



Issues Note for Theme 3

Structural transformation as a driver of prosperity

Issues Note

Whilst LDCs continue to make efforts to enhance several areas of overall economic performance, trade and human development, a critical challenge remains their inability to initiate a sustained process of structural transformation of their economies. The importance of structural transformation was reflected in the Istanbul Programme of Action (IPoA) for the LDCs for the decade 2011-2020¹, with expanding productive capacity being the first priority. This involves the process of creating new areas of activities and the shifting of resources from low value-added and low productivity to higher value-added and high productivity activities. During the past decade, LDCs have been largely unable to overcome their economic vulnerability and structurally transform their economies to build resilience against internal and external shocks and crises. The COVID-19 pandemic has further highlighted these vulnerabilities.

The state of structural transformation in LDCs

The starting point of structural transformation has traditionally been the transformation towards a smaller but more productive agricultural sector. The agricultural sector continues to employ more than half of the population in the LDCs and constitutes the primary income source for rural areas, although there is a perceptible decrease in the share of the population employed in agriculture. Value added per worker in agriculture increased by 12 per cent between 2011 and 2018, rising from 769.8 to 860.4, expressed in constant 2010 dollars. The three-year average percentage of arable land equipped with

¹ <http://unohrrls.org/UserFiles/File/IPoA.pdf>

irrigation remained more or less constant, down slightly from 11.5 per cent during the period 2009–2011 to 11.2 per cent during 2014–2016. Fertilizer consumption increased between 2011 and 2016, from 24.6 kg per ha of arable land to 27.2 kg but was still well below the average for other developing countries. This demonstrates that the LDCs agriculture sector is relatively less productive than that of developing countries².

Given the still very significant share of employment in agriculture in African LDCs, there is a high potential for enhancing the contribution of the agriculture sector to achieving structural transformation in LDCs and ultimately achieving sustainable development. Many LDCs face two simultaneous challenges: they must accelerate growth of agricultural labor productivity, and substantially generate employment in other sectors³.

In addition to the growing productivity of the agriculture sector, structural transformation is linked to a growing contribution of the manufacturing and services sectors to the economy. In LDCs between 2011 and 2019, the contribution of manufacturing to GDP remained relatively constant, at about 10 per cent and the contribution of other sectors also suggests minimal change⁴ which implies that little progress has been made regarding structural economic transformation. Countries such as Bangladesh, Cambodia, Ethiopia, and Myanmar expanded their share in the group's total manufacturing value added⁵.

The share of manufactured products in LDC exports increased from 22 per cent to 40 per cent in the period 2011-2019, mainly due to a higher share of clothing products in some LDCs. The majority of LDC economies have nonetheless remained largely commodity dependent and at the bottom of the global value chains ladder⁶ and are therefore vulnerable to external shocks including volatile commodity prices.

Regional and global value chains (GVCs) constitute important opportunities for LDCs to become part of the global economy, to absorb knowledge and technology, and add value to their products. Many LDCs are endowed with basic inputs and commodities that would normally form the foundation for regional or global value chains. Most of these commodities hold high potential for significant value chain processes that remain largely untapped. As a consequence of this marginalization, LDCs could remain providers of low-value primary materials, missing out on industrialization and value added which is usually an intermediary step towards a modern, diversified, and prosperous economy.

To move up global value chains, especially commodity-dependent countries must diversify their economy and invest in greater value addition to their products. The value of the product concentration of exports index⁷ for LDCs as a group halved from 0.42 in 2011 to 0.21 in 2019 but was still three times higher than the world's value. Angola and Guinea-Bissau showed the highest product concentration of exports, followed by Kiribati, Chad, Tuvalu, and Mali. However, there has been some progress: productive capacities increased in several LDCs, confirming Senegal, Sierra Leone, Djibouti, and Nepal as

² OHRLLS (2021): Report on the State of the LDCs.

