UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT

Ethiopia

Technical and statistical report

Productive capacities development: Challenges and opportunities

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Acknowledgements

Productive Capacities Development: Challenges and Opportunities: The Case of Ethiopia, which comprises the "National Productive Capacities Gap Assessment (NPCGA) of Ethiopia" and the "Holistic Productive Capacities Development Programme (HPCDP) for Ethiopia", was prepared under the overall guidance of Paul Akiwumi, Director, Division for Africa, Least Developed Countries and Special Programmes of UNCTAD. The report team was led by Mussie Delelegn (Productive Capacities and Sustainable Development Branch) and included Andrzej Bolesta (PCDB) and Tadele Ferede (Addis Ababa University), with contributions from Stefanie Gary, Luyao (Kate) Wang and Huidi Feng.

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Executive Summary

Productive Capacities Development: Challenges and Opportunities – The Case of Ethiopia examines the country's productive capacities to advance structural transformation and economic diversification, as well as related gaps and necessary policy responses. The publication consists of an Introduction, which also analyses the state of Ethiopia's economic development, as well as Part I and Part II. Part I – *The National Productive Capacities Gap Assessment of Ethiopia* (NPCGA) – provides data-driven and evidence-based articulation of the challenges facing Ethiopia in developing its productive capacities and kick-starting the process of structural economic transformation. The NPCGA's value added lies in its consistent and systemic application of the eight components of the Productive Capacities Index (PCI), key indicators used in the construction of the index, and a closer examination of Ethiopia's micro-, meso-, and macro-economic policies, institutional and governance frameworks, as well as challenges and opportunities. Part II – *The Holistic Productive Capacities Development Programme for Ethiopia* (HPCDP) – provides details on how best to address the gaps and limitations and key binding constraints to Ethiopia's development through a comprehensive programme. The HPCDP is tailored to specific domestic circumstances, comparative advantages, and national institutional frameworks and provides strategic orientation and action-oriented, step-by-step approaches to tackle these key binding constraints. It is designed to address Ethiopia's structural development challenges, as articulated in the NPCGA, by moving away from the practice of short-term, sectoral and fragmented, project-based interventions towards long-term, integrated, and programme-based approaches to development. Both, the NPCGA and the HPCDP have been discussed and validated by the Government of Ethiopia at technical and high-level policy dialogues organised in 2022 and 2023, respectively.

Ethiopia has made significant socioeconomic progress in the past two decades through public-led investments in economic and social infrastructure. Growth has been driven by the expansion in services and a boom in construction, with the contribution of agriculture to Gross Domestic Product (GDP) continuously declining, but with more than two-thirds of the labour force still employed in the sector. The contribution of manufacturing to overall growth and employment has remained low. Despite certain dynamism, the pace of growth has gradually slowed in recent years due to overlapping shocks, including internal conflict and instability, the COVID-19 pandemic, and global geopolitical tensions, which have caused renewed trade disruptions and triggered high oil and food prices. Moreover, climate-induced drought and other factors have dragged down the country's growth prospects and undermined the development of productive capacities.

Notwithstanding the progress made, the acceleration of Ethiopia's growth has not been associated with the fostering of economy-wide productive capacities, economic diversification, value-addition and the achievement of overall structural economic transformation. Nor has it led to employment creation and substantial poverty reduction. The slow process of building productive capacities and advancing structural transformation rests on sluggish productivity growth and weak forward and backward linkages among sectors, especially between agriculture and manufacturing. One of the peculiar characteristics of the sluggish structural transformation of the Ethiopian economy is manifested by the lack of significant shifts in the quality and complexity of its economic and social development, which includes changes to the economy's sectoral composition of output, productivity, export diversification and sophistication, competitiveness, and labour force participation. The lack of productive economic structural transformation and the country's continued high vulnerability to shocks are, indeed, associated with limited development of productive capacities.

Although Ethiopia has also made progress as captured by its performance in the overall Productive Capacities Index (PCI) over the past two decades, the country's PCI score has remained low compared to many other sub-Saharan African countries, including those located in close geographic proximity such as Kenya, Rwanda and Tanzania, slightly lower than the median for the least developed countries (LDCs) and far behind landlocked developing countries (LLDCs) and other developing countries (ODCs).

In 2022, Ethiopia ranked 169th out of 194 economies and territories in the overall PCI. Ethiopia's performance in the PCI is dragged down by its weak performance in institutions, human capital, energy, and ICT, as well as manufacturing value-added in GDP, and dependence on the production and export of low-value agricultural commodities, with little or no technological sophistication. Its persistent deficit in productive capacities constitutes a barrier to increased competitiveness, inclusion and productive transformation. Indeed, the low level of productive capacities is due to binding constraints and gaps in several key areas: national institutions, which is reflected by the country's weaknesses in policy making, implementation and management; deficits in human capital formation; low levels of ICT and innovation; inadequate physical and natural capital; a non-conducive business environment for the development of the private sector, and weak policy coherence and linkages. The country's performance in the structural change category of the PCI is characterised by a moderate shift in the contribution of agriculture to GDP, in favour of industry. However, the share of industry in GDP is driven by the State-led construction and transport sectors. Likewise, the services sector is predominantly characterised by low skills, low knowledge and low-technological intensity services. To kick-start inclusive and sustainable economic growth, including economic diversification, the country needs to act quickly and at scale in more innovative ways, by exploring opportunities across sectors that can help raise competitiveness and growth, and enable it to achieve structural economic transformation.

Since policies and strategies, as well as institutions may foster or constrain productive capacities, the economic management framework, including macroeconomic policies and strategies, needs to support the development of productive capacities by articulating their centrality at the macroeconomic and sectoral levels, creating a conducive environment, strengthening coherence and linkages, as well as setting key performance indicators and associated targets for effective monitoring and evaluation. Specifically, Ethiopia should: prioritise productive capacities for structural transformation; adopt a holistic approach; enhance industrialisation and sectoral development, and build linkages; strengthen human capital and address the mismatch in skills supply; create new jobs, particularly for youth; expand infrastructure and enhance connectivity, while facilitating green transformation; improve access to electricity; intensify support for private sector development and foster entrepreneurship; invest in ICT and innovation; leverage domestic and foreign direct investment (FDI); strengthen institutions and improve policy and coordination; address macroeconomic imbalances; improve financing for development; and ensure political stability. The role for the international community to support productive capacities building and structural transformation lies in enhancing benefits from regional integration; facilitating technology transfer and fostering R&D; supporting attracting FDI; facilitating infrastructure financing; and building capacity among the Government units and the private sector.

A holistic approach and wide-ranging policy recommendations are required, including the need for key actors to participate in the policy making processes, to consider mainstreaming productive capacities' development as a necessary enabler for boosting overall national capacity to ensure inclusive and sustainable development and to resiliently respond to and recover from shocks. Thus, macroeconomic and sectoral policies should prioritise structural economic transformation, diversification, and competitiveness as tools for ensuring sustainability. This should be supported by designing a sustainable financing framework to ensure that the means necessary to progress towards long-term sustainable development are consistent with the country's aspirations, as well as the objectives of the 2030 Agenda for Sustainable Development and the African Union's

Agenda 2063. The country needs to put in place the necessary structures, institutions, policies, and resources to undertake mission-oriented, and purpose-built interventions to improve productive capacities for sustainable development. In the short and intermediate periods, Ethiopia needs to put in place mechanisms to resolve internal conflicts, restore macroeconomic stability and create the foundations for the realisation of its development ambitions, which will be achieved by fostering economy-wide productive capacities and achieving structural economic transformation.

The *Holistic Productive Capacities Development Programme for Ethiopia* therefore consists of six interlinked pillar intervention areas: (I) Agriculture modernisation, manufacturing and value addition; (II) International trade and integration; (III) Infrastructure (including transport, energy, and water); (IV) Innovation and technology development; (V) Human development and private sector; (VI) Institution building and coordination. These are also divided into sub-pillars: (Ia) Modernisation of agriculture through building linkages and diversification; I(b): Industrialisation through manufacturing; (IIa) Export orientation through special zones and intensification of services trade; (IIb) Foreign direct investment (FDI) and remittances; (IIc) Regional integration within the African Continental Free Trade Area (AfCFTA); (Va) Building human capital; (Vb) Facilitating private sector development.

The HPCDP is also closely aligned with national development strategies, including, *the National Import Substitution Strategy for Selected Manufacturing Industry Sub-sectors in Ethiopia* and *Ten Years Development Plan: A Pathway to Prosperity, 2021-2030*. The country's overall development strategy, which lays a vision of making Ethiopia an "African Beacon of Prosperity", is expected to achieve the following outcomes: (a) Improvement in income levels and wealth accumulation so that every citizen will be able to satisfy their basic needs and aspirations; (b) Improvement in access of basic economic and social services such as food, clean water, shelter, health, education, and other basic for every citizen regardless of their economic status; (c) Creating an enabling and just environment where citizens will be able to utilise their potentials and resources so that they lead quality life; (d) Improvement in social dignity, equality, and freedom where citizens can freely participate in every social, economic, and political affairs of their country regardless of their social background.

MAX.GROSS
30.480 KGS
67.200 LBS
TARE
3.840 KGS
8.465 LBS
NET
26.640 KGS
CU. CAP.
76.4 CU.M.

1. Introduction

The concept of productive capacities was developed by the United Nations Conference on Trade and Development (UNCTAD) in 2006 and is broadly defined as *the productive resources, entrepreneurial capabilities and production linkages that together determine a country's ability to produce goods and services that will help it grow and develop*. Productive resources refer to natural and human resources, as well as financial and physical capital. Entrepreneurial capabilities encompass both core and technological competencies. Production linkages include information exchange, resource flows and backward and forward linkages along the entire value chain. These interrelated elements, taken together, comprise a country's productive capacities, which enable inclusive economic growth and development.[1]

To operationalise the concept of productive capacities in the context of development policies, UNCTAD developed the Productive Capacities Index (PCI), which relies on eight categories to measure different elements of productive capacities – natural capital, human capital, transport, energy, ICT, institutions, private sector and structural change. The PCI is a composite index measuring productive capacities based on 42 indicators and eight components: Natural Capital, Human Capital, Transport, Energy, ICT, Private Sector, Institutions and Structural Change. The index ranges between 0 and 100, with higher numbers indicating a higher level of development of productive capacities.

The PCI analysis, together with an assessment of the micro and macroeconomic fundamentals of a country forms the basis of the National Productive Capacities Gap Assessment (NPCGA) – the Part I of this report. The NPCGA of Ethiopia closely examines the country's socioeconomic challenges, opportunities, and prospects. It identifies key binding constraints to socioeconomic development. It recommends a series of policy actions at the domestic level, together with international support measures (ISMs) aimed at fostering productive capacities and achieving structural economic transformation. The ultimate objective of the NPCGA is to support Ethiopia's policy makers and other national stakeholders in identifying developmental gaps and, subsequently, devising holistic policies to advance sustainable development. These are captured in the Holistic Productive Capacities Development Programme (HPCDP), which constitue Part II of this report. Indeed, assessing productive capacities through a robust framework helps to understand the sources of a country's systemic vulnerabilities and to identify the enablers of economic growth, including progress towards national and global development goals (UNCTAD, 2020a).

The publication starts with the examination of the micro- and macro-economic fundamentals of Ethiopia's economy. Using the Productive Capacities Index, it then progresses to the examination of the gaps in productive capacities and the identification of key binding constraints to

[1] https://unctad.org/system/files/official-document/ldc2006_en.pdf;
https://unctad.org/topic/least-developed-countries/productive-capacities-index

structural economic transformation and development. Subsequently, policies to be implemented by national stakeholders and international partners are listed to address these constraints and challenges. To operationalise the necessary actions, pillar interventions are identified and examined. This is followed by a stakeholder analysis and capacity assessment, sections on financing, modalities and implementation, and on sustainability, risks and performance monitoring.

Resilient & sustainable growth in Ethiopia is unlikely to transpire without the development of productive capacities & fostering structural economic transformation

1.1. Why do productive capacities matter for Ethiopia's development?

Ethiopia is a Sub-Saharan African LDC and a LLDC with a population estimated at 129.7 million (as of 2024) (UNCTADstat, 2024a), 65 percent of which are below the age of 30 (CSA, 2014). The country has experienced commendable economic performance during the last two decades. The country has also shown improved outcomes in education, health and poverty outcomes. Despite this progress, however, it has experienced fundamental and concurrent challenges, including a lack of structural economic transformation of its economy, heavy reliance on rain-fed subsistence agriculture, climate-induced drought, an underdeveloped manufacturing industry, low technology uptake, low productivity within and across sectors, high unemployment, a rising share of the informal sector, weak linkages within and across sectors, an increasing share of the low-skilled and low-technology services sector, and limited entrepreneurial capability, as well as weak institutions and violent conflict. These challenges have constrained sustainable development and job creation, an issue particularly relevant in the context of a rapidly growing young population. On the other hand, there are opportunities that can help the country to achieve robust growth and structural economic transformation, including natural resources (e.g. irrigable land, water resources, forests, minerals, biodiversity, wildlife resources, etc.), a young, dynamic population, potential for the development of agro-processing industries, substantial renewable energy resources, untapped commercial agriculture potential, and high domestic demand, among others.

Viewing them in a holistic manner, the fundamental and overlapping challenges facing the country stem from the underdevelopment of its domestic productive capacities. Resilient and sustainable growth in Ethiopia is unlikely to transpire without the development of its productive capacities that can facilitate structural economic transformation in favour of higher productivity sectors such as manufacturing. The development of productive capacities through targeted investments and smart policy interventions is critical for the country to achieve its economic and social objectives, because the former would lay solid foundations by fostering structural economic transformation, diversification, inclusiveness, and productive employment generation. Thus, it is crucial that development of productive capacities be placed at the centre of holistic economy-wide policy design and institution building. Productive capacities are particularly needed for achieving inclusive and sustainable growth, which will facilitate accelerated poverty reduction and expand employment opportunities. They are necessary for breaking the country's dependence on external financing and breaking the low-income trap. They also address existing economic vulnerabilities and contribute to improving resilience towards external shocks and growth fluctuations.

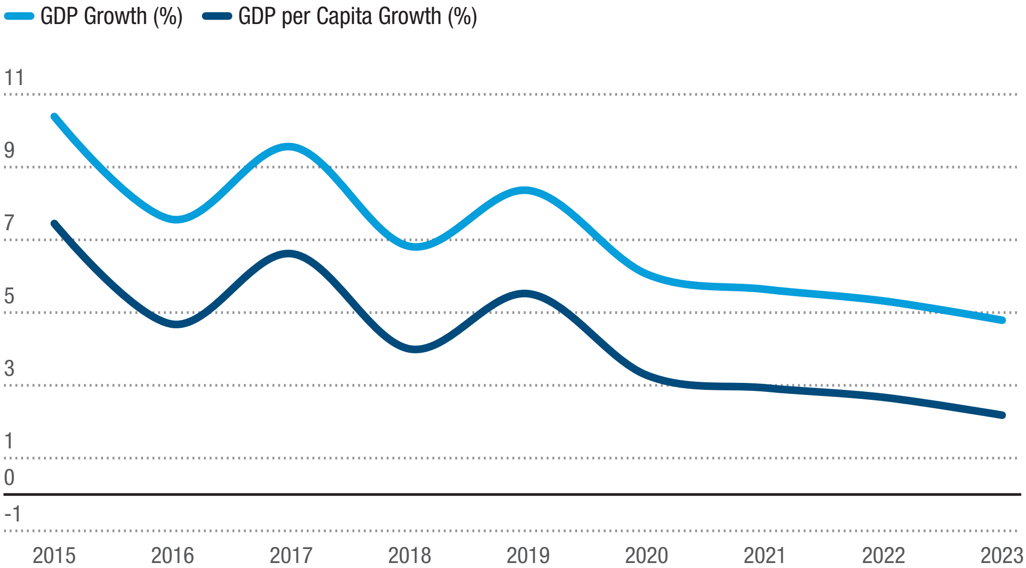
1.2. An overview of Ethiopia's economy and development

Ethiopia's economy has shown tremendous growth in the past two decades, especially when one considers the country's rapid population growth, when real GDP per capita increased by 5.4 annually between 2000 and 2022 (UNCTADstat, 2024b).

However, a substantial part of this gain was registered during the period of growth acceleration that began in 2003/4 (Figure 1). National statistics show that economic growth accelerated during the first and second Growth and Transformation Plans (GTP I, 2010/11-2014/15 and GTP II, 2015/16-2019/20), with real GDP increasing on average by 9.2 percent per year (MoPD, 2022a). Per capita income also increased from about USD 406 in 2010/11 to USD 1,212 in 2021/22 (MoPD, 2022a).

Growth has mainly been driven by the rapid expansion of services, particularly in recent years, though the sector remains largely informal, low-skill and low technology intensive. Nevertheless, its value added overtook that of agriculture in 2014/15. Industry has also been increasing its share in national output, although much of industrial activities originated from the construction subsector and to a certain extent mining, rather than from manufacturing.

Figure 1.1
Ethiopia's GDP and GDP per capita growth
(Percent)



Source: UNCTADstat (2024b).

The role of **external trade** in the economy has been in decline, diminishing from 34.9 percent of GDP in 2015/16 to 24.3 percent in 2020/21, with a significant reduction in the import to GDP ratio from 27.1 percent in 2015/16 to 16.5 percent in 2020/21 (NBE, 2021). At the same time, the export to GDP ratio remained dismal. Export performance has historically been low, both in value terms, as well as a share of GDP. The value of merchandise exports remained around USD 3 billion between 2010/11 and 2018/19 and finally fell to as low as USD 2.67 billion in 2018/19 (NBE, 2021). This is despite the various export support policy measures and incentive schemes provided during the GTP I and GTP II.

