organization



## **Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation**

9.1 Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all

9.2 Promote inclusive and sustainable industrialization and, by 2030, significantly raise industry's share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries

9.3 Increase the access of small-scale industrial and other enterprises, in particular in developing countries, to financial services, including affordable credit, and their integration into value chains and markets

9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities

9.5 Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending

9.a Facilitate sustainable and resilient infrastructure development in developing countries through enhanced financial, technological and technical support to African countries, least developed countries, landlocked developing countries and small island developing States

9.b Support domestic technology development, research and innovation in developing countries, including by ensuring a conducive policy environment for, inter alia, industrial diversification and value addition to commodities

9.c Significantly increase access to information and communications technology and strive to provide universal and affordable access to the Internet in least developed countries by 2020



## **Goal 10. Reduce inequality within and among countries**

10.1 By 2030, progressively achieve and sustain income growth of the bottom 40 per cent of the population at a rate higher than the national average

10.2 By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status

10.3 Ensure equal opportunity and reduce inequalities of outcome, including by eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and action in this regard

10.4 Adopt policies, especially fiscal, wage and social protection policies, and progressively achieve greater equality

10.5 Improve the regulation and monitoring of global financial markets and institutions and strengthen the implementation of such regulations

10.6 Ensure enhanced representation and voice for developing countries in decision-making in global international economic and financial institutions in order to deliver more effective, credible, accountable and legitimate institutions

10.7 Facilitate orderly, safe, regular and responsible migration and mobility of people, including through the implementation of planned and well-managed migration policies

10.a Implement the principle of special and differential treatment for developing countries, in particular least developed countries, in accordance with World Trade Organization agreements

10.b Encourage official development assistance and financial flows, including foreign direct investment, to States where the need is greatest, in particular least developed countries, African countries, small island developing States and landlocked developing countries, in accordance with their national plans and programmes

10.c By 2030, reduce to less than 3 per cent the transaction costs of migrant remittances and eliminate remittance corridors with costs higher than 5 per cent



**Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable**

11.1 By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums

11.2 By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons

11.3 By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries

11.4 Strengthen efforts to protect and safeguard the world’s cultural and natural heritage

11.5 By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations

11.6 By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management

11.7 By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities

11.a Support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning

11.b By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015–2030, holistic disaster risk management at all levels

11.c Support least developed countries, including through financial and technical assistance, in building sustainable and resilient buildings utilizing local materials



**Goal 12. Ensure sustainable consumption and production patterns**

12.1 Implement the 10Year Framework of Programmes on Sustainable Consumption and Production Patterns, all countries taking action, with developed countries taking the lead, taking into account the development and capabilities of developing countries

12.2 By 2030, achieve the sustainable management and efficient use of natural resources

12.3 By 2030, halve per capita global food waste at the retail and consumer levels

and reduce food losses along production and supply chains, including post-harvest losses

12.4 By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment

12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse

12.6 Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle

12.7 Promote public procurement practices that are sustainable, in accordance with national policies and priorities

12.8 By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature

12.a Support developing countries to strengthen their scientific and technological capacity to move towards more sustainable patterns of consumption and production

12.b Develop and implement tools to monitor sustainable development impacts for sustainable tourism that creates jobs and promotes local culture and products

12.c Rationalize inefficient fossil-fuel subsidies that encourage wasteful consumption by removing market distortions, in accordance with national circumstances, including by restructuring taxation and phasing out those harmful subsidies, where they exist, to reflect their environmental impacts, taking fully into account the specific needs and conditions of developing countries and minimizing the possible adverse impacts on their development in a manner that protects the poor and the affected communities



## **Goal 13. Take urgent action to combat climate change and its impacts\***

13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries

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\* Acknowledging that the United Nations Framework Convention on Climate Change is the primary international, intergovernmental forum for negotiating the global response to climate change.