³ UNCTAD (2020): LDC Report 2020: Productive Capacities for the New Decade.

⁴ WDI, World Bank. The share of agriculture rose moderately (from 21% to about 24%), while that of services shows a declining trend (by 4 percentage points from about 43% to 39%) towards the end of the IPoA implementation period.

⁵ OHRLLS (2020): Secretary-General Report on the Implementation of the Istanbul Programme of Action (IPoA).

⁶ OHRLLS (2020): Secretary-General Report on the Implementation of the Istanbul Programme of Action (IPoA).

⁷ The product concentration index shows to which degree exports and imports of individual economies or of groups of economies are concentrated on a few products rather than being distributed in a more homogeneous manner among several products.

countries with the most diversified export structure among the LDCs in 2019⁸. Integration into regional and global value chains offer the opportunity to create new productive activities and new quality jobs, which are necessary for the structural transformation of LDC economies⁹.

Growth in the share of services in output and employment is also generally seen as a sign of economic modernization. The LDCs average share of value-added services as a percentage of GDP grew from about 43 per cent in 2011 to about 45 per cent in 2017. These values overlook the strong heterogeneity among different service subsectors. Especially in African LDCs the bulk of tertiary employment is concentrated in less knowledge-intensive services such as retail trade, accommodation, and food, which are typically low-productivity and low value-added activities and often carried out in the informal sector¹⁰. The participation of LDCs in global exports of commercial services is also still negligible as they accounted for just about 0.63 per cent in 2020¹¹ of the global exports, compared to 0.65 per cent in 2011. LDCs experienced a decline in exports of commercial services from 0.78 per cent in 2019 to 0.63 per cent in 2020 which demonstrates the impact of COVID-19 on LDCs' services sector, in particular, the tourism sub-sector which is one of the hardest hit by the pandemic.

Differences in Asia-Pacific and African LDCs

Asian LDCs as a group are undergoing what most resembles a more classical process of industrialization. Several of the Asian LDCs have seen a rising share of manufacturing in output and employment, specialization in manufacturing exports, and have experienced the strongest performance in terms of labour productivity growth, together with the attendant reduction of poverty levels and stronger progress in social outcomes.

There are also disparities in the commercial services exports by regions. In 2019, exports of LDCs in Africa continued to account for around half of LDCs' total commercial services exports, while the eight LDCs in Asia accounted for 44.9 per cent. LDCs' services exports remained concentrated within a few economies. The top ten leading exporters accounted for 73.3 per cent of the group's services receipts, almost a 7 percentage points increase in comparison to 2011. The share of other LDCs in total exports declined from 33.5 per cent in 2011 to 26.7 per cent in 2019, indicating that an increasing number of LDCs face challenges in integrating in global services markets¹².

Looking at the economic structure in many LDCs, there is a risk of early de-industrialization where LDCs begin to experience not just falling shares of manufacturing in employment, but also, falling manufacturing value added, as a share of GDP. This is a phenomenon that Rodrik (2015) highlighted in his empirical paper where he observed that some developing countries were running out of industrialization opportunities sooner and at much lower levels of income

⁸ UNCTAD (2020): LDC Report 2020: Productive Capacities for the New Decade.

⁹ OECD (2021): Africa's Development Dynamics: Digital Transformation for Quality Jobs.

¹⁰ UNCTAD (2020): LDC Report 2020: Productive Capacities for the New Decade.

¹¹ <https://unctadstat.unctad.org/>

compared to the experience of early industrializers. This is especially the case for many African LDCs that are exhibiting less growth in manufacturing, industry, and services, compared to the Asian-Pacific LDCs¹².

Asian LDCs need to deepen and broaden their structural transformation, and further build their entrepreneurial and technological capabilities, in order to maintain the process of growth-enhancing structural transformation¹³.