In addition, export performance has been weak, not only in terms of value but also in terms of its quality, diversification, and competitiveness. After 2018/19, export value picked up, with a relatively fast growth in 2020/21 and 2021/22, reaching USD 4.12 billion (NBE, 2021). Manufacturing exports represented a relatively low percentage of total merchandise exports. This reflects the small share of manufacturing value added in GDP, at 5.3 percent in 2020 (MoPD, 2021. The country's share in the global market for manufactured goods has also been minimal, indicating both a low manufacturing production base and poor competitiveness. On the one hand, Ethiopia ranked 141st (out of 154 countries) in competitive industrial performance in 2020 (UNIDO, 2022). On the other hand, the share of resource-based and low-technology manufactured exports accounted for more than 70 percent of total merchandise exports, indicating a weak link between industry and trade. Although there have been some encouraging results in the total value of merchandise exports, diversifying exports has, indeed, remained arduous and the main export commodities continue to be dominated by agricultural products, especially coffee, cut flowers, khat, and gold. The share of manufactured goods in total merchandise exports increased from 9 percent in 2010/11 to 17 percent in 2018/19, while the share of agriculture increased from 71 percent to 79 percent during the same period. The share of manufacturing then fell to 10 percent in 2020/21, before slightly reviving to 12 percent a year later (NBE, 2021).

Foreign Direct Investment (FDI) inflows recorded substantial annual growth since 2013, ranging from USD 1.34 billion in 2013 to 4.26 billion in 2021, as compared to the period 2000-2012, when flows ranged from USD 109 million in 2008 to USD 672 million in 2011 (UNCTADstat, 2024c). National statistics, which are provided according to their respective budget years, show that FDI increased from less than USD 1.07 billion in 2010/11 to USD 4.12 billion in 2016/17, the largest rise ever. FDI then declined for three consecutive years, reaching USD 2.42 billion in 2019/20. In 2020/21, FDI inflows increased again to USD 3.91 billion, partly due to the operational license given to Safaricom for private telecommunications services (NBE, 2021). FDI inflows stood at USD 3.67 billion in 2022 and 3.26 billion in 2023 (UNCTADstat, 2024c).

The ratio of gross fixed capital formation or investment to GDP has been continously declining in recent years. It reached a low of 28 percent in 2020/21, from a high of 38.4 percent in 2016/17. Gross domestic savings have also shown a declining trend, falling to 19 percent in 2020/21 from 24.1 percent in 2017/18 (MoPD, 2021). On the contrary, consumption expenditure has been rising, with private consumption leading the way during the same period. Given the socioeconomic and political challenges of recent years – including political instabilities and high inflationary pressures leading to rising uncertainty – it is not surprising to observe a declining share of investment and savings in the economy. This also indicates that the recent high GDP growth was mainly driven by growth in aggregate demand, rather than aggregate supply (or production).

The **employment** to population ratio declined during the past decade from 76.6 percent in 2013 to 59.5 percent in 2021. The decline was from 82.7 percent to 69 percent for male and from 69.8 percent to 50.2 percent for female. This indicates that the economy has been struggling to create adequate jobs for the expanding population, especially for the youth. Labour force participation rate also decined from 80.7 percent in 2005 to 79.8 percent in 2013, and fell further to 64.7 percent in 2021. Both male and female workers experienced a fall in labour force participation (from 85 percent in 2013 to 72.6 percent in 2021 for male, and from 74.6 percent to 56.8 percent for female) (ESS, 2021; CSA, 2014).

Since 2018/19, Ethiopia's **inflation** rate has been driven by the price changes in the food component of the consumption expenditure basket. This is related to signifcant demand-supply gap as a key driver of inflation. Food production has not been able to sufficently keep pace with the growing demand in recent years. The average general inflation rate reached 26.63 percent at the end of 2023/2024. Similarly, the food and non-food inflation rates reached 28.1 percent and 24.37 percent, respectively (ESS, 2024).

Over the recent years, the country's total public **debt** increased from USD 48.3 billion in 2017/18 to USD 57.4 billion in 2021/22, growing by 4.4 percent per year. External debt accounted for 48.7 percent of the total debt as of June 2022 (MoF, 2024). However, the share of total public debt to

GDP declined from 60 percent in 2017/18 to about 50 percent in 2021/22.[2] Although both domestic and external debt as share of GDP declined, the sharp decline in the former contributed mostly to a fall in the ratio of total debt to GDP. External debt as a share of GDP fell from 31.6 percent in 2017/18 to 24.5 percent in 2021/22 and domestic debt declined from 28.8 percent in 2010/11 to 25.6 percent in 2021/22 (MoF, 2024). The decline in the debt to GDP ratio has mainly been driven by the reduced growth rate of actual debt levels due to Government's decision to stop taking external commerial loans since 2018, although its impact on the overall total public loan volume was partly compansated for by increased domestic loans. Thus, the growth in debt stock was lower than the growth rate of GDP that ultimately led to a reduction in the overall debt to GDP ratio.

Ethiopia managed to reduce its national headcount **poverty** rate from 29.6 percent in 2010/11 to 23.5 percent by 2015/16 (PDC, 2018).[3] The decline was deeper in urban areas as the headcount poverty rate declined from 25.7 percent to 14.8 percent. In rural areas, the headcount poverty rate declined only modestly from 30.4 percent in 2010/11 to 25.6 percent in 2015/16.

Nevertheless, the national Gini coefficient, which depicts **income inequalities** rose from 0.30 in 2010/11 to 0.33 in 2015/16 (PDC, 2018). Inequality has generally been higher in urban areas than in rural areas. Consumption inequality increased in both urban (from 0.37 to 0.38) and rural (from 0.27 to 0.28) areas (PDC, 2018). About 50.2 percent of the rural population falls into the lowest two wealth quintiles, while 61.7 percent of urban households are in the top wealth quintile, indicating that the wealthiest households are concentrated in urban areas. The Gini coefficient for wealth is higher for urban households (0.26) than for rural households (0.22) (CSA and ICF, 2016).

Ethiopia's economic performance has been characterised by severe **macroeconomic imbalances,** despite wide-ranging reforms. The country's key macroeconomic challenges include rising fiscal deficits, a pressing debt burden, dwindling levels of foreign exchange, unemployment, and inflation, among others. The origins of these challenges can be traced to long years of unsustainable financing modalities, mismanagement and inefficiency in State-owned enterprises, and the stagnation of economy-wide productivity levels. These challenges continue to hinder structural economic transformation.

Companies point to the shortage of foreign exchange as a constraint to their ability to import critical inputs, which leads to reduced capacity utilisation, low output and ultimately decreasing pace of economic growth and transformation (MCC, 2020). High demand for foreign currency to import strategic commodities (such as fuel, fertilizer, inputs, medicine, food and other capital goods) and rising prices of imported goods in the domestic and international markets widened the gap between the currency's market value and its official exchange rate. The parallel market rate for US dollars was accelerating and exceeded the official rate by more than 100 percent in September 2022, pointing to a severe foreign exchange gap. This situation, combined with the new reform agenda agreed with the World Bank and International Monetary Fund (IMF), prompted Ethiopia's Government to introduce free floating exchange rate regime on 24 July 2024, effective immediately. Although the shift from a managed float to a free-float regime made the Ethiopian currency to depreciate by more than 100 %, it managed to temporarily narrow the gap between the official and parallel

High demand for foreign currency to import strategic or essential goods widened the gap between the currency's market value and its official exchange rate.

[2] The Debt to GDP ratio data for 2021/22 was taken from the Ministry of Finance's August 2022 Debt Bulletin. Thus, it does not represent the status of the debt to GDP ratio of the entire fiscal year.

[3] The Ethiopian Statistics Services (former Central Statistical Agency) in collaboration with the World Bank conducts Household Consumption Expenditure Surveys and Welfare Monitoring Surveys every five years. However, the latest data is not yet available.

markets for foreign currency. It is still too early to assess the full impact of the policy change. However, there are already some serious concerns about the implications of this bold decision by the Government. According to available information, prices of household consumer items and critically important supplies such as medicine and petroleum have immediately begun to soar triggering fear of hyperinflation.

Key factors for the country's persistent foreign exchange shortage include the country's weak export performance (in terms of quantity, diversification, and quality), poorly managed administration procedures, and burdensome regulations. Low export performance and accumulated external debt, along with increasing import spending also led to falling foreign exchange reserves. This exacerbated the balance of payment problems and limited the country's capacity to access foreign financing, not only for new projects but also for completing ongoing ones. A constraint analysis by the Millennium Challenge Corporation (2020) identified foreign exchange as one of the key binding constraints to Ethiopia's economic transformation.

Moreover, Ethiopia's **fiscal deficit** rose to an even higher level because of the country's dwindling rate of revenue mobilisation and rising financing needs, both of which were made worse by COVID-19, the internal violent conflict, and falling overall business activity. A declining share of domestic revenue, especially the low tax revenue to GDP ratio also made it hard to adequately cover both capital, as well as recurrent expenditure needs, leading to a high level of monetisation of the deficit which fuels inflation. The tax to GDP ratio has been low, averaging 10.4 percent between 2015/16 and 2020/21. As a result, the share of the national budget funded by domestic taxes also declined to 65 percent in 2020/21, compared to 68 percent in 2015/16 (MoPD, 2022b). Low revenue narrows the fiscal space and reduces the Government's flexibility to deal with domestic and external shocks. Large and growing level of informality, a low tax base, weak capacity and high levels of corruption in the tax administration system are among the key features of the country's fiscal status. Thus, fiscal constraints remain a challenge for Ethiopia to realise its prospects for structural economic transformation.

Ethiopia faces a plethora of adverse weather events and other **climate change** induced challenges, such as drought that have been causing widespread damage to agricultural output, as well as significantly affecting lives and livelihoods. Drought and related disasters, including El Niño (2015-2016), have been a recurring feature, historically affecting parts of highland areas (1972-1974 and 1984-1985) and lowland pastoral areas (2002-2003). Considering Ethiopia's agriculture heavily relies on a rain fed system, which is highly vulnerable to rainfall variability, these have had particularly substantial impacts. Recent drought conditions led to crop failure and the death of livestock, as the eastern and southern pastoral areas have experienced an unprecedented lack of rainfall in consecutive rainy seasons, a climatic anomaly not seen in at least 40 years (FEWS NET et al., 2022). In 2020/21, Ethiopia also experienced a severe locust invasion, which damaged agricultural production. In lowland areas, flooding and landslides have also displaced people and caused destruction to livelihoods. These challenges have recently become more intense, widespread, and frequent, which caused significant output losses and worsening food security.

The extreme weather events and other climate change induced challenges are also threatening the loss of biodiversity and disrupting the ecological balance as they lead to the loss of vegetation cover, change in the natural ecosystem, and threaten human existence. Human actions are also putting pressure on the land, causing degradation and the loss of fertile soil. Thus, climate change and environmental challenges are among the key binding constraints for Ethiopia's development aspirations.

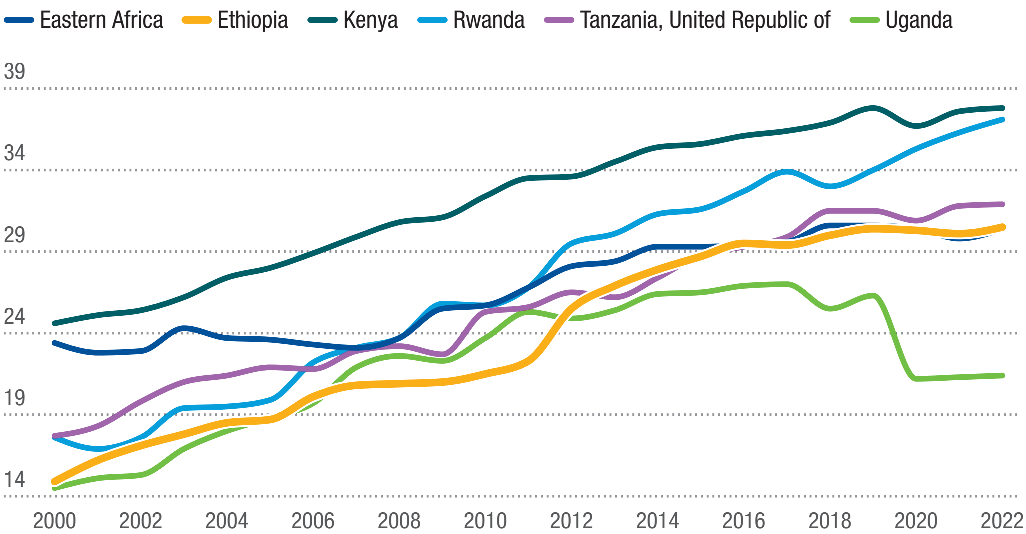
Finally, Ethiopia has been going through successive periods of **violent domestic conflict** fuelled by ethnic tensions and other forms of polarisation, as well as deficiencies in governance quality and democratic institutions that are instrumental in addressing them. Such challenges have been seriously affecting peace, stability, and sustainable economic development. They have continued to be among the key factors undermining the country's performance and progress towards achieving its various development goals.

2.
Part I: National Productive Capacities Gap Assessment

Ethiopia's policy makers are becoming increasingly conscious of the centrality of productive capacities for advancing inclusive and sustainable development, accelerating structural transformation and intensifying economic diversification. The country has made progress in the development of its overall productive capacities as measured by the Productive Capacities Index (PCI) over the past two decades. Ethiopia's PCI score doubled from 14.9 in 2000 to 30.5 in 2022. However, the country continues to have low levels of productive capacities compared with the lower-middle income and low-income countries from the region (e.g. Kenya (37.8), Rwanda (37.1) and Tanzania (31.9)). Ethiopia has managed to catch up with the median score for Eastern Africa[4] (30.4) and in 2012 overtook Uganda's and has steadily widened the gap since then (Uganda's score in 2022 was 21.4). Ethiopia's PCI score is slightly lower than the median for LDCs (30.9), and higher than the median for Africa's LDCs (27.6), as well as substantially lower than the median for LLDCs (37.2). The country ranked 169th out of 194 economies and territories in the overall PCI in 2022.

Ethiopia ranked 169th out of 194 economies and territories in the overall PCI in 2022

Figure 2.1
Ethiopia's Productive Capacities Index (PCI) in a comparative perspective



Source: UNCTADstat (2024d).

[4] For the purpose of this analysis Eastern Africa comprises of: Burundi, Comoros, Djibouti, Eritrea, Ethiopia, Kenya, Madagascar, Malawi, Mauritius, Mozambique, Rwanda, Seychelles, Somalia, South Sudan, Tanzania, Uganda, Zambia, Zimbabwe (see: UNCTAD Data Centre at: https://unctadstat.unctad.org/datacentre/).

2.1. Natural Capital

The Natural Capital component of the Productive Capacities Index measures the availability of extractive and agricultural resources, including rents generated from the extraction of the natural resource, less the cost of extracting the resource. To capture commodity dependence, natural capital decreases as the material intensity increases.

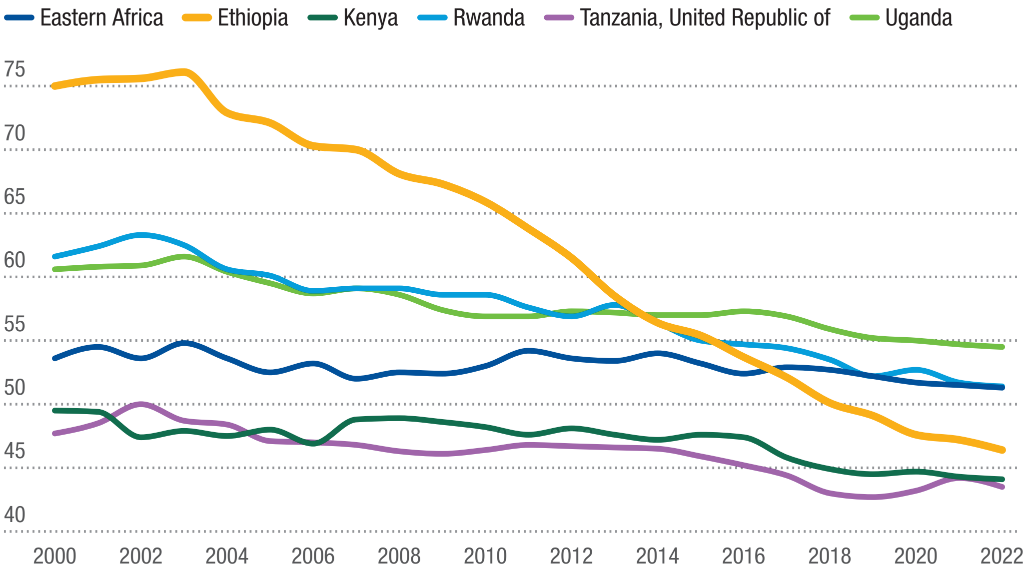
Ethiopia's natural capital includes both renewable and non-renewable assets. Included under the former are forests (timber and ecosystem services), mangroves, fisheries, agricultural land (cropland and pastureland), and protected areas, while non-renewable natural capital includes fossil fuels (oil, natural gas, and coal) and metals and minerals. Ethiopia has extraordinary potential for expanding exploitation and the development of the mining sector. The main mineral types include metallics (e.g. gold, platinum, iron, nickel, chromite and base metals), fertilizer raw materials (potash and phosphate), gemstones (sapphires, emeralds, fiery opals), energy minerals (lithium, graphite and tantalum, oil shale and coal), cement raw materials (limestone, gypsum, clay, pumice), ceramics raw minerals (kaolin, feldspar), glass raw minerals (silica sand), dimension stones (marble, granite, limestone, sandstone, diatomite, bentonite, soda ash, salt, graphite and sulphur), and natural gases and hydro-carbons.[5] Therefore, the Government has prioritised the development of industrial minerals, construction minerals, gold, potash and gemstones to increase the contribution of the mining sector to the economy. The number of investors licensed for mineral exploration and production increased in recent years. At the same time, however, between 2015/16 and 2020/21, the share of GDP of renewable natural capital such as forestry was small and further declined from 3.4 percent to 2.8 percent, while the share of fishing and mining and quarrying remained marginal at 0.1 percent and 0.3 percent, respectively (MoPD, 2021). Moreover, the contribution of natural capital has not been fully captured in the national accounts as the estimation method does not use the integrated environmental-economic accounting (EEA) framework.

At 46.4, Ethiopia's Natural Capital component of the PCI is above that of Kenya (44.1) and Tanzania (43.5) though between 2003-2022 its value decreased substantially from 76.1, ending up below that of Uganda (54.5), Rwanda (51.4) and the median for Eastern Africa (51.3). So did the country's natural capital value per capita from US$ 2,182 in 2015 to US$ 1,793 in 2018, which is now among the lowest in Central and East Africa (World Bank, 2022b). The share of natural capital in total wealth remained low at 16.7 percent (as of 2018) (World Bank, 2022b). Some of the elements of natural capital declined in value terms, including some protected areas, pastureland and forest timber. Multiple reinforcing factors are responsible for the decline such as policies, population pressure, deforestation, land fragmentation, and land-use practices, including, free grazing and tree removal from farmland, drought and floods.

In the 1990s, the Government of Ethiopia (GoE) embarked on a rural land certification programme that aimed at increasing tenure security and certifying long-term use rights for rural households. Despite land certification in rural areas, land tenure insecurity and a lack of common property rights remain a challenge. Therefore, the decline in the country's score in natural capital category is not the result of structural economic transformation. Rather, it is the consequence of natural and manmade disasters, which degrade available capital, undermining the potential and prospects for structural economic transformation and fostering productive capacities.

[5] See http://www.mom.gov.et/index.php/investing-in-ethiopia/natural-resources/

Figure 2.2
Natural Capital (PCI)



Source: UNCTADstat (2024d).

Ethiopia has made the sustainable management of its natural resources a priority as articulated in the 1995 Constitution (Article 92). Policies and strategies such as the Environmental Policy, the Climate Resilient Green Economy (CRGE) strategy, National Adaptation Plan (NAP), strategy of reducing emissions from deforestation and forest degradation (REDD+), and the Biodiversity Conservation and Research Strategy to protect plant species are aimed at preservation of natural capital. Indeed, the country has made a conscious effort in restoring and rehabilitating its natural capital. The Government, together with development partners, has designed and implemented flagship and multi-sectoral programmes to support sustainable production and consumption, including Sustainable Land Management Programme (SLMP), Agricultural Growth Programme (AGP) and Productive SafetyNet Programme (PSNP). Environmental and climate change issues have featured prominently at the highest leadership level around the Green Legacy Programme (GLP) aimed at forest-landscape transformation for sustainable development. The share of protected area increased from 11 percent of total land area in 2015/16 to 17 percent in 2020/21. Around 2.8 million ha of land was rehabilitated through investment in natural resources conservation and close to 2.6 million ha of land was re-forested. The share of forest area under sustainable forest management stood at 2 million ha in 2020/21 (MoPD, 2022b). However, institutional, financial, technical and human resources to implement policies and strategies aimed at restoring and rehabilitating the country's natural capital continue to be insufficient.

Key Binding Constraints

Unsustainable land-use practices: Free grazing and tree removal from farmland, ploughing on steep land, and continuous tillage accelerate land degradation. The availability of arable land is already a critical problem and will become more acute as the population continues to grow.

Deforestation: Despite efforts to address the issue, Ethiopia experiences deforestation and forest degradation due to a number of factors, including unsustainable land use practices and poor law enforcement. Specifically, major causes of deforestation and forest degradation are related to population pressure, including farmland expansion, overexploitation, urbanisation, and human habitat expansion (Zegeye, 2017). In addition, the country's dependence on biomass for energy (from fuel wood and charcoal)[6] and increased demand for construction materials also lead to deforestation. Only a fraction (5 percent) of the population uses improved technologies for cooking and access to electricity and biogas is also limited (World Bank, 2020).

Urbanisation: The proportion of urban population has recently grown by 5.5 percent per year (CSA, 2014). This rapid urbanisation rate puts pressure on urban infrastructure, leading to proliferation of slums and informal settlements. There is lack of spatial urban planning in the country and regions. In urban areas, 30 percent of residential holdings are informal (MoPD, 2022b), and their residents often lack durable houses, adequate living space, and access to safe water and sanitation, making them more vulnerable to natural disasters. About two-third of the urban population lives in slums and the coverage of solid waste collection and disposal systems has remained low.

Uncoordinated land policy and administration: Land policy and land administration are not properly coordinated, as there exist different legal and institutional frameworks for urban and rural lands, in addition to poor coordination across local and federal institutions (World Bank, 2022b). Weak property rights registration and enforcement mechanisms, as well as gaps in land tenure and common property rights exacerbate the challenges related to land utilisation. In sum, the country does not have a land use policy to properly guide and manage its natural resources, including land.

Climate change: Ethiopia is vulnerable to climate change as the country is heavily dependent on rain-fed agriculture which is highly vulnerable to the adverse effects of climate change. National rainfall has been subject to high variability between years, seasons and regions. This has increased the intensity of drought, which severely impacts the economy, especially the agricultural sector. Assuming the current trend in the average rainfall continues and in the absence of major adaptation interventions, Ethiopia could start losing more than 6 percent of agricultural output per year (World Bank, 2022b). In addition, the increased incidence of climate induced floods and landslides not only damage crops and exacerbate soil erosion, but also contribute to loss of arable land. For example, it is estimated that the country could experience the loss of agricultural land area suitable for cultivation of major crops such as maize (18 percent), teff (11 percent), and barley (37 percent) (EPCC, 2015). Animal feed shortage and water scarcity could also affect the livestock sector.

2.2. Human Capital

The Human Capital component of the Productive Capacities Index captures the education, skills and health conditions possessed by a country's population, and the overall research and development integration in the texture of the society through the number of researchers and expenditure on research activities. The gender dimension is reflected by the fertility rate, which at each increase reduces the human capital score.

Considering that more than 65 percent of Ethiopia's population is below the age of 30 (CSA, 2014), representing a substantial human resource boon for the coming decades, paying particular attention to nurturing human capital will determine Ethiopia's potential to develop its productive capacities to a significant degree. An ever-large percentage of ready-for-work youth and working age adults can be a key source of growth if properly and timely utilised. However, the dividend from the demographic

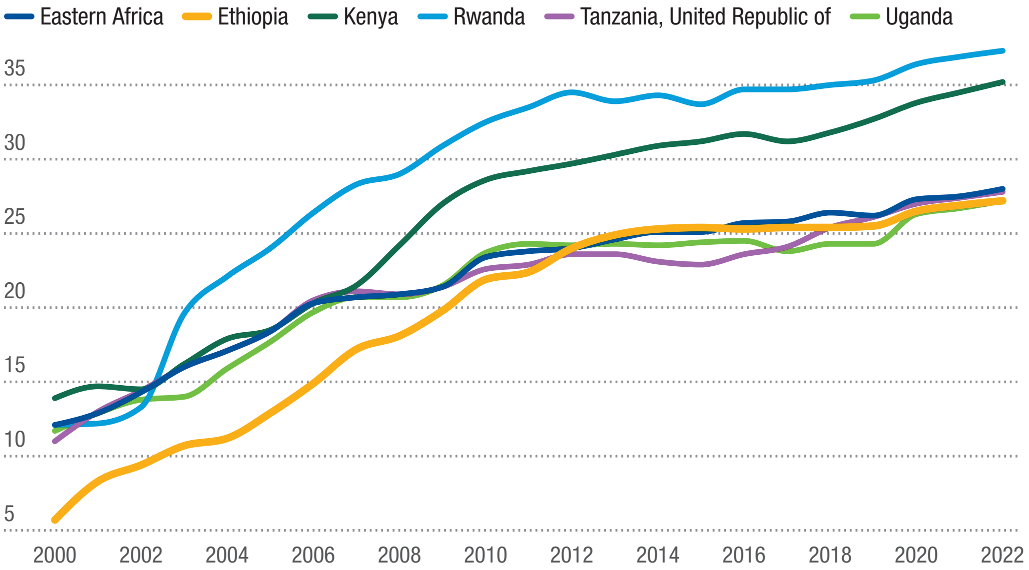
[6] Natural forests are the major source (over 90 percent) of wood-based bioenergy.

transition will be missed, if not immediately harnessed for sustainable development.

Ethiopia has made some progress in terms of human capital development in the past decades through investment in higher education institutions, TVETs, and specialised skills development institutes.

The Human Capital component of the PCI increased from 5.7 in 2000 to 27.2 in 2022. It nevertheless continues to be lower compared to Rwanda (37.3), Kenya (35.2), and marginally lower than that of Tanzania (27.8) and the median for Eastern Africa (28).

Figure 2.3
Human Capital (PCI)



Source: UNCTADstat (2024d).

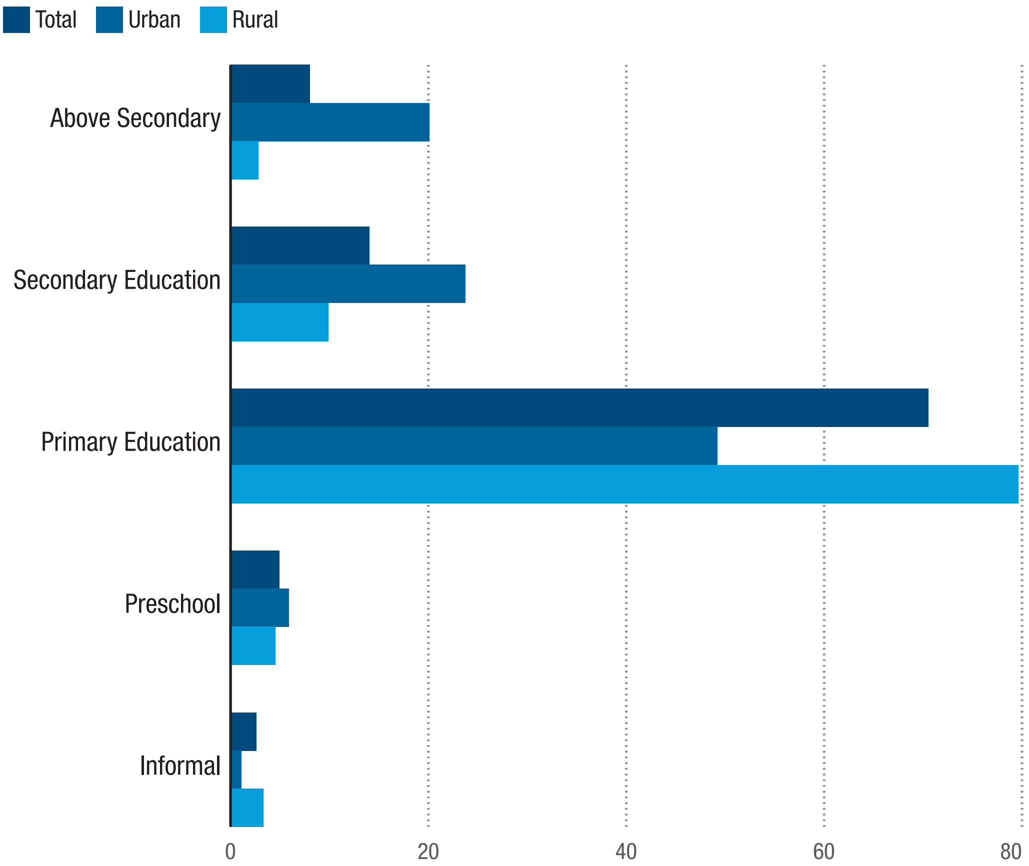
Ethiopia's life expectancy at birth improved from 62 years in 2010/11 to 69 years in 2022 (World Bank, 2024). Improvements in the provision of essential health services, gains in reproductive, maternal, new-born and child health, as well as progress in the fight against infectious diseases helped to extend life expectancy and improve the overall human capital performance. Ethiopia has made progress in reducing the mortality rates of children, especially those under-five years of age, from 67 deaths per 1,000 in 2015/16 to 59 in 2019/20, while the maternal mortality rate marginally declined to 401 per 100,000 in 2019/20 (MoPD, 2022b).

The policy aimed at providing a comprehensive package of health services and improving equity and quality health services has been implemented through successive National Health Sector Development Plans (HSDPs I-IV)) since 1997. The Ethiopian National Healthcare Quality Strategy (NHQS) aims to align key stakeholders across prioritised interventions that help drive large-scale improvement in quality-of-care delivery. The Ethiopian health sector has a strong community health programme through the health extension program (HEP) which delivers cost effective basic services and community-based health insurance (CBHI). Between 2020/21 and 2021/22, community-based health insurance (CBHI) beneficiary households increased by 9.2 percent and reached 9.5 million (MoPD, 2022b).

The education sector accounted for only 2.2 percent of GDP in 2020/21 (MoPD, 2021). According to the 2021 Labour Force and Migration Survey, about 54.9 percent of the total population ever attended some form of education, most only at the primary level. In 2020/21, gross enrolment rate

(GER) reached 95 percent and 42.1 percent in the primary and secondary education, respectively. While the net enrolment rate (NER) in primary education was 86.4 percent in 2020/21, the figure for secondary education was 29.5 percent (ESS, 2021). Moreover, the dropout rate increased for primary education. Low GER and NER in secondary schools is due to low capacity, the limited proliferation of secondary schools, low transition rates from Grade 8 to Grade 9, as well as general socio-economic and cultural barriers, among others (MoE, 2021). Compared with primary schools, an inadequate number of accessible secondary schools have remained a major problem, especially in rural communities.

Figure 2.4
Highest education grade completed



Source: ESS (2021).

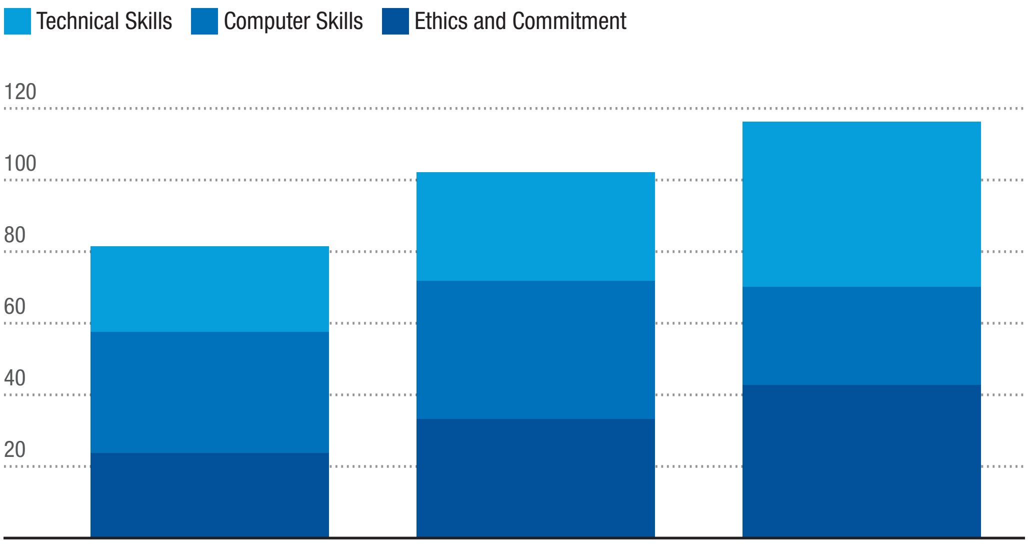
In 2018, the Ministry of Education (MoE) adopted a new education roadmap (2018-2030) which introduced new structures into the education system. Under the new roadmap, primary education system now consists of Grades 1-6, middle level includes Grades 7-8, whereas high school consists of Grades 9-12. In addition, education management has been decentralised with shared duties and responsibilities between federal, regional, and district governments. At the federal level, the MoE is responsible for policy and leadership, with regional and district governments implementing policies and initiatives.

Despite the changes in the education system, the overall business sector continues to face significant challenges in obtaining the skilled labour needed for production activities due to a weak alignment between human resource development and the knowledge and skills needs of industries. The quality of education, both at tertiary level and TVET is low, and the learning achievement of most graduates is inadequate. For instance, the main challenges for TVET graduates to transition to the labour market are attributed to a mismatch in skills development and a scarcity of (formal) jobs. Both tertiary and TVET graduates lack technical and soft skills, including limited ICT, communication, presentation, and time management skills (GIZ, 2019).

According to the World Bank's Skill Module survey for Ethiopia, about half of the firms report difficulty in finding workers with the required technical skills (Beyene and Tekleselassie, 2018). Likewise, about 27 percent of firms report difficulty in finding workers with adequate computer literacy, while 43 percent indicate difficulty of finding workers with essential ethics and commitment attributes (Figure 2.5). The skillsets available in the job market in Ethiopia are too generic to cater to its needs and it has become increasingly difficult to find specialised experts (e.g., for agro-processing industry). These factors have impacted firm performance (Figure 2.6). Firms report three types of skill gaps: technical skills related to work, work ethics and literacy (ability to read with understanding and write at a level relevant to a job). Addressing the skills gap is crucial to improving competitiveness, export performance, job creation and income (MoLSA, 2019). This requires aligning education and training policies with the needs of the labour market through, for example, fostering effective linkages between industry and universities and research institutes. Ethiopia has developed an Industry-University Linkage strategy and directives but there are limited incentives and accountability mechanisms to operationalise the strategy. There is also lack of clarity in skills and knowledge transfer procedures in the manufacturing industry.

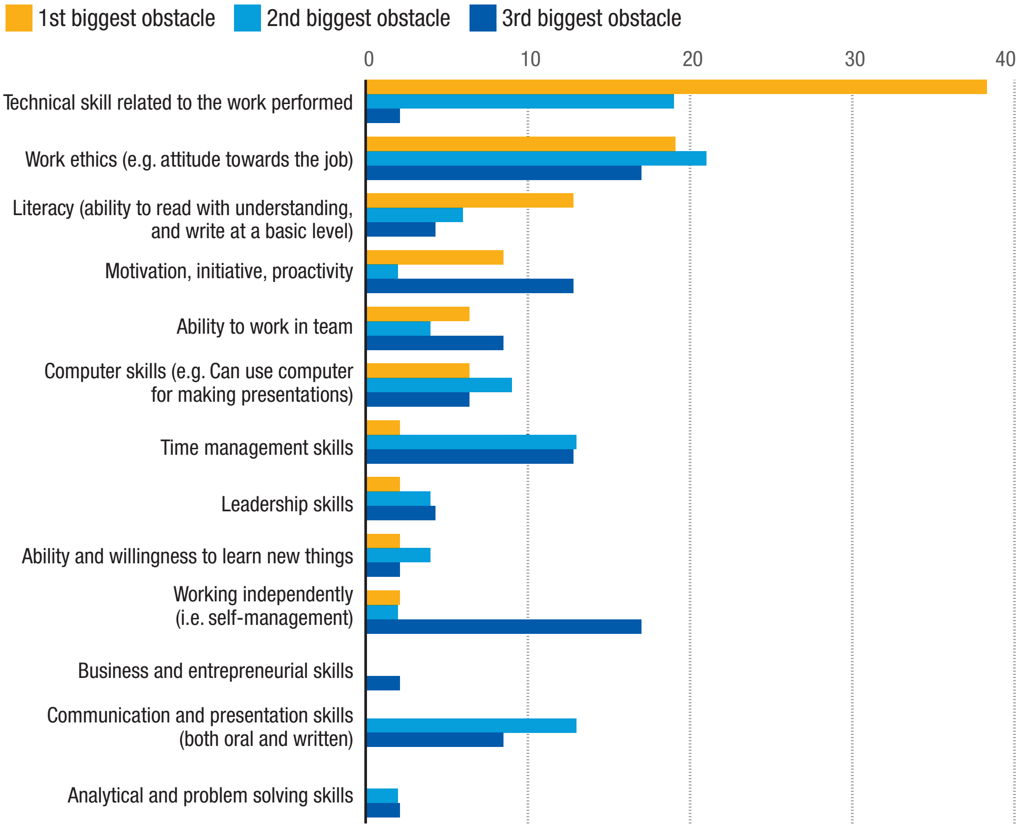
The quality of education, both at tertiary level and TVET is low, and the learning achievements of most graduates is inadequate

Figure 2.5
Degree of difficulty in finding employees with specific skill attributes



Source: Based on Beyene and Tekleselassie (2018).

Figure 2.6
Skills gaps as obstacles to firm's performance (percent)



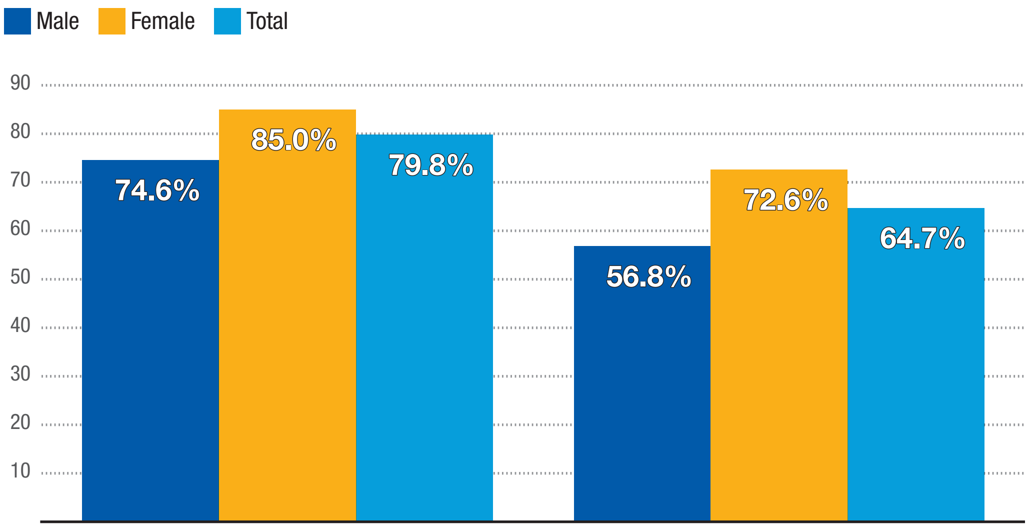
Source: MoLSA (2019).

In the Global Gender Gap Report, Ethiopia performs poorly in economic participation and opportunities and educational attainment – 112th and 133rd place out of 145 countries, respectively, in 2022

Human capital is inevitably affected by gender inequalities. In the Global Gender Gap Report, Ethiopia performs poorly in economic participation and opportunities and educational attainment – 112th and 133rd place out of 145 countries, respectively, in 2022 (WEF, 2022). Despite improvements in the global gender gap score, the country is far from achieving gender parity as its Sustainable Development Goals Gender Index is among the lowest in the world. There have long been some social norms and traditional practices that limit women's participation in certain economic activities, hindering women from benefiting fairly in education, health, property ownership, access to resources including finance, economic and political decision making and household resource allocation. Women have lower access to essential productive inputs and services, including lower chances to enrol in secondary education. Few women farmers have access to agricultural extension services, very limited access to credit is prevalent, and limited land ownership remains an issue (MoPD, 2022b). The low empowerment prevents women from fulfilling their potential and effectively contributing to the economy.

Other barriers for inclusion include a division of labour that holds women responsible for unpaid family care and domestic work, which constraints their involvement in paid employment. In 2020/21, about 45.3 percent women were engaged in unpaid activities, compared with 30 percent of men. A third of female workers were in paid employment compared with 64.1 percent of male workers in 2020/21. In terms of the fertility rate, the country experienced a decline from 5.5 children per woman in 2000 to 4.6 per woman in 2016 (CSA and ICF, 2016). This trend is expected to continue.

Figure 2.7
Labour force participation rate (percent)



Source: ESS (2021).

Exclusions based on other background characteristics such as language, ethnic groups and social classes are also key constraints to improvements in human capital and fostering structural economic transformation in Ethiopia. People with disabilities have also experienced exclusion. Indeed, a lack of inclusivity across society is a key structural constraint for Ethiopia's aspirations to achieve sustainable development.

Key Binding Constraints

Despite progress in terms of access to education through enhanced investment in the sector, there are a number of binding constraints to human capital development.

Inadequate educational facilities: Educational facilities and materials are inadequate at all levels. Specific challenges include inadequate teaching materials, laboratories and lab chemicals and libraries, lack of clean and separate sanitation facilities for girls and boys, poor physical conditions, and unsafe school environments (including gender-based violence), and the poor provision and utilisation of ICT facilities in almost all primary schools.

In 2020/21, only 30 percent of primary schools had access to electricity (MoPD, 2022b). Access to basic education facilities has also remained low in primary schools, as many of these schools are in rural areas where basic facilities are limited.

Poor quality of education*:* Increased school participation has not been accompanied by quality learning outcomes. Graduates lack the necessary competencies and skills to join the labour market. Ethiopia's tertiary education is rated at 37 points (out of 100) compared to emerging and developing economies (55 points) in terms of meeting the needs of employability (WEF, 2020). In addition, the poor quality of teachers (poor subject matter knowledge and know-how), and high staff turnover contribute to the low quality of education and training. Only 30.2 percent and 13.1 percent of teachers in pre-primary (KG) and primary schools, respectively, are appropriately qualified (MoE, 2021). Qualified school leaders[7] are 54.2 percent in primary and 64.9 percent in secondary schools. There are inadequate standards in education institutions at all levels (MoE, 2021).

[7] The term "qualified school leaders" refers to those with relevant training in school leadership as per Ethiopia's national standards.

Inadequate financing: The education system faces funding constraints and depends heavily on development partners for funding. Other challenges include: a lack of transparency in the allocation of budgets, a lack of accountable systems in the utilisation of the budget and limited participation of communities in financing schools. These major challenges are particularly acute in primary education.

Mismatch between education and labour market needs: Despite substantive investment in education and training in the last couple of decades, there is a mismatch between the skills acquired and those demanded by the labour market, as reflected by the rising share of educated unemployment.

Gender bias: Ethiopia has improved its Global Gender Gap Score, but the country remains at the bottom of the Sustainable Development Goals' Gender Index (MoPD, 2022b). Economic and social factors, as well as traditional norms hold back progress towards gender equality and women's empowerment. Specifically, women have limited access to essential productive inputs and services, including lower chances to enrol in secondary education, limited agricultural extension services, a lack of access to credit, and limited land ownership.

Conflict and other shocks: The magnitude of children out of school has increased substantially due to the interplay of domestic and exogenous factors such as the prolonged violent conflict, the COVID-19 pandemic, drought outbreaks and other factors. Conflict and instability have caused a large displacement of children out of school.[8]

2.3. Transport

The Transport component of the Productive Capacities Index measures the capability of a transport system to take people and goods from one place to another. It is defined as the capillarity of roads and railway networks, and air connectivity.

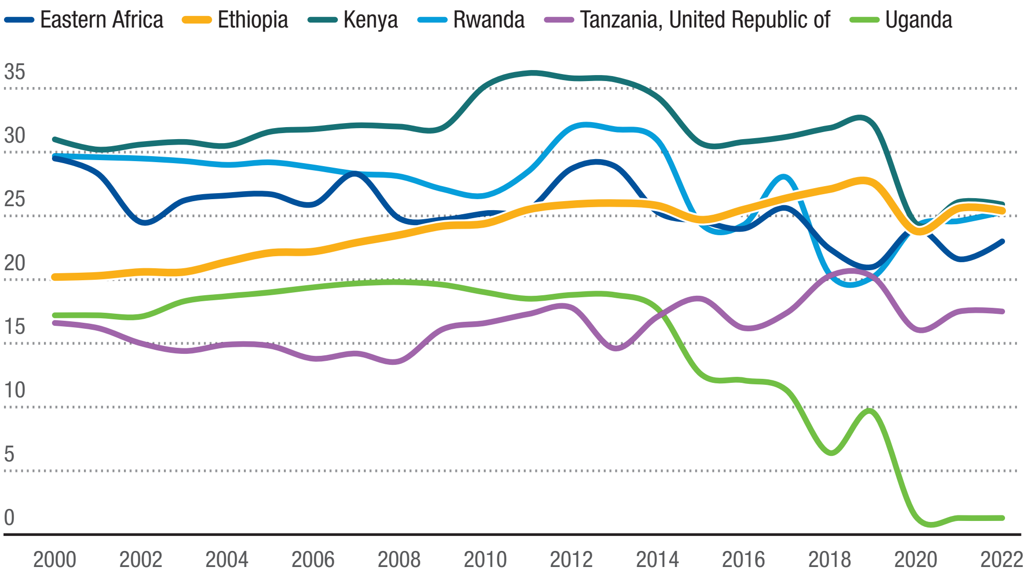
Ethiopia recorded a steady increase in the value of the Transport component of the PCI from 20.2 (in 2000) to 27.6 (2019). This period enabled the country to overtake Rwanda (20.2 in 2019 as compared to 29.7 in 2000) and to achieve a higher score than the median for Eastern Africa (21 in 2019). Despite a subsequent regress recorded by many countries in the region – in 2022 Ethiopia recorded a score of 25.4 – it managed to achieve score higher than the Eastern African median (23 in 2022), being slightly ahead of Rwanda (25.3) and slightly behind Kenya (25.9). At the same it increased the distance to Tanzania (17.5 in 2022) and Uganda. For the latter the value of the Transport component of the PCI plummeted from 17.7 in 2014 to 1.3 in 2022.

Nevertheless, despite significant investment in the expansion of roads, railways, energy, irrigation and various infrastructure activities, there has been significant deficiency in and inefficiency of physical infrastructure in Ethiopia. Integrating and coordinating the planning, development, and service provisions of infrastructures at sectoral level continues to be an issue. The limited spatial equity in the distribution of infrastructure and enabling services also remains one of the key challenges to sustainable development.

At the same time, the transport sector was identified as a game changer to expedite the country's socioeconomic development. The Government established a National Transport Council to provide strategic guidance and lead the reform programme in the sector. The Council endorsed various policies and strategies including the national transport policy (2020), a national logistics strategy (2020- 2030), and the transport sector's 10-year development plan (TYDP) (2021-2030). The transport policy covers road infrastructure, railways, maritime, air and other transport systems.

[8] The conflict in the north of the country alone forced 1.95 million students out of school due to internal displacement and destruction of schools and facilities (EVNR, 2022).

Figure 2.8
Transport (PCI)



Source: UNCTADstat (2024d).

In particular, the road transport is given due emphasis, focusing on passenger, freight, urban, rural, and non-motorised modes of transportation. In addition, the policy envisages the participation of the private sector in infrastructure development. The logistics sector is one of the areas that is open to foreign companies through joint ventures (Regulation No 474/2020). The National Adaptation Plan (NAP) emphasises sustainable transport systems through reviewing the design and safety standards (FDRE, 2017). The TYDP of the transport sector serves as a guiding framework for shaping the sector in the period 2021-2030. The strategic directions of the long-term plan include improving transport infrastructure, the safety of transport services and the implementation capacity of the sector at different levels.

It is important to note that the transport sector offers various opportunities to enhance decarbonisation efforts, through electric railways powered by renewable energy, light rail transit, bus rapid transit (BRT), discouraging the importation of second-hand vehicles and a shift to lower-emitting fuels. To support the country's carbon-neutral development path, the CRGE (Climate Resilient Green Economy) strategy aims to keep greenhouse gas emissions low and build a climate resilient sector.[9] One of the pillars is adopting energy efficient technologies in the transport sector.[10] The CRGE strategy encourages fuel efficiency standards and promotes the uptake of hybrid and electric vehicles.[11] It advocates for constructing a renewable energy powered electric rail network, improving public transportation in the capital, Addis Ababa, and increasing the use of biofuels. Ethiopia also adopted a Climate Resilient Transport Sector strategy to deliver an integrated, modern transport system with a strong focus on multimodal transportation links and a customer service (MoT, 2014). In the revised excise tax proclamation of the

[9] The CRGE Strategy estimated that by 2030 the transport sector could have an abatement potential of up to 13.2 MtCO2e through leapfrogging to new technologies (FDRE, 2011).

[10] Freight and passenger transport are the primary drivers of a projected 36 MtCO2e emissions growth in the transportation sector from 2010 to 2030 under a business-as-usual scenario.

[11] In July 2020, the Marathon Motors Ethiopia commenced assembling electric cars, an important step in line with Ethiopia's effort towards greening and climate resilient goals.

Ministry of Finance, new cars are favoured through lower excise tax compared with used cars, to encourage environmentally friendly cars with low emissions.

The transport sector is dominated by the public sector as far as road infrastructure development, the railways, maritime, and logistics, as well as aviation are concerned. Road transportation is the main mode of movement and intercity public transport is mainly facilitated by buses, followed by railways and air. The fully-electrified Addis Ababa–Djibouti railway, which became operational in early 2018, not only connects the country with Djibouti Port but also links other cities on the way, as well as industrial parks and dry ports. It facilitates the bulk transport of goods and passengers. The Addis Ababa Light Rail Transit (LRT), with its north–south and east–west lines, connects inner city business and transport hubs with rapidly developing commercial centres and new housing developments at the urban periphery (Fikade, 2018). The LRT is also fully electrified and powered by renewable energy sources.

In 2020/21, the transport sector accounted for about 5.6 percent of GDP (MoPD, 2021). Road infrastructure development has been one of Government's priority sectors. Between 2015/16 and 2020/21, the Government allocated on average 11.8 percent of the total budget to road building and modernisation. The length of the all-weather-road network grew by 6.5 percent per year during 2015/16-2020/21 to reach 145,213 km in 2020/21, whereas the share of the rural population located within five kilometres of an all-weather road increased to 74.5 percent, from the 2015/16 level of 64.2 percent (MoPD, 2022b).

As a result of the COVID-19 pandemic, however, the volume of passengers transported by vehicles decreased from 722 million in 2019/20 to 570 million in 2020/21 and those who travelled by air decreased from 7.6 million to 4.5 million (MoPD, 2022b).

Key Binding Constraints

Despite the efforts directed at building a green and resilient transport system and expanding and modernising transport infrastructure, a large part of the country remains being served by road transport, which depends on fossil fuel. The transport sector faces several challenges which can be categorised into the following major areas:

Limited private sector participation: The participation of the private actor in the transport sector is limited to public and freight transport services, freight forwarding and chartered flight services with small passenger aircrafts. The limited role of the private sector is due to restricted government policy and lack of incentives.

Financial constraints: The transport sector faces financial constraints, especially in green transport investments such as bus rapid transit and railways. These transport projects require substantial initial investments which the country has little capacity to finance from domestic sources. Simmptomatic is the case of the Weldiya–Mekelle railway, the northern extension of the Ethiopia-Djibouti rail project, which has experienced significant delays due to the funding package issues from the Export-Import Bank of China. A major concern contributing to these delays is the economic sustainability and feasibility of the project (Reuters, 2018).

Congestion and high vehicular pollution: Ethiopia's automotive market is dominated by second-hand imported vehicles, both for commercial and private uses. About 85 percent of vehicles are second-hand imports. Most of them are older than 15 years and beyond their useful service life, which results in high fossil fuel consumption and pollution (AAIT, 2012). If current trends continue, greenhouse gas emissions in Ethiopia will rise from 150 MtCO2e per year in 2010 to 400 MtCO2e in 2030 (FDRE, 2011). Non-motorised vehicles which would reduce congestion and pollution, especially in cities and towns, are often not considered a viable option.

Limited domestic capacity: Inadequate local capacity manifests in different dimensions such as a lack of human resources in railway engineering (or technology), a lack of local capacity in PPP transport projects, inadequate local skills in preparing green procurement specifications, and inadequate capacity in managing transport projects such as railways development.

Lack of fuel efficiency standards: Despite clear recommendations in the area, there are no legally binding vehicular emission standards (AAIT, 2012) and insufficient effort is made to introduce and enforce them. At the same time, with growing vehicle numbers (by about 10 percent a year), the consumption of fossil fuel increases.

Inadequate incentives for clean transport technologies: There are limited incentives to attract green investment. There is also limited awareness of policy instruments related to green investment in the transport sector, such as green vehicles, hybrid vehicles, plug-in electric vehicles, fuel cell vehicles, alternative fuel vehicles and other modes of transport (AAIT, 2012). In addition, low retention rates for environmental reinstatement, i.e. low withholding of funds for building back the environment and natural resources damaged by road construction, hinder environmentally friendly investment.

Inadequate transport infrastructure: Road density per 1,000 people was estimated at 1.27 km in 2018/19 (FDRE, 2021). It takes on average 1.4 hours for a driver to access all-weather roads. Worse is the absence of mass transport (e.g., BRT and railways) and non-motorised transport (NMT) facilities, as Ethiopian cities have been largely car-centred (MoT, 2020). Key problems with NMT include a lack of a complete pedestrian infrastructure, the absence of cycling facilities, poorly managed on-street parking, and poor road design.

Lack of environmental and social elements in bidding and procurement guidelines: There is limited awareness of the need for the inclusion of environmental and social issues in evaluating bidding documents for transport projects. In addition, bidding and procurement evaluation guidelines often lack explicit criteria on environment and social dimensions.

2.4. Energy

The Energy component of the Productive Capacities Index measures the availability, sustainability, and efficiency of power sources. It is sustained through evaluating the status of use and access to energy, losses in distribution and the renewability of energy components and sources. It also includes the GDP generated by each unit of energy to highlight further the importance of optimal energy systems.

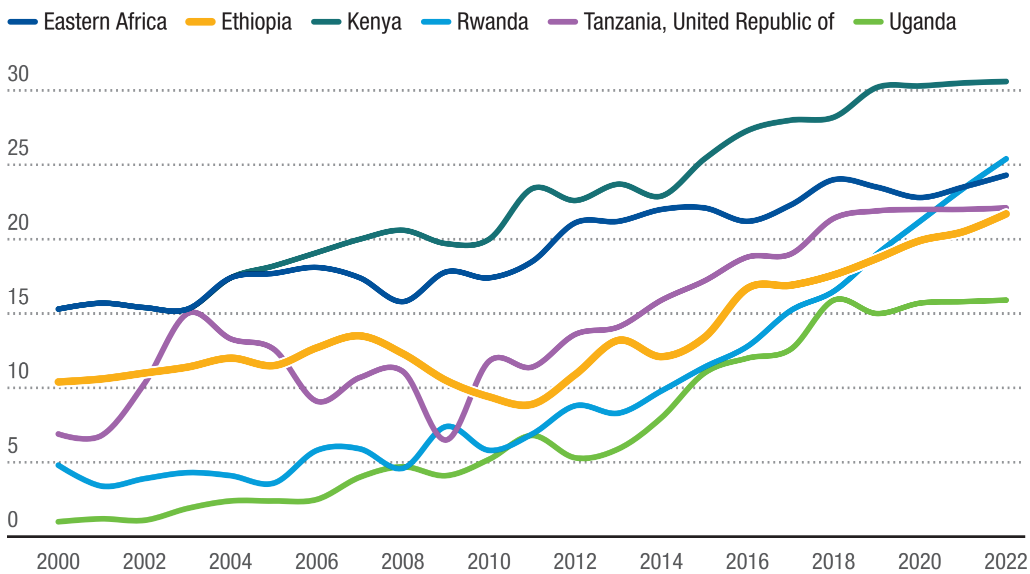
Ethiopia is endowed with vast renewable energy potential in hydro, solar, wind, and geothermal power and has been investing significantly in energy infrastructure over the past two decades using publicly financed and publicly executed approaches. The country's installed renewable energy capacity reached 4465.1 MW in 2020/21 (MoPD, 2022b). It is one of the few countries in the world which generates almost all its electricity from renewable resources, with hydropower accounting for more than 90 percent of total modern energy production. In 2021, the electricity sector accounted, however, for less than one percent of GDP (MoPD, 2022b).[12]

Nevertheless, Ethiopia's score in the Energy component of the PCI (21.7 in 2022) has remained lower than the median for Eastern Africa (24.3), Kenya (30.6), as well as Rwanda (25.4), which overtook Ethiopia in this respect only in 2019. Ethiopia managed to almost catch up with Tanzania (22.1) having recorded lower values since 2009.

> There are limited incentives and lack of awareness of policy instruments related to green investment in the transport sector, such as green vehicles, hybrids, etc

[12] In the national accounts data, electricity and water are treated together. The two sectors accounted for about 0.80 percent of GDP in 2020/21.

Figure 2.9
Energy (PCI)



Source: Based on UNCTADstat (2024d).

Despite increasing energy generation capacity, Ethiopia still has the second largest energy access deficit in Sub-Saharan Africa, and the third in the world

Despite increasing energy generation capacity, Ethiopia still has the second largest energy access deficit in Sub-Saharan Africa, and the third in the world.13 At the end of 2019, only 44 percent of Ethiopians had access to electricity, with 33 percent from on-grid and 11 percent from off-grid facilities (MoWIE, 2020). Per capita electricity consumption also remains low at less than 100 KWH per year. Households consumed 97 percent of total renewable energy in 2019, with industry's consumption remaining low at 1.4 percent. With continued efforts to prioritise industrialisation and a renewed focus on electrification, electricity demand is growing by more than 12 percent per year which requires a dramatic energy supply growth (MoPD, 2022b).

Ethiopia is making a conscious effort in diversifying energy sources through solar auctions, including through the Scaling-Up Renewable Energy Programme for Ethiopia (SREP), and the National Biogas Programme (NBP). The second phase of the National Electrification Plan (NEP 2.0) initially aimed at universal electrification by 2025 through a mix of on and off-grid energy solutions.

In 2018, Ethiopia revised its energy policy to develop and utilise the country's energy resources, in line with its overall development strategy. The Government also amended the energy proclamation (Proclamation No.1085/2018)14 to support the implementation of the policy and to allow private sector participation in the energy sector. Ethiopia is trying to attract private investors to participate in power generation facilities through independent power producers (IPP) modality to relieve public financing in the sector and to increase the generation mix from other renewables, other than hydropower. The country now allows for the duty-free import of solar technologies to encourage private sector investment and a wider use of solar energy (MoPD, 2022b). It also enacted a proclamation (Proclamation No.1076/2018) to regulate the Public-Private Partnership (PPP) between the Government and the private sector.

[13] See: https://www.un.org/tr/desa/universal-access-sustainable-energy-will-remain-elusive-without-addressing-inequalities

[14] The 1085/2018 Energy Proclamation replaces Proclamation No. 810/2013.

Table 2.1
Energy policies, strategies and programmes

	Description
1.	National Electrification Programme 2019
2.	Biofuel Policy, 2019
3.	National Energy Policy 2018
4.	Energy Proclamation (1085/2018)
5.	Scaling-Up Renewable Energy Programme: Ethiopia Investment Plan, 2012
6.	Climate Resilience and Green Economy, 2011
7.	National Biogas Programme (NBP), 2007
8.	Biofuels Development Strategy, 2007

Source: Ferede (2020).

Table 2.2
Stakeholders in the energy sector

Stakeholder Group	Description	Roles
Government	Ethiopian Electric Power (EEA)	• Involved in the production and transmission of energy; EEP operates and maintains all high-voltage transmission lines across the country.
	Ministry of Water and Energy	• Responsible for designing policies, strategies and laws; undertaking implementation, follow up and supervision of energy investments; supporting and leading the generation of electricity from water, wind and other alternative renewable energy sources.
	Ethiopian Electricity Utility (EEU)	
	Petroleum and Energy Authority	• Regulates the energy sector • Issues standards and ensure their compliance.
	Other government actors	• Undertakes civil construction • Manufactures and supplies parts and equipment • Provides consulting and advisory services
Private sector	Energy investors and producers	• Involved in the generation of energy, especially renewable energy sources.
	Other private actors	• Undertakes civil construction • Manufactures and supplies parts and equipment • Provides consulting and advisory services on environmental issues
Financial sector	**Multilateral Development Banks**	• Support power investment through availing finance • International financial institutions provide project preparation grants, as well as s investments.
	International Finance Corporation, the World Bank	
	African Development Bank	
	National Banks	
	Commercial Bank of Ethiopia (government)	
	Development Bank of Ethiopia (government)	
Other development partners	Bilateral development partners (e.g., Government of Denmark)	• Support diversification of renewable energy sources such as wind, geothermal, etc.

Source: Ferede (2020).

Key Binding Constraints

Ethiopia's energy sector faces critical challenges in meeting steadily increasing energy demands. More importantly, the use of energy (electricity) in productive sectors and for productive transformation remains one of the lowest, also by the standards of Sub-Saharan Africa. Using the World Bank's Enterprise Surveys of 2011 and 2015, Abdisa (2018) established that frequent power outages have adversely affected businesses and increased the cost of production and service delivery by about 15 percent. The World Bank study also shows that about 22 percent of business managers consider electricity as the most serious obstacle to doing business (World Bank, 2015). The following are the key binding constraints to the sector's development:

Limited electrification and limited access to modern energy sources: Ethiopia has low electricity coverage at 44 percent (as of 2019/20). Rural populations depend on the unsustainable use of traditional biomass for energy due to a lack of access to modern and affordable energy sources.[15] Inhabitants of rural areas with sufficient biomass stock are not incentivised to divert for economic reasons.

Limited energy source diversification: Ethiopia depends mainly on hydropower for energy, which is subject to significant variability due to changes in water flows caused by seasons and unpredictability in rainfall patterns and drought.

Weak transmission and distribution capacity: The country incurs significant costs in the form of power loss due to poor quality and ageing distribution networks. Energy loss accounts for more than 21 percent of the power generated, which occurs from the point of generation, all the way through distribution networks, until it reaches the end users.[16]

Inadequate financing for investment in clean energy: Ethiopia's overall revenue generation performance has remained low, and the pace of tax revenue growth has been only moderately elastic with respect to GDP (Benien et al., 2014). External support is likely to remain low due to spending cuts by development partners in the face of global shocks and other factors. Inadequate finance for initial investment in renewable energy sources, the complexity of procedures, and delays in releasing funds have remained a challenge in implementing renewable energy strategies (ECA, 2015). Inadequate budget allocation to sustainable water and environmental investments has also remained a challenge. In 2022/23, the budget allocated to the water sector was only 4.2 percent of the total budget (MoF, 2024).

Inadequate domestic knowledge and skills in renewable energy: A lack of local human resource capacity limits green policies to achieve short- and long-term green growth transformation goals. There are inadequate human resource capacities in the development and application of renewable energy technologies, especially in solar, wind, geothermal, and biomass.

Unstable institutional arrangements and inadequate standards: One of the major bottlenecks in the Ethiopian energy sector is a lack of stable institutional arrangements. Frequent changes in the institutional structure undermines the performance and hinders investment. Moreover, sub-standard energy products of often unclear origin dominate the market. The absence of quality standards for energy products and energy technologies and/or low regulatory capacity inhibit wider adoption of energy technologies in the country.

Limited supply of locally produced clean energy equipment and technology: There is limited domestic capacity to

[15] About 60 million tons of biomass is consumed for fuel and 82 percent of households depend on firewood (Sieff, Troncoso, and Tesfamichael, 2022).

[16] Ethiopian Business Review (2017). Ethiopia loses more than 21% of the electricity, see: https://ethiopianbusinessreview.net/ethiopia-loses-more-than-21-of-the-electricity/

produce and manufacture equipment and technology related to renewable energy sources that fit local conditions, especially in solar, wind, geothermal, and biomass.

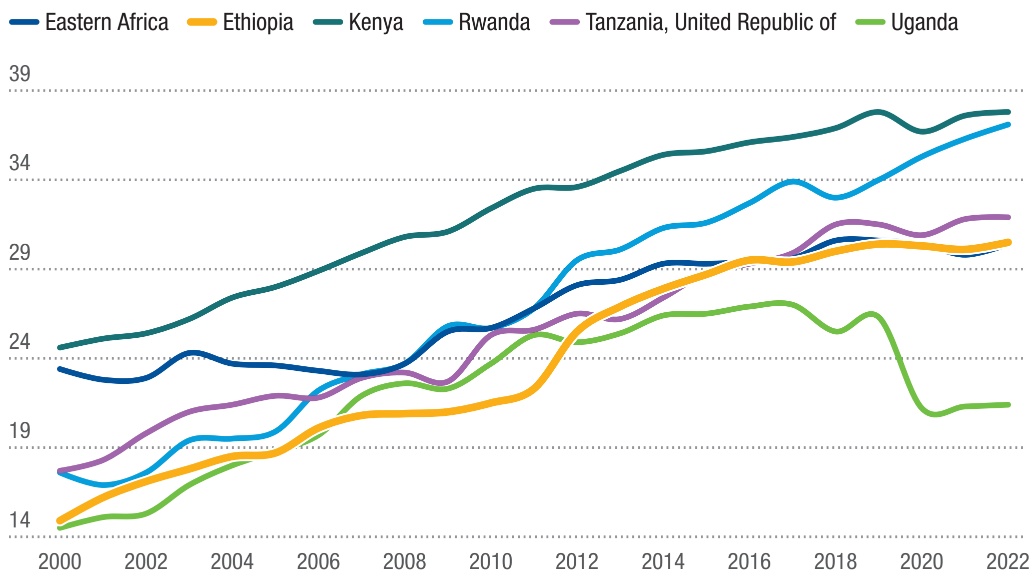
Weak incentive mechanisms: There is a lack of strong and clear incentives for promoting renewable energy investments, especially by the private sector.

2.5. Information and Communication Technologies

Access to information and communication technologies (ICT) and use of digital solutions are key enablers of economic and social transformation through enhancing efficiency across sectors, delivering better services and addressing asymmetries in information. The ICT component of the Productive Capacities Index estimates the accessibility and integration of communication systems within the population. It includes fixed line and mobile phones users, internet accessibility and server security.

Ethiopia's digital economy is at an early stage of development, with few private sector players offering digital services and some government institution-driven digitalisation initiatives. Ethiopia's ICT sector has shown rapid expansion, nevertheless, which is reflected in the rapid growth of the value of the ICT component of the PCI from 1.1. in 2000 to 4.2 in 2011 and then to 21.1 in 2022. This enabled the country to narrow the gap to Uganda (22 in 2022) and the median for Eastern Africa (21.8 in 2022). The distance to Kenya (35.9), Tanzania (29.9) and Rwanda (28.1), nevertheless increased and remains substantial.

Figure 2.10
Information and Communication Technologies (PCI)



Source: UNCTADstat (2024d).

The Government's digital transformation strategy – Digital Ethiopia 2025 – aims to address the digital divide, leverage digital opportunities, and promote digital financial services for advancing the socioeconomic transformation of the country (FDRE, 2020a). Digital Ethiopia 2025 serves as an overarching strategy that helps achieve greater digital and economic inclusion through better coordination and through making ICT infrastructure adequate, accessible, and affordable. The country has also taken steps to liberalise the telecom sector to improve efficiency and accelerate digital transformation. The Ethiopian ICT policy and strategy give priority to technology transfer, mainly through acquisition of technologies from abroad. The Government also offers incentives for investments in ICT, including business income tax exemptions (Regulation No.474/2020). The realisation of the ICT policy and strategy needs to be supported by a robust energy policy as the latter is crucial for the implementation and adoption of ICT. ICT, on the other hand, also supports the development of energy sector through introducing energy efficient devices. ICT-enabled solutions (e.g., smart grids, smart buildings, smart logistics and industrial processes) (Hu, et al., 2022).

The National ICT Policy and Strategy was developed in 2017 (FDRE, 2017) to promote the ICT sector and enhance its role in economic, social, and political transformation. Its key foundational dimensions are ICT infrastructure development, human resources development, the legal system and security, and internet governance (FDRE, 2017). The three broad pillars are ICT for governance (e.g. government, education and health, agriculture development), the ICT sector (research and development, computer and related services and industry development) and cross-cutting issues (e.g., entrepreneurship and innovation and youth and women). The ICT Policy and Strategy considers ICT as an enabler of the different sectors and an economic sector of its own. It focuses broadly on core and emerging issues that are crucial for the ICT ecosystem, such as infrastructure, services, applications, universal access, cyber security, social media, and users. It gives priority to technology transfer, mainly referring to the acquisition of technologies from abroad. The Government also offers incentives for investments in the ICT sector, including business income tax exemptions (Regulation No.474/2020).

Ethiopia's ICT integration into the broader economic system has been severely restricted by limited ICT infrastructure

The 2017 ICT Policy and Strategy and Digital Ethiopia 2025 also support the establishment of innovation centres through research and development programmes. In 2018, the Ministry of Innovation and Technology developed a start-up strategy, known as "2222 Strategy", to establish 2,000 new technology-related enterprises in two years that have ultimately the capacity to create 20 million jobs and generate US$2 billion. The strategy also aims to establish incubation centres for new technology-based firms. In that vein, Ethiopia has also established an ICT Park to attract overseas investment, generate foreign earnings, stimulate growth of the domestic ICT industry and create employment and career opportunities for citizens. The Park is viewed as Ethiopia's Silicon Valley and is spread over 200 hectares of land in Addis Ababa. Moreover, cognizant of the dynamics of digital payment systems, the Government adopted the revised national payment system that accommodates local and foreign brands.[17]

Key Binding Constraints

Limited ICT infrastructure: ICT integration into the broader economic system has been severely restricted by limited ICT infrastructure. Making markets for digital financial services work requires adequate investments. In 2020/21, around half of the population – 52.7% – subscribed to Ethio Telecom's mobile service. According to Ethio Telecom (2022), Ethiopia's telecommunication penetration rate (telecom density) reached 63.3% in 2021/22 fiscal year. New Internet Service Providers (ISPs)[18] have been emerging recently, but they are reliant on Ethio Telecom's infrastructure and are limited to service locations dictated by the provider.

[17] See: The Reporter (2022). Beating the odds, digital finance thrives in Ethiopia, https://www.thereporterethiopia.com/25720/

[18] Ethiopian Monitor (2022). Ethio Telecom Signs Deals with Five VISP firms, https://ethiopianmonitor.com/2022/04/11/ethio-telecom-signs-deals-with-five-virtual-internet-service-providers/

Lack of broadband and secure internet connectivity: Fixed broadband subscriptions per 100 inhabitants were 1.5 in 2020/21 and the proportion of individuals using the Internet was low at 25 percent (Alemu, et al., 2021). Mobile and broadband penetration has been low compared to other developing countries due to poor network coverage. In addition, limited network coverage and low affordability (due to high costs) and low quality have been impeding the development of the ICT industry.

Low technical literacy: The 2021 Labour Force and Migration Survey revealed that the proportion of "technically illiterate" people aged 10 years and above is 50.8 percent, with a significant rural-urban divide. 90.3 percent of the population aged 10 years and above are computer illiterate (i.e., unable to use computers). A third of the urban population is computer literate compared to the rural population of only 3.9 percent. Similarly, a significant proportion (83.8 percent) of the population is unable to use internet (ESS, 2021). Overall, digital literacy and digital skills have remained one of the key barriers for adopting and using digital technologies.

Power supply irregularity: As indicated earlier, only 44 percent of the population has access to electricity, with 33 and 11 percent having access through grid and off-grid supplies, respectively (MoWIE, 2020). There is an important divide between rural and urban areas, as only 27 percent of the rural population has access to electricity compared to more than 95 percent of residents in urban areas. Electricity consumers experience recurring power interruptions, leading to high coping costs and stifled investment.

Insufficient financing: Inadequate finance to support the ICT sector has remained a barrier. In 2022/23, the share of the Ministry of Innovation and Technology in the total Federal Government budget was only 0.13 percent (MoF, 2024). Moreover, the ICT sector is not a priority for the banking industry in providing loans.

Low capacity for harnessing the power of innovation: Ethiopia ranked 126th among the 132 economies featured in the 2021 Global Innovation Index (GII) (WIPO, 2021). The country has performed poorly in many of the dimensions of the GII.[19] This has been mainly due to an inadequate number of researchers (at 90.5 per million of the population), low budget allocations to research and development, weak cooperation and the absence of R&D resource sharing among R&D institutions, limited local technical capabilities for equipment maintenance, and malfunctioning scientific equipment which have undermined capacity utilisation and effectiveness in R&D institutions.

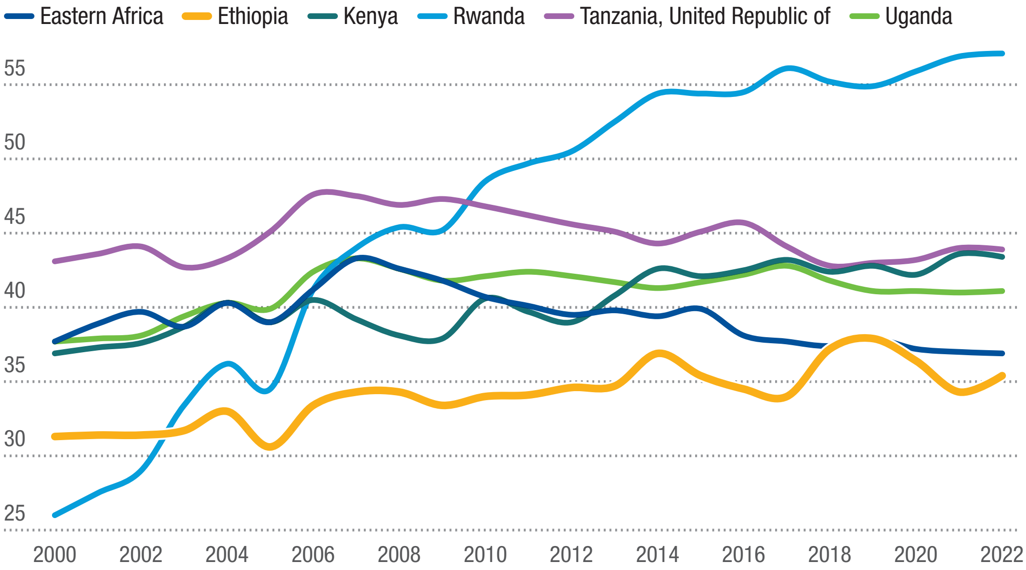
2.6. Institutions

In the context of productive capacities, the Institutions component of the Productive Capacities Index is captured by indicators such as political stability, regulatory quality, rule of law, government effectiveness, control of corruption and voice and accountability.

Ethiopia faces weak institutional architecture and a lack of independent institutions that are capable of the accomplishment of its functions (Admassie, 2006). Ethiopia's PCI score in the component remained below Kenya's (43.4 in 2022) Tanzania's (43.9.), Uganda's (41.1), and Rwanda's (57.1). The latter upon surpassing Ethiopia's level in 2003 recorded stellar improvements (between 2000 and 2022 by 31.1 points). The median for Eastern Africa has remained higher than Ethiopia's score throughout the period, with the exception of 2019, when they were on par at 37.9.

[19] The GII consists of seven pillars. These are: knowledge and technology outputs, institutions, infrastructure, business sophistication, human capital and research, creative outputs, and market sophistication.

Figure 2.11
Institutions (PCI)



Source: UNCTADstat (2024d).

In 2021, Ethiopia ranked 139th out of 167 countries on the extent to which government powers are subject to independent and non-governmental checks, indicating weak formal checks and balances (World Bank, 2021). According to the World Bank's government effectiveness indicator, Ethiopia has a low score (at 28 in 2019 and 31.3 in 2020 out of 100) in government effectiveness, positioning the country barely above the Sub-Saharan Africa average (World Bank, 2021).

Ethiopia's score of 16.8 in 2019 and 38 in 2020 (out of 100) in the regulatory quality indicator, which captures "the ability of Government to formulate and implement sound policies and regulations that permit and promote private sector development, thus laying down uniform rules of economic engagement" illustrates its considerably lower position than comparator countries. It is also below the average for Sub-Saharan Africa, indicating the poor regulatory capacity of Ethiopian institutions. Poor policy coordination, as reflected by a lack of clarity in mandates among government institutions is another contributing factor, reflected in the position that Ethiopia is ranked 119th in policy coordination out of 167 countries (World Bank, 2020).

Ethiopia needs to ensure functioning, dynamic, & vibrant institutions to effectively implement development polices & build productive capacities.

Weak institutional capacity hinders the effective implementation and coordination of policies and the ability to address complex socioeconomic, political, environmental challenges. The development of capable institutions has also been negatively affected by organisational fragmentation, weak leadership, the absence of continuity, lack of adequate resources, overlapping mandates of governance, failure to integrate traditional values and norms, strong politicisation during reforms as well as political instability. Weak institutional capacity, ethnic profiling and absence of meritocracy makes policy formulation, implementation and coordination difficult as well as undermines policy consistency and coherence leading to inefficient use of resources and rising corrupt practices. Inadequate complementary financing and a lack of technical capacity to lead institutions remain an issue. To effectively implement development polices and build productive capacities to advance structural economic transformation and to achieve inclusive and sustainable development, Ethiopia needs to ensure functioning, dynamic, and vibrant institutions.

Moreover, a lack of good governance, peace, and security leads to instability that creates a state of fear and prompts declining production activities and investment. Indeed, poor governance and political instability hinder domestic investment and also push foreign direct investments away. The prevalence of poor governance, rising corruption, economic mismanagement, human rights abuses, and a lack of fair participation and economic opportunities led to four years of protests that led to a change in the Government leadership in 2018. The peaceful transition was expected to address the underlying problems that led to it, and to recalibrate power relationships among various groups to establish a more just and stable country. However, the steps and positions taken by the different interest groups to influence the country's future socio-political architecture made it difficult to build consensus, leading to armed conflicts especially in the north. As a result, Ethiopia's rank in the Global Peace Index deteriorated from 117th in 2015 to 139th in 2021 (IPE, 2021).

Key Binding Constraints

Inadequate institutional capacities continue to limit Ethiopia's progress towards the development of its productive capacities. Policy design and implementation capacity gaps have become a challenge in different government institutions that are involved in the policy design, implementation, coordination, and service delivery of development plans.

Weak capacity in policy design and implementation: The capacities of institutions are crucial for overall policymaking process. Three indicators are often used to gauge the policymaking capacity of countries, including policy coordination, policy stability and future orientation and policy learning. Ethiopia scores low in terms of designing policies (e.g. coordination (4 out of 10), policy stability and future orientation (3.1 out of 7) and policy learning (3 out of 10)) compared with Kenya, Rwanda, Tanzania and Uganda. Similarly, the country lacks implementation capacity, as reflected by low scores (4 out of 10), far behind comparator countries (World Bank, 2021).

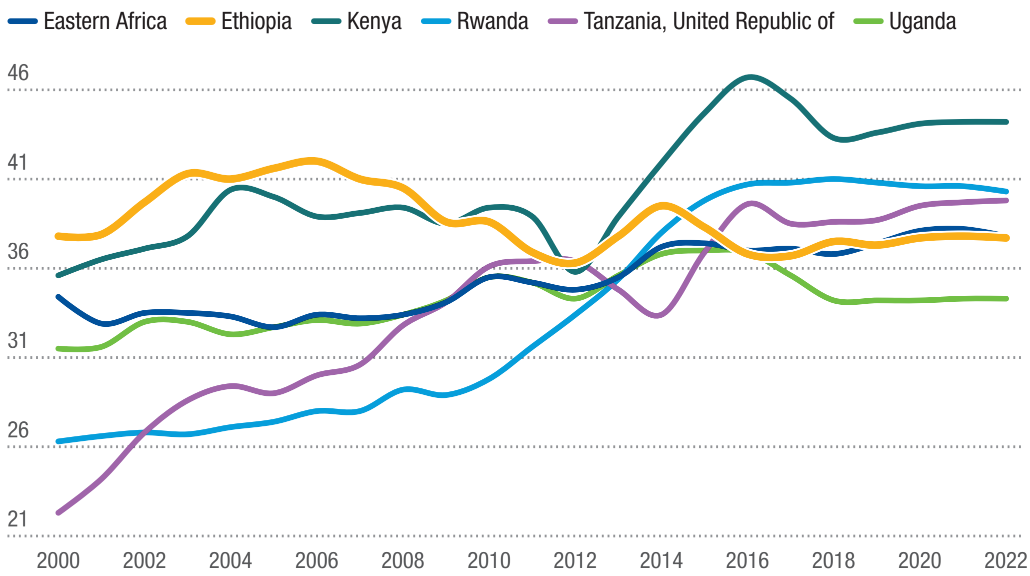
Weak regulatory quality: Ethiopia ranked 160th out of 192 countries in terms of regulatory quality in 2021 (World Bank, 2021). The state of regulation and the regulatory capacity of the administration have remained weak. This impedes the development of productive capacities. For example, the business environment is characterised by barriers and obstacles for investors and businesses. The country performs poorly in a number of doing business indicators.

2.7. Private Sector

The Private Sector component of the Productive Capacities Index is defined by the ease of cross-border trade, which includes time and monetary costs to export and import, and the support to business in terms of domestic credit, velocity of contract enforcement and time required to start a business.

Ethiopia's private sector's development is still at a nascent stage. Despite progress in socioeconomic outcomes through State-led investments, success in igniting private sector growth has been very limited. Up until 2009, the value of the Private Sector component of the PCI of Ethiopia was higher than the values of comparator countries and groups. However, because of a decline between 2006 and 2009, as well as a stagnation since then, Ethiopia's score in 2022 (37.7) was lower than that of Kenya (44.2), Rwanda (40.3), and Tanzania (39.8), and similar to the median for Eastern Africa (37.8).

Figure 2.12
Private Sector (PCI)



Source: UNCTADstat (2024d).

Reform measures aligned with the Homegrown Economic Reform Agenda[20] have aimed at encouraging the participation of the private sector. These include the decision to open up the financial sector to foreign investors, and the privatisation of State-owned enterprises and other related reforms. Ethiopia also has put in place enabling legislation towards greater private sector activity through its Investment Proclamation (Proclamation No. 1180/2020), and its Public Private Partnership Proclamation (No.1076/2018). Nevertheless, the country lacks a comprehensive and coherent private sector development strategy that promotes the domestic private sector.

Given the ethnic-based administration system and political arrangement, the business-politics interface appears to be strong in Ethiopia. Ethnic-based parties have established endowment conglomerates, including TIRET for Amhara, EFFORT for Tigray, TUMSA (previously Dinsho) for Oromia, and WENDO for Southern Nations, Nationalities and Peoples. The operation of party controlled and managed business companies creates a disenabling environment as they have enjoyed support from government institutions (both from the federal and regional governments) including preferential access to land, finance, foreign exchange, information and other inputs which stifle competition and constrain the expansion of the private sector (Belete, 2015). In addition, State-owned enterprises (SOEs) dominance is apparent in power, banking, telecommunications, insurance, air transport, shipping, railway, industrial parks, and petroleum importing. Although the free floating exchange rate may ease access to foreign exchange, it is expected that party-affiliated business companies and SOEs will continue to enjoy preferential treatment over private firms, including priority access to credit, foreign exchange, land, and quick customs clearances.[21]

Key Binding Constraints

Unfavourable business environment: Despite the Government's recent initiatives, the business environment has remained

[20] Implementation of reform measures started in 2019. See https://pmo.gov.et/initiatives/

[21] See: US Embassy in Ethiopia (2022) 2022 Investment Climate Statements: Ethiopia; https://et.usembassy.gov/2022-investment-climate-statements-ethiopia/

unconducive in the country, which discourages investments and harms competition. In 2020, Ethiopia ranked 159th among 190 countries in the overall Ease of Doing Business Index (World Bank, 2020). It ranks particularly low in the ease of getting credit (176th), starting a business (168th), dealing with construction permits (142nd) which particularly affect industry, protecting minority investors (189th), and registering property (142nd) (World Bank, 2020). At the same time, an incentive structure biased towards foreign investors (or firms) at the expense of domestic firms in some instances is erected, as exemplified by some export processing zones and industrial parks with 100 percent foreign or FDI-based companies.

Inadequate infrastructure services: While improving, infrastructure services are still inadequate for the development of the private sector. For example, despite reforms to improve the trade logistics environment, trade logistics performance indicators show that Ethiopia's rank deteriorated from 104th to 126th place (out of 160 countries) between 2014 and 2016 (World Bank, 2016).

Barriers to regional trading: The difficulty in trading across borders presents a significant barrier to Ethiopia's export-driven growth and in the context of regional integration. The country performs badly in trading across borders, ranked 156th in the Ease of Doing Business Report (World Bank, 2020). The time required to import goods is still high and it remains among the highest when compared with those of neighbouring countries. In 2020, documentary compliance for exporting and importing took, respectively, 51 and 72 hours. Border compliance for imports has remained a challenge.

Procedural obstacles and non-tariff barriers (NTBs): About 90 percent of exporting companies experience burdensome NTBs, a considerably higher rate than elsewhere in sub-Saharan Africa. For example, about 97 percent of companies in the leather and leather products sector have experienced difficulties with NTBs when exporting (ITC, 2018). A large share (86 percent) of exporters of other products (such as coffee, oilseeds, and manufacturing) also faces burdensome NTBs. For imports, the proportion of companies affected by NTBs ranges between 53 and 67 percent. Unlike exporters, all burdensome NTBs reported by Ethiopian importers have been the consequence of Ethiopian regulations. These are related to non-technical measures such as pre-shipment inspection, conformity assessments and other entry formalities. About 79 percent of NTBs are considered burdensome due to procedural obstacles.

Limited access to finance: Access to credit has remained narrow with a limited range of products and channels to serve broader business needs. A much higher proportion of firms in Ethiopia (69 percent) finance their investment from internal resources, when that figure is 24 percent in Kenya, and 38 percent in Uganda (World Bank, 2019). This distortion in the financing of infrastructure through State-owned banks and a lack of meaningful competition between State-owned and private commercial banks has resulted in limited access to finance for the private sector. Moreover, the high cost of accessing finance (domestic lending rates are one of the highest in the region) also prevents domestic firms from obtaining financial resources.

Political instability and ethnic-biased policies: A lack of peace and stability and discriminatory policies of the regional states against domestic investors who do not belong ethnically or linguistically to a given region inhibit private sector development. This "ethnic policy" created, for example, ethnic-based parastatals, which have hindered competition and the establishment of a conducive business enabling environment.

2.8. Structural Change

The Structural Change component of the Productive Capacities Index refers to the ability of a country to undergo effective structural economic transformation and the propensity a country exhibits towards the process. This is currently captured by the sophistication and variety of exports, the intensity of fixed capital and the weight of industry and services in total GDP.

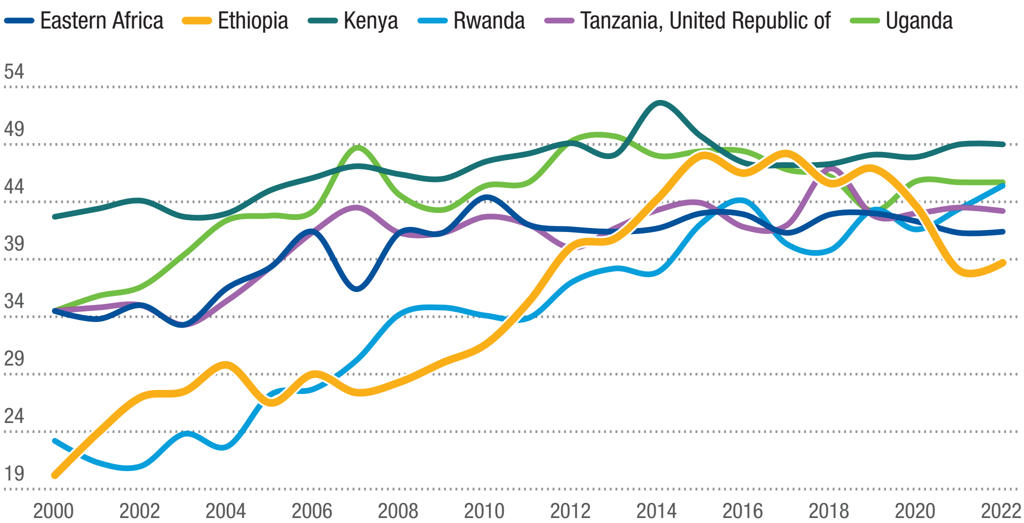
Ethiopia has undergone limited structural change over the years and has exhibited the "wrong" type of structural change, including with a precipitously low level of manufacturing value added in GDP, despite the increasing share of the industrial sector. The country has also experienced a transformation to low-skilled services sectors, which has made little impact on poverty reduction.

Ethiopia experiences a movement of labour from low productivity activities to other low productivity activities, hindering economic growth & structural transformation

Ethiopia's score in the Structural Change component of the PCI grew rapidly between 2000 (from the value of 20.2) and 2015 (reaching 48), then stagnated until 2019 (46.9) before it declined to 38.7 (in 2022). The score remained mostly lower than the scores of peer countries and the median for Eastern Africa, with the exception of the 2010s, when, in a limited period of time, Ethiopia overtook Rwanda (2011-2020), Tanzania and Eastern Africa (2014-2020). In 2022, Ethiopia again recorded the lowest score in the group and was outperformed by Tanzania (43.3), Rwanda (45.4) Uganda (45.7), and Kenya (49), as well as the median for Eastern Africa (41.4).

The low level reflects a lack of diversification into manufacturing and other higher value-added activities which constraints competitiveness and the development of productive capacities. Ethiopia has also faced weak intersectoral linkages and high commodity dependence. The country experiences a movement of labour from low productivity activities to other low productivity activities (e.g., trade related services), indicative of a structural burden which hinders productivity, economic growth and structural transformation. Ethiopia's structural change differs from the experiences of the success stories of most East Asian countries, where structural transformation was accompanied by increases in the shares of manufacturing in GDP and employment (Shiferaw, 2017). Dependency on the export of primary commodities has hampered the country's performance and capacity to undergo the process of structural economic transformation.

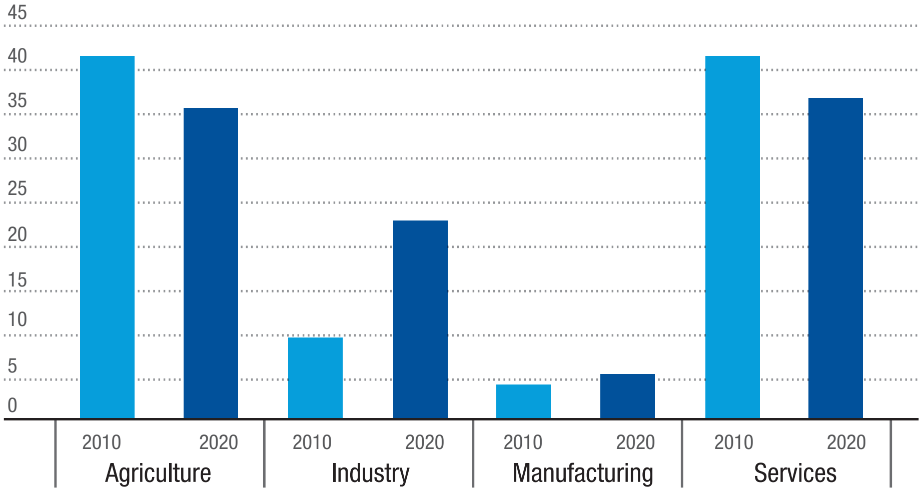
Figure 2.13
Structural Change (PCI)



Source: UNCTADstat (2024d).

Overall, the share of agriculture in GDP declined from 41.4 percent in 2010 to 35.6 percent in 2020, while the share of the service sector declined from 41.8 to 36.8 percent (Figure 2.14). The share of manufacturing remained low over a long period and was only 5.3 percent in 2020 (World Bank, 2022c). According to Ethiopia's National Accounts, the share of construction in GDP increased from 16.1 percent to 21.1 percent between 2015/16 and 2020/21 (MoPD, 2021). These sectoral trends indicate that there seems to be a change in the composition of GDP, indicating a structural shift in favour of sectors outside the agriculture, though this change does not constitute the "right" type of structural transformation, as indicated above, as share of manufacturing remains negligible.

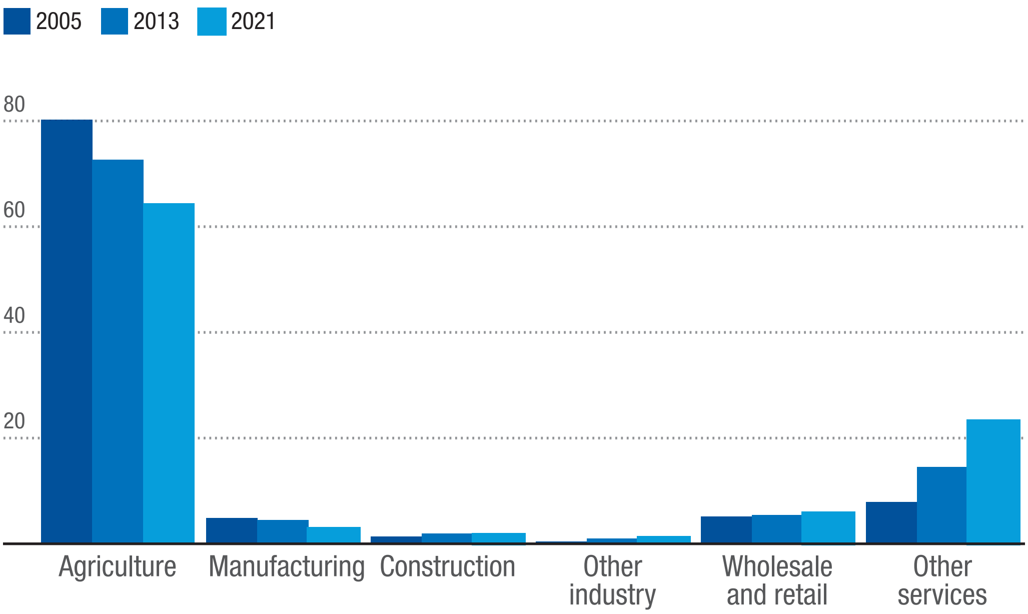
Figure 2.14
Sectoral shares in GDP (percent)



Source: World Bank (2022c).

Despite a declining trend, a large share of the population is still engaged in agricultural production. In 2021, according to the national statistics, its employment share was 64.4 percent compared with 80.2 percent in 2005 and 72.5 percent in 2013 (Figure 2.15) (ESS, 2021). Agricultural jobs are generally precarious and households engaged in agriculture have the highest poverty rate. The share of the services sector in total employment increased to 29.2 percent in 2021, up from 13.1 percent in 2005 (ESS, 2021). The employment contribution of manufacturing has remained dismal and has been declining. Employment in the manufacturing industry grew by 1.8 percent annually between 2005 and 2021, with other services (e.g., finance and transport) and other industries (e.g., mining and quarrying) registering high employment growth rate (ESS, 2021). With a growing labour force at 2 percent per year, Ethiopia faces the dual challenges of improving the quality of existing jobs, while creating new job opportunities.

Figure 2.15
Employment share (percent)



Source: Based on CSA (2006, 2014) and ESS (2021).

Key Binding Constraints

Challenges to structural change are related to the inherent characteristics of the economic system. Hence, constraints that affect other components of productive capacities also directly or indirectly impact structural change. Relevant challenges, which are not adequately reflected above, are listed below:

Inadequate coordination: Lack of effective coordination among economic and social policies hampers the development of productive capacities. For instance, there is no effective coordination between education and training policies (supply side) and employment policies (demand side), resulting in skills mismatch. In addition, there are weak linkages between industry and trade, which would provide room for moving towards the production of medium and high-technology manufacturing products to enhance competitiveness.

Incoherent incentives: There are also coherence issues associated with the implementation of economic policies and incentives. Inconsistent policies are obstacles for building productive capacities. Despite the Government's focus on transforming the economy, businesses continue to face not only limited access to finance but also very high lending interest rates which increase the cost of investment. There is also inadequate incentive for domestic producers of local inputs compared to imported inputs as the former are subject to greater taxes.

Weak inter and intra-sectoral linkages: Building robust productive capacities requires enhancing linkages within and across sectors. However, the domestic economy is characterised by weak backward and forward linkages due to underdevelopment and the low productivity of productive sectors (i.e. agriculture and manufacturing). In addition, lack of linkages between small and large firms, as well as between domestic investment and foreign direct investment are notable. Limited investments in both sectors limits the potential of the industrial sector to compete internationally and to generate employment opportunities. Technological uptake is limited in both agriculture and manufacturing sectors, resulting in low productivity.

Domestic consumer preference challenges: Consumers prefer imported commodities compared with locally produced ones as the latter are considered low quality. Around 25.5 percent of large and medium manufacturing industries reported lack of market demand as the first major reason for not working at full capacity in 2015/16 (CSA, 2017). Although there are quality issues for locally produced commodities, not all local products are of low quality. This perception in favour of imported commodities tend to negatively affect local producers and weakens intersectoral linkages.

3. Recommendations

Policy recommendations constitute priority actions which need to be undertaken in order to ensure the building of economy-wide, domestic productive capacities and advance structural economic transformation, economic diversification and the overall sustainable development of Ethiopia. They are subsequently operationalised through the Holistic Productive Capacities Development Programme (HPCDP) in Part II. The HPCDP provides operational complementarity to national policy and strategy documents in support of the national development vision and aspiration of the Government and people of Ethiopia.

3.1. Policies and strategies at the national level

1. Prioritise productive capacities for structural transformation: Ethiopia needs to prioritise developing new productive capacities, while simultaneously utilising and maintaining existing ones, which should be carefully sequenced both in timeframe, prioritisation, and resources allocation. That is, while the medium- to long-term priority should be to build new productive capacities, in the short term, the focus should be on how to maintain and utilise existing capacities. This also means that the country's macroeconomic, industrial, agricultural and infrastructure policies should be geared towards these processes.

2. Adopt a holistic approach: Looking at how to adjust the country's development trajectory, it is essential for policy makers in Ethiopia to kickstart a paradigm shift in development policy formulation and implementation, away from the current practice of traditional, fragmented and short-term interventions towards multi-sectoral, comprehensive and long-term, programme-based approaches to development. This should include efforts to break free from old mindsets (e.g., reduce dependence on external sources of finance) organised around traditional productive sectors and established institutions and policies, some of which hold back the envisioned transformation of the Ethiopian economy. Breaking away from traditional and disjointed efforts will involve applying new ideas, drawing lessons from successful experiences and practical approaches in evaluating where Ethiopia has fallen short in its industrialisation agenda, and in designing a new path forward.

3. Enhance industrialisation and sectoral development, and build linkages: Export diversification, value addition and manufacturing should remain on the top of the development agenda and the process of industrialisation to ensure the "right" type of structural transformation by avoiding jobless growth, the development of sectors with limited poverty reduction potential and indeed other challenges associated with the low-income trap. The solution lies in a dynamic industrial policy that taps the comparative advantages of the country, together with regional and global opportunities with a focus on labour-intensive manufacturing. Fostering industrialisation and technological upgrading are critical for building productive capacities and accelerating structural transformation in Ethiopia as much as elsewhere in the developing world. The Government needs to play a central role in the industrialisation process by taking on a more proactive and catalytic function to stimulate productive activities, including through creating enabling environments for business and investment.

Ethiopia needs to prioritise developing new productive capacities, while simultaneously utilising and maintaining existing ones

This can be done based on principles that contribute to building effective and mutually supportive public-private partnerships through constructive government-private sector relationship. Such efforts should also focus on addressing binding constraints and putting in place mechanisms for monitoring, evaluation and accountability.

As part of its industrial plan, Ethiopia should continue building industrial and agro-industrial parks, and special economic zones (SEZs), with the objectives of creating employment opportunities and generating foreign currency. But the country has had mixed success in implementing these projects: construction lead times are long; some industrial parks, particularly in the northern part of the country, ceased production and many others still struggle to fill their capacity, while others remain viable only until the expiration of temporary fiscal incentives. A new, more strategic approach is therefore needed to go beyond short-term objectives of creating employment opportunities for unskilled workers to manage poverty or being driven by the need for foreign exchange. It is vital to link industrial parks with the full range of necessary productive capacities, shorten lead times and develop long-term marketing and financial plans for the parks based on competitiveness, not only fiscal incentives. It is important to develop linkage programmes that maximise production, supply, and market information linkages between small and large and between foreign and domestic firms with the aim to foster transfer of technology and managerial and technical skills.

It is equally important that industrialisation is not pursued at the expense of other sectors such as agriculture and services, but in a mutually supportive manner, facilitating backward and forward linkages, especially between agriculture and the industrial sector. The important role of agriculture in Ethiopia calls for urgent actions aimed at boosting investment in agriculture and ensuring that the sector is well targeted with a special focus on research and development of indigenous crops and better variety seeds. Efforts aimed at improving agriculture should also include improving production and marketing systems, diffusing technology and disseminating information, as well as assisting in establishing acceptable practices in agriculture to meet international standards.

Indeed, Ethiopia needs to put in place effective policies and strategies that enhance agricultural productivity to meet local demand for its growing population and enhance food security. As far as the latter is concerned, it is necessary to reduce post-harvest losses through investment in necessary infrastructure (e.g. storage facilities and transport infrastructure) and agro-services. The policies should go beyond the efforts of consumer-market or price stabilisation programmes, such as subsidies. They should enhance public investment in agricultural research and development (R&D), irrigation, improved farm inputs and high-yield variety seeds, as well as implement or enhance agricultural extension programmes and targeted training for farmers. Among the key challenges facing the agricultural sector of Ethiopia is dependence on primitive farming techniques, rainfed agriculture, poor rural development and access to adequate and appropriate finance. The lack of financial resources inhibits sectoral development and modernisation and prevents investment (both domestic and foreign). Considering its importance, special provisions may need to be put in place through dedicated programmes, including those focused on concessional loans. Moreover, this may require the establishment of new frameworks or the revision of existing regulatory frameworks, which could facilitate easier access to finance. Ethiopia may consider banking and financial services catered to harnessing the potential of the agricultural sector for socioeconomic development and environmental protection.

In the context of structural change, both production and consumption linkages are weak, among firms and across sectors (UNCTAD, 2020b). In particular, manufacturing firms depend on imported inputs due to inadequate input supply domestically both in quantity and quality. Given limited propensity to structural change in the economy, there is a need for strengthening the development of productive sectors (e.g. agriculture and manufacturing) and enhancing their linkages through joint venture in priority sectors that will help in fostering capabilities of firms and improve their competitiveness.

4. Strengthen human capital and address the mismatch in skills' supply: Despite substantial investment in education and training, the quality and relevance of the educational system have remained a concern. The main issue is the mismatch between the skills acquired by graduates and those demanded by the economy, as reflected by the rising share of educated unemployed. The problem is believed to be particularly acute in terms of making a well-skilled domestic labour force available to the manufacturing sector. Elevated investment in human capital development and skills acquisition is needed to reap the demographic dividend. This calls for addressing the human capital deficit through increasing investment in the educational system, with a strategic focus on the skills necessary for meeting the current and future needs of the economy. Improving the quality and relevance of human capital development also requires collaboration across different stakeholders including the private sector, other employers and development partners to address the country's skills mismatch by offering tailored trainings. The Ministry of Education in collaboration with other stakeholders needs to design a forward-looking strategy for addressing the existing skill gaps and strengthening the supply of skills sought by the economy. The revised roadmap may help address the root causes and challenges facing the education system. Since schools often lack basic services, including electricity, water, and other laboratory equipment, there is a need for improving the supply of school facilities at all levels.

5. Create new jobs, particularly for youth: Overall Ethiopia should pursue policies for employment-rich growth to expand the number of jobs to absorb the growing labour force, and raising the incomes generated by these jobs (by means of productivity gains) so as to combat the general prevalence of poverty and underemployment. Reaching these objectives will involve implementing a range of mutually supportive policies aimed at building productive capacities and fostering structural transformation. Policy interventions should cover three broad areas: macroeconomic policies, enterprise development and technological learning, and public-sector investment. Particular attention should be paid to the creation of jobs for persons entering the labour market and young people, as 60 percent of the Ethiopian population is below the age of 25 (CSA, 2014). This demographic dividend is, at the same time, an opportunity and a challenge. Thus, it is critical that policies aimed at accelerating job creation focus on generating youth employment.

6. Expand infrastructure and enhance connectivity, while facilitating green transformation: As a landlocked country, Ethiopia has invested in physical infrastructure to attract and encourage local and foreign investments in the country. Infrastructural facilities ranging from roads, water pipes and power and telecommunication lines to a new rail link between Addis Ababa and the Port of Djibouti. Nevertheless, inadequate physical infrastructure and logistics have remained a challenge to the country's competitiveness and productive structural economic transformation. The transport and logistics sectors are beset by a multitude of constraints which need to be addressed to make the sector a key enabler for building economy-wide productive capacities, towards a more sustainable, inclusive development. One of those constraints is the limited domestic capacity to effectively manage the existing and already operational infrastructure. The Government need to follow a holistic approach and well-formed long-term strategy to build a robust transport system that serves as facilitator for economic interaction domestically and abroad. This strategy must anticipate linking urban and industrial centres with parts of the country to possess the potential for sectoral development, at the same time enhancing the connectivity of rural and remote populations without affecting their rights. Considering the sustainable transport development potential in decarbonisation and in limiting pollution, it is imperative that the strategy encompasses green transformation with greater participation of the private sector. As a landlocked country, Ethiopia must enhance its international connectivity by cooperating closer with its neighbouring countries (cooperation with Djibouti is a good example), as well as effectively utilise existing initiatives such as the LAPSSET (Lamu Port – Southern Sudan – Ethiopia Transport Corridor).

7. Improve access to electricity: Ethiopia is endowed with vast renewable energy potential, particularly in hydro, solar, wind, and geothermal power. Moreover, the country is investing significantly in enhancing its energy infrastructure. The Ministry of Water and Energy has ambitious plans to reform the power sector in order to eventually achieve an almost universal access to electricity. The participation of the private sector in energy supply and distribution, however, has so far been severely restricted due to Government's monopolistic approach and despite some efforts to engage private sector. There is an urgent need for private sector's greater participation in energy production and distribution. Currently, the Government of Ethiopia aims to attract private investors to participate in power generation facilities through Independent Power Producer (IPP) and public-private partnership modalities. These efforts need to intensify and expand allowing for business penetration on a substantially larger scale.

Moreover, despite a conscious effort in developing the energy sector, Ethiopia has a low per capita energy supply and consumption. Energy poverty, insecurity and inefficiency have remained major challenges as more than 56 percent of the population do not have access to any form of modern energy and 90 percent of the rural population depends on biomass (Yalew, 2022). Access to energy needs to be improved through the mix of infrastructure building and policy incentives to attract investment.

Ethiopia's energy system also faces diversification problems, with hydropower accounting for a large share of modern energy supply. Given the centrality of affordable and reliable modern energy supply for developing productive structural transformation, there is a need to improve and expand the production and utilisation of energy through public and private investments in both on-grid and off-grid energy sources. Doing so requires easing constraints and providing incentives to attract investments in the energy sector.

Finally, access to electricity is not only limited in terms of the share of the population, but it is also unreliable with frequent blackouts, and interruptions in energy supply. This causes not only inconveniences to households, but also negatively affects business operations, including, services and production. Moreover, it is a deterrent to foreign investors. Consequently, efforts need to be made to ensure greater reliability of the electricity supply and the entire power system through adequate investments in efficient distribution infrastructure and electricity production. At the same time, polices should be put in place to incentivise sectoral investment and to enforce standards and best practices.

8. Intensify support for private sector development and foster entrepreneurship: Ethiopia's private sector faces multiple constraints and its contribution to the GDP has remained low. Private sector has remained uncompetitive due to weak technological capabilities, limited access to technology, a lack of linkages between small and large firms, limited access to finance in terms of both quantity and cost, weak managerial capability, infrastructural deficits, and regulatory bottlenecks. The regulatory environment for starting and operating a business, and resolving insolvency has remained restrictive, complex, and costly. Firms engaged in the export and import business face many non-tariff barriers (NTBs). Traders also face trade facilitation (TF) challenges which increase trade cost. In the OECD's (2022) Trade Facilitation Indicators, Ethiopia's average score is one of the lowest. The country lags behind on information availability, advance rulings, formalities, governance and impartiality, and cooperation with other countries' border agencies (World Bank, 2022b). Measures are needed to create an enabling business environment for the domestic private sector's development, which will address the above challenges, and additional efforts are required to enhance entrepreneurship. There is a need to address both TF constraints and NTBs through streamlining procedures and automation that would offer scope for large gains and enhance the country's integration in the global value chains (GVCs). At the same time, a strategic approach to policies focusing on enabling access to credit must be put in place. Benefiting from those regulatory measures should be domestic companies, preferably job-creating MSMEs, in the sectors that have the greatest potential to foster productive capacities, build linkages, advance structural transformation and economic diversification and create better jobs. Moreover, there is a need to invest in automation covering all institutions involving in trade to increase efficiency, reduce revenue losses due to leakages, standardise service delivery and ensure transparency and accountability. For that, a proactive, forwarding looking and coherent private sector development strategy needs to be implemented coupled with robust institution building to unleash the potential and dynamism of the private sector for productive structural transformation of the country.

9. Invest in ICT and innovation: Technology and innovation are central to boosting Ethiopia's productive transformation and development gearing toward an economy, which is more digitally intensive. The review of the country's ICT landscape indicates that ICT remains one of the most undeveloped elements of Ethiopia's productive capacities due to multiple constraints. Technology acquisition, adaptation, and use need to be promoted through targeted interventions, if the country is to achieve multi-sectoral and diversified development.

Given that both the supply of (e.g., availability, affordability, and relevance) and demand for technologies (capacity to utilise) are limited, there is a need for a coordinated approach to promote investments in technology infrastructure and skills development for digital literacy, including digital financial solutions. The Ministry of Innovation and Technology – in collaboration with other stakeholders – needs to enhance hard infrastructure, increase internet penetration rate, making technologies more accessible and relevant, and invest in skills development for digital literacy. This requires provision of incentives for digitisation of businesses, including the adoption of specific tools such as e-commerce and support development of ICT enabled services as articulated in the Digital Ethiopia 2025 strategy.

10. Leverage domestic and foreign direct investment (FDI): Domestic and foreign investments, including greenfield FDI, are critical in order to expand and modernise the country's transport infrastructure, to accelerate renewable energy diversification and support Ethiopia's electrification, to build an ICT base and boost innovation by facilitating transfer of technology, know-how and financial resources, and to enhance domestic private sector development with a focus on job creation for young people through the identification of labour intensive sectors. In addition, to strengthen the linkages between domestic and FDI investments, it is crucial to boost the capabilities of domestic firms through fiscal and monetary measures, especially those engaged in the manufacturing sector.

11. Strengthen institutions and improve policy and coordination: Inadequate institutional capacities continue to limit Ethiopia's progress towards the development of its productive capacities. Institutional incapacity includes the low quality of administration, the inadequate structure of state institutions, and a lack of transparency in procedures, including in reference to public finance (e.g. in collecting taxes, etc.). Policy design and implementation capacity gaps have become a challenge in different government institutions that are involved in the policy design, implementation, coordination, and service delivery of development plans. Specific capacity shortfalls occur in the design of a results-based performance management system, database management, project design and management, monitoring, evaluation, and reporting system for up-to-date information on implementation status. A thorough evaluation of the implementation of previous development plans has not been conducted and no lessons drawn from its implementation. In addition, the Homegrown Economic Reform Agenda has not been supported by a robust monitoring and evaluation framework with key performance indicators. Frequent restructuring of public institutions has also remained a challenge. Although evidence-based and thoughtful restructuring could help improve efficiency in service delivery, it also could create uncertainty and confusion among the staff of the institutions and other stakeholders who have to re-identify their interlocutors every now and then. In addition, it also entails discontinuity of activities and programmes and loss of institutional memory. Hence, there is a need for establishing fit-for-purpose institutions through diagnosis of the context and the country's need based on its long-term vision and aspirations.

Although the Government has established institutional and policy frameworks, the inherently weak political and economic institutions require capacity strengthening and coordination to ensure policy coherence and transparency through domestic reforms and with support from international institutions. Since interventions by different institutions are interdependent, reinforcing policy actions through a coherent approach to ensure that all policies contribute to the overarching national vision and priorities is necessary. Fostering synergies in policy design and implementation also helps reduce overlapping mandates, minimise coordination failures, and allow the effective use of resources, as well as reconcile national and international development agendas. Indeed, achieving the vision of making Ethiopia an African beacon of prosperity depends on the successful implementation of policies, strategies and development plans through greater coherence and coordination among different stakeholders.

This is why providing the Ministry of Planning and Development with substantial coordination powers as to the overall development processes is critical. This approach can be traced back to the successful examples of economic transformation by some Asian countries, which appointed a coordinating ministry with substantial prerogatives to guide the national development trajectory and to ensure effective policy coordination.

12. Address macroeconomic imbalances: The macroeconomic imbalances are reflections of the inherent weaknesses of the structure of the national economy which require interventions on multiple fronts. Recommendations include:

ensuring policy coherence between industry and trade policies and strategies, as well as between employment and education and training policies which need to be supported by a favourable macroeconomic environment. Policy coherence can be achieved through improving the policymaking process, strengthening coordination mechanisms across institutions, enhancing resource allocation, targeting, management and streamlining both fiscal and monetary policies in support of the development priorities of the country.

13. Improve financing for development: A lack of sustainable finance, unpredictability of external finance, limited domestic revenues and inefficient public expenditure management pose another macroeconomic challenge. There is a need to boost domestic revenue sources through improving the efficiency of the tax administration (through capacity development) and broaden the revenue base by identifying new revenue sources and formalising the informal sector. There is also a need for expanding the financing envelope by implementing public-private partnerships, developing capital markets and reducing unproductive subsidies. Equally important is the need for improving the efficiency of public expenditure through accelerating reforms in strengthening Expenditure Management and Information Systems, including the rollout of Integrated Financial Management Information System (IFMIS), enhancement of Integrated Budget and Expenditure (IBEX) system and the monitoring and evaluation of risks posed by public enterprises (FDRE, 2020b). There is a need to identify national development priorities and align them with regional and global initiatives for mobilising development finance. This could include, for example, programmes to support and enhance regional integration with support from multilateral organisations (e.g., AfDB).

14. Ensure political stability: The lack of peace and stability has adversely affected the development of the country's productive capacities through destruction, damage and disruption in supply chains, and the displacement of people and death. Given the centrality of political stability for peace and security, addressing the root causes of peace and security challenges should be a top priority for the Government through inclusive reconciliation, reintegration and reconstruction. The Government needs to put in place mechanisms to resolve internal conflicts and restore peace and security across the nation, restore macroeconomic stability and ensure the realisation of the country's development ambitions by fostering economy-wide productive capacities and structural economic transformation. This should be seen as a prerequisite to mobilise and recalibrate total factors of production, as well as to enhance the country's vision for production transformation and achieve sustained economic growth and development.

3.2. International support and global partnership

National policies and actions alone are not sufficient to effectively address challenges facing Ethiopia in fostering productive capacities and structural economic transformation. Global actions and policies are equally crucial for building productive capacities and accelerating diversification and structural transformation. These should include support for regional economic integration, technology transfer, infrastructure financing and the attraction of FDI. The following specific measures and actions can be undertaken at the international level in support of Ethiopia's efforts to build productive capacities for achieving sustained and inclusive growth.

1. Enhance benefits from regional integration: Ethiopia's development strategies, including the Ten Years Development Plan 2021-2030, should go hand in hand with fostering regional cooperation, particularly in the context of the establishment of the African Continental

Free Trade Area (AfCFTA). According to preliminary studies by UNECA, all sectors in Ethiopia will considerably benefit from the AfCFTA in terms of exports to and imports from the rest of Africa. Given the role of agriculture in exports and employment, diversification of Ethiopia's exports including agro-processing needs to be explored. AfCFTA can also boost Ethiopia's services exports to and facilitate imports of agricultural inputs and machinery from the rest of Africa. As is the case elsewhere in Africa, capitalising on new productive and trade opportunities under the AfCFTA will depend, in part, on Ethiopia's ability to develop a critical mass of medium and large enterprises and entrepreneurs capable of competing and tapping regional and global opportunities. This should include effective policies that equip and incentivise also micro-, small- and medium-sized enterprises (MSMEs) to expand and improve their productivity, as well as establishing a conducive business environment that attracts new domestic and foreign investment. MSMEs' development and particular sector's international explanation must be supported by the international community (capacity building, financing, creating enabling international environment for cooperation) and aided by foreign companies (transfer of know-how and technology, investment, financing, facilitating access to markets and participation in regional and global production value chains) for mutual benefits.

2. Facilitate technology transfer and fostering R&D: Research and development (R&D) need strengthening to facilitate development of an innovation-driven economy and one which will be competitive in the 4.0 industrial era. This calls for supporting technology transfer, mainly through the acquisition of technologies and technology adoption transition, aligning the education and training strategy of the country with the skills required to build a strong network information system (NIS), evaluating the structure, capabilities, and relevance of technology institutes, including R&D support, regional technology centres, and technology financing, incentivising local manufacturers and assemblers of digital technologies by making these technologies affordable and available. Given the high costs involved in research and development (R&D), a tax incentive can be used as a way of indirectly subsidising research and development.

3. Support attracting FDI: FDI home countries can assist Ethiopia in building its negotiating capacities to attract and target FDI outside of the extractive sectors and enhance linkages between foreign investors and the domestic private sector. Support by FDI home countries can further include putting in place appropriate investment insurance or guarantee schemes and exempting actual and potential investors from taxes on profit repatriation. Such measures are also key to harnessing the potential of FDI to upgrade production and facilitate participation in regional and global value chains.

4. Facilitate infrastructure financing: International support in infrastructure financing, including in the context of trade facilitation, is needed. This can include expanding transport connectivity, maintaining existing transport infrastructure, boosting electricity supply, and embracing ICTs, which can bring quick results and effective solutions to facilitate trade, foster competitiveness and improve integration to the regional and global market.

5. Build capacity among the Government units and the private sector: International support needs to be scaled-up to enhance policy formulation and implementation capacities and improve policy coordination to make domestic policies centred on the fostering of economy-wide productive capacities and to achieve long-term, inclusive development gains. Through dedicated capacity building initiatives, international organisations with technical expertise must facilitate the channelling of knowledge and experiences, particularly from other successful national cases, to equip policy makers in Ethiopia with the expertise in tailored, country-specific policy formulation and institution building to advance sustainable development, structural transformation, economic diversification, and productive capacities building. At the same time, knowledge sharing with the private sector must also take place to enable the latter to achieve faster development, and more beneficial engagement with the regional and global economy through international trade, production linkages and investment. Ethiopia can benefit from UNCTAD's support in fostering the development of a modern, vibrant and dynamic private sector through improved entrepreneurship policy and dedicated entrepreneurship development programmes such as EMPRETEC.

4. Part II: Holistic Productive Capacities Development Programme

This Holistic Productive Capacities Development Programme is intended to provide an operational guide (the how) to address the gaps and limitations in national productive capacities, as well as structural development challenges as discussed in Part I of the publication. The ultimate objective of the HPCDP is to equip Ethiopia with dynamic and practical policy tools, as well as human and institutional capacities to formulate and implement sound policies and strategies, enhance inclusive and sustainable economic development, reduce poverty, and accelerate the process of fostering productive capacities and structural economic transformation. These are key to realise the development objectives of national policy documents and visions of the country, as well as to make steady progress towards the achievement of the Sustainable Development Goals.

Project Code and Title:	Holistic Productive Capacities Development Programme for Ethiopia
Implementation period	7 years
Estimated budget:	US$ 10,000,000
Target countries:	Ethiopia
Executing Entity:	UNCTAD
Counterpart institution in Ethiopia:	Ministry of Industry
Development partner(s):	TBC in consultation with counterpart institutions in Ethiopia and donor(s).

Table 4.2
Programme objectives and description

The Holistic Productive Capacities Development Programme for Ethiopia (the Holistic Programme) is a holistic, multi-dimensional and multi-annual comprehensive programme, which emanates from a careful assessment of the country's gaps and limitations in fostering productive capacities and structural economic transformation. It builds on evidence-based and data-driven assessments using the Productive Capacities Index (PCI), which serves as the basis for the formulation of the National Productive Capacities Gap Assessment (NPCGA). This Holistic Programme is designed to tap the comparative advantages of Ethiopia and relieve the key binding constraints to the country's development as articulated in the NPCGA. It aims at building economy-wide, national productive capacities, accelerating economic and export diversification and advancing structural economic transformation in order to enable the achievement of the objectives of *Ethiopia's Ten Years Development Plan: A Pathway to Prosperity, 2021-2030*, the country's development strategy and to ensure inclusive and sustainable development.

The Programme has the following specific areas of focus:

(a) Seeking ways and means of harnessing Ethiopia's comparative advantage in agriculture, including in livestock, to boost productivity and agro-processing through integrated rural development, targeted investment in infrastructure (e.g. irrigation) and by creating backward and forward linkages in labour intensive agro-processing and agro-services.

(b) Industrialising the country through a focus on value-addition and building a robust manufacturing sector based on the country's identified comparative advantages. This should include a focus on special economic zones (SEZ), export processing zones (EPZ), and industrial parks (IP), to enable the country's greater participation in global and regional value chains and international trade.

(c) Fostering inter- and intra-firm and inter-sectoral (backward and forward) linkages and creating dynamic, vibrant and competitive domestic private sector.

(d) Addressing the country's physical infrastructure deficiencies, including in transport, energy and water resources, to enable sectoral development.

(e) Building human capital to effectively respond to the changing market needs.

(f) Facilitating private sector development through the creation of an enabling business environment and mechanisms to support MSMEs' financing needs and the sharing of technical expertise.

(g) Accelerating ICT development as a facilitator of sectoral development, as well as an integral part of the national economy, through the modernisation of domestic infrastructure and its expansion, as well as through technical skills-building.

(h) Strengthening the capacity of