13.2 Integrate climate change measures into national policies, strategies and planning

13.3 Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning

13.a Implement the commitment undertaken by developed-country parties to the United Nations Framework Convention on Climate Change to a goal of mobilizing jointly \$100 billion annually by 2020 from all sources to address the needs of developing countries in the context of meaningful mitigation actions and transparency on implementation and fully operationalize the Green Climate Fund through its capitalization as soon as possible

13.b Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and small island developing States, including focusing on women, youth and local and marginalized communities



## **Goal 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development**

14.1 By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution

14.2 By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans

14.3 Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels

14.4 By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics

14.5 By 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on the best available scientific information

14.6 By 2020, prohibit certain forms of fisheries subsidies which contribute to overcapacity and overfishing, eliminate subsidies that contribute to illegal, unreported and unregulated fishing and refrain from introducing new such subsidies, recognizing that appropriate and effective special and differential treatment for developing and least developed countries should be an integral part of the World Trade Organization fisheries subsidies negotiation<sup>1</sup>

14.7 By 2030, increase the economic benefits to small island developing States and least developed countries from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism

14.a Increase scientific knowledge, develop research capacity and transfer marine technology, taking into account the Intergovernmental Oceanographic Commission Criteria and Guidelines on the Transfer of Marine Technology, in order to improve ocean health and to enhance the contribution of marine biodiversity to the development of developing countries, in particular small island developing States and least developed countries

14.b Provide access for small-scale artisanal fishers to marine resources and markets

14.c Enhance the conservation and sustainable use of oceans and their resources by implementing international law as reflected in the United Nations Convention on the Law of the Sea, which provides the legal framework for the conservation and sustainable use of oceans and their resources, as recalled in paragraph 158 of “The future we want”



**Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss**

15.1 By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements

15.2 By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally

15.3 By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world

<sup>1</sup> Taking into account ongoing World Trade Organization negotiations, the Doha Development Agenda and the Hong Kong ministerial mandate.

15.4 By 2030, ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development

15.5 Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species

15.6 Promote fair and equitable sharing of the benefits arising from the utilization of genetic resources and promote appropriate access to such resources, as internationally agreed

15.7 Take urgent action to end poaching and trafficking of protected species of flora and fauna and address both demand and supply of illegal wildlife products

15.8 By 2020, introduce measures to prevent the introduction and significantly reduce the impact of invasive alien species on land and water ecosystems and control or eradicate the priority species

15.9 By 2020, integrate ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts

15.a Mobilize and significantly increase financial resources from all sources to conserve and sustainably use biodiversity and ecosystems

15.b Mobilize significant resources from all sources and at all levels to finance sustainable forest management and provide adequate incentives to developing countries to advance such management, including for conservation and reforestation

15.c Enhance global support for efforts to combat poaching and trafficking of protected species, including by increasing the capacity of local communities to pursue sustainable livelihood opportunities



**Goal 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels**

16.1 Significantly reduce all forms of violence and related death rates everywhere

16.2 End abuse, exploitation, trafficking and all forms of violence against and torture of children

- 16.3 Promote the rule of law at the national and international levels and ensure equal access to justice for all
- 16.4 By 2030, significantly reduce illicit financial and arms flows, strengthen the recovery and return of stolen assets and combat all forms of organized crime
- 16.5 Substantially reduce corruption and bribery in all their forms
- 16.6 Develop effective, accountable and transparent institutions at all levels
- 16.7 Ensure responsive, inclusive, participatory and representative decision-making at all levels
- 16.8 Broaden and strengthen the participation of developing countries in the institutions of global governance
- 16.9 By 2030, provide legal identity for all, including birth registration
- 16.10 Ensure public access to information and protect fundamental freedoms, in accordance with national legislation and international agreements
- 16.a Strengthen relevant national institutions, including through international cooperation, for building capacity at all levels, in particular in developing countries, to prevent violence and combat terrorism and crime
- 16.b Promote and enforce non-discriminatory laws and policies for sustainable development



**Goal 17. Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development**

**Finance**

- 17.1 Strengthen domestic resource mobilization, including through international support to developing countries, to improve domestic capacity for tax and other revenue collection
- 17.2 Developed countries to implement fully their official development assistance commitments, including the commitment by many developed countries to achieve the target of 0.7 per cent of gross national income for official development assistance (ODA/GNI) to developing countries and 0.15 to 0.20 per cent of ODA/GNI to least developed

countries; ODA providers are encouraged to consider setting a target to provide at least 0.20 per cent of ODA/GNI to least developed countries