Challenges for structural transformation in LDCs

Several challenges have contributed to the LDCs failure to progress towards productive structural transformation. Challenges are manifold and include difficulties in integrating in the global value chains as described above, poor infrastructure, limited availability of human capacities, insufficient investments, challenges in accessing credit, and unfavorable legal and regulatory frameworks.

Ensuring access to affordable, reliable, sustainable, and modern energy for all is another key condition for achieving structural economic transformation. However, LDCs continue to face severe challenges in access to energy. According to the 2021 SDG 7 tracking report, the share of LDCs' population with access to electricity stood at 53 per cent in 2019 having increased from 33 per cent in 2010. Rural energy access remains even lower at around 40 per cent in 2019. Moreover, there are substantial variations within LDCs, with LDCs in Africa fairing worse relative to their counterparts in other regions. In 2019, fifteen LDCs make-up the top-20 access-deficit countries, with the largest populations in the world lacking access to electricity. LDCs face challenges at three levels: generation, transmission, and utilization of energy. These countries lack the capacity to mobilize the large amounts of financing that are required to invest in major power generation projects. Although international financial flows to developing countries in support of clean and renewable energy have doubled since 2010, reaching USD21.4 billion in 2017, only 12 per cent reached the LDCs¹⁴.

Reliable and affordable transport infrastructure and services are essential for the efficient operation of existing productive assets and enterprises in LDCs, attracting new investment, connecting producers to markets, assuring meaningful economic development, and promoting regional integration and therefore plays an essential role in structural transformation. Seventeen LDCs are also landlocked and therefore reliable transit transport infrastructure and services are fundamental to link these countries to global markets. LDCs are however faced with inadequate and transport infrastructure as well as missing links. In 2018, LDCs accounted for only 0.9 per cent of global air freight, rising only slightly from 0.8 per cent in 2011¹⁵. Ethiopia accounts for some 30 per cent of the LDCs group total. The share of the LDCs container port traffic, relative to the world, during the Istanbul Programme of Action period was a minuscule 0.01 per cent. Inadequate data in LDCs on transport infrastructure such as roads and rail also remain a challenge and therefore affects planning.

¹² Rodrik, D. (2015): Premature Deindustrialization, NBER Working Paper Series, Working Paper 20935.

¹³ UNCTAD (2020): LDC Report 2020: Productive Capacities for the New Decade.

¹⁴ SDG 7 Tracking Report, 2020.

¹⁵ UN A/75/72

Developing a vibrant and dynamic private sector is also an indispensable element of building productive capacities and achieving structural transformation. The private sector has a key role to play by supporting inclusive growth, poverty reduction, job creation, and access to critical goods and basic services and by providing tax revenues. The development of the private sector requires a comprehensive strategy aimed at creating an overall conducive business environment including through reducing the cost of doing business, reducing production and trade costs, and ensuring protection of property rights, amongst others. Private sector development in LDCs has been constrained by access to finance, especially for micro-, small-, and medium-sized enterprises (MSMEs), limited supply and high costs of energy, skill gaps and limited ICT capacities. The LDCs also continue to face significant challenges that affect their competitiveness to attract foreign direct investment including, high operating and trading costs, deficient infrastructure, limited logistics services, limited human capital and the shortage of potential local partners. To support the contribution of private business to economic development and employment, public policy needs to set the enabling environment that encourages entrepreneurship and investment, including FDI. Many LDCs have embarked on numerous reforms to make it easier for companies to do business but more remains to be done. In 2018, 162,763 new businesses were registered across 31 of the LDCs¹⁶.

Technology as a driver of structural transformation

Looking ahead, new technologies have enabled a number of services and agro-industries that share characteristics with the traditional move towards a higher share of manufacturing¹⁷.

Information and communication technologies (ICT) have become highly important and should be considered as critical infrastructure to LDCs. Technology development offers a variety of opportunities for improving the value of production processes, such as the potential to generate high-yield and climate-change proof seed varieties in the agricultural sector, advance production techniques in the manufacturing sector, etc. The digital economy has become increasingly inseparable from the functioning of a modern economy in general and may hold great potential for LDCs¹⁸.

However, the low levels of physical and human capital in LDCs may make the expansion of structural transformation via these areas more challenging, given that emerging technologies also lead to more capital and skill intensity. Based on the impact of the COVID-19 pandemic, the climate crisis and calls for “building back better”, the focus is very much on sustainable structural transformation that is lasting, inclusive and incorporates technical developments.

Digital developments raised hopes of leapfrogging, and in some instances, LDCs have been successful in developing digital strategies and making use of emerging technologies. However, transforming firms and sectors into digital enterprises is a costly and successive process that requires capacities, skills, and industrial policies that strengthen and develop the technological capabilities of firms. Leapfrogging requires functioning digital ecosystems, with the right connectivity, and

¹⁶ OHRLLS (2020): Secretary-General Report on the Implementation of the Istanbul Programme of Action (IPoA).

¹⁷ Page, J. (2018): Rethinking Africa’s Structural Transformation – The rise of new industries, Brookings Institute. (<https://www.brookings.edu/research/rethinking-africas-structural-transformation/>)

¹⁸ UNCTAD (2020): LDC Report 2020: Productive Capacities for the New Decade.

relevant digital skills in place¹⁹. Internet access in LDCs stands at only 19 per cent in 2019. This results from low internet coverage especially in rural and remote areas, the cost of using the internet, lack of local content and inadequate relevant skills in LDCs. In 2019, only 14 per cent of women in LDCs were using the internet as compared to 25 per cent of men. There is need to promote affordable broadband connectivity and the right digital access and skills in LDCs. Without technological capabilities and the right connectivity, LDCs are at risk of falling behind again - this time in the global digital transformation race²⁰. The importance of closing this digital divide has been vividly exposed during the COVID-19 pandemic.

The way forward

While manufacturing will continue to be important, growth in ICT services and sustainable tourism in LDCs might have the potential to better drive growth, especially in African LDCs. The potential for agroindustry is enormous, given the expected population growth on the continent. Key sectors of strategic interest in LDCs, such as agriculture, manufacturing, and services, need a reset and technologies represent an unrealized opportunity.²¹

For the LDCs to meet the SDGs by 2030 and be on a sustained path towards convergence with other developing countries, it is important to critically assess which sectors can contribute most to higher productivity, enhance growth and ultimately, create decent jobs and eradicate poverty. In addition to technological advancements, initiatives for green growth to “build back better” after the COVID-19 pandemic also call for a discussion on different paths for sustainable development and sustainable structural transformation in LDCs.

It is clear that achieving structural transformation by LDCs require a multifaceted but well-coordinated approach involving several stakeholders. There is no “one size fits all” approach or a single pattern of structural transformation. Strategies geared towards increasing trade and developing productive capacities must address the context-specific realities of LDCs and harness their respective comparative advantages.

¹⁹ OECD (2021): Africa's Development Dynamics: Digital Transformation for Quality Jobs.

²⁰ ITU (2019): Measuring digital development – Facts and Figures.

²¹ UNCTAD (2020): LDC Report 2020: Productive Capacities for the New Decade.

Guiding questions

- What are the potential sources for enhanced economic diversification in LDCs over the next decade as well as to facilitate COVID-19 economic recovery?
- How can the emerging technologies be leveraged to support sustainable production in LDCs and enhance structural transformation endeavors of LDCs?
- How can LDCs improve opportunities for productive employment utilizing technologies?
- How can infrastructure development be accelerated to become an enabler for structural transformation?
- What policies, both at national and international level, should be adopted by LDCs to enhance growth of their services sector and to ensure services sector are drivers of growth and structural economic transformation in LDCs?
- What are the key enablers to integrating the LDCs into regional and global value chains and how can LDCs be supported, including by trade policies?
- What are some of the best practices for promoting entrepreneurship, innovation, value addition, and closing the digital divide in LDCs?