17.3 Mobilize additional financial resources for developing countries from multiple sources

17.4 Assist developing countries in attaining long-term debt sustainability through coordinated policies aimed at fostering debt financing, debt relief and debt restructuring, as appropriate, and address the external debt of highly indebted poor countries to reduce debt distress

17.5 Adopt and implement investment promotion regimes for least developed countries

## **Technology**

17.6 Enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation and enhance knowledge sharing on mutually agreed terms, including through improved coordination among existing mechanisms, in particular at the United Nations level, and through a global technology facilitation mechanism

17.7 Promote the development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries on favourable terms, including on concessional and preferential terms, as mutually agreed

17.8 Fully operationalize the technology bank and science, technology and innovation capacity-building mechanism for least developed countries by 2017 and enhance the use of enabling technology, in particular information and communications technology

## **Capacity-building**

17.9 Enhance international support for implementing effective and targeted capacity-building in developing countries to support national plans to implement all the Sustainable Development Goals, including through North-South, South-South and triangular cooperation

## **Trade**

17.10 Promote a universal, rules-based, open, non-discriminatory and equitable multilateral trading system under the World Trade Organization, including through the conclusion of negotiations under its Doha Development Agenda

17.11 Significantly increase the exports of developing countries, in particular with a view to doubling the least developed countries' share of global exports by 2020

17.12 Realize timely implementation of duty-free and quota-free market access on a lasting basis for all least developed countries, consistent with World Trade Organization decisions, including by ensuring that preferential rules of origin applicable to imports from least developed countries are transparent and simple, and contribute to facilitating market access

## **Systemic issues**

### *Policy and institutional coherence*

17.13 Enhance global macroeconomic stability, including through policy coordination and policy coherence

17.14 Enhance policy coherence for sustainable development

17.15 Respect each country's policy space and leadership to establish and implement policies for poverty eradication and sustainable development

### *Multi-stakeholder partnerships*

17.16 Enhance the Global Partnership for Sustainable Development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the Sustainable Development Goals in all countries, in particular developing countries

17.17 Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships

### *Data, monitoring and accountability*

17.18 By 2020, enhance capacity-building support to developing countries, including for least developed countries and small island developing States, to increase significantly the availability of high-quality, timely and reliable data disaggregated by income, gender, age, race, ethnicity, migratory status, disability, geographic location and other characteristics relevant in national contexts

17.19 By 2030, build on existing initiatives to develop measurements of progress on sustainable development that complement gross domestic product, and support statistical capacity-building in developing countries



The 2030 Agenda for Sustainable Development provides the main reference for development policies in the 47 least developed countries (LDCs). The eradication of poverty is among the most prominent of the Sustainable Development Goals, and worldwide the challenge of poverty eradication is the greatest for the LDCs. This is why UNCTAD argues that the least developed countries is the battleground where the Sustainable Development Goals will be won or lost.

Revitalizing sustainable economic growth and employment creation in the LDCs and accelerating the structural transformation of their economies will be indispensable to achieve the Sustainable Development Goals. Although external factors have a strong impact on the pace and structure of economic growth in LDCs, the Governments of these countries can influence the process of structural transformation and reduce their external vulnerability by choosing appropriate policies. It is essential that LDCs themselves take the lead in their development policy design and implementation.

*Achieving the Sustainable Development Goals in the Least Developed Countries – A Compendium of Policy Options* reviews the policy recommendations derived from the analytical reports of UNCTAD's Division for Africa, Least Developed Countries and Special Programmes, and identifies the strategies that could help LDC policymakers achieve the Goals. Specifically, this Compendium identifies possible types of instruments in various policy areas that will foster development progress, enhance growth, and support poverty eradication and economic structural transformation. It addresses the overall framework for development policies in LDCs, development-friendly macroeconomic policies, measures to support the creation and/or strengthening of productive capacities, and strategies to take advantage of the opportunities arising from trade and finance. The Compendium also suggests several elements to strengthen international support measures for LDCs within the global economic system. It therefore also serves as an appeal to LDC development partners for collaborative support at the international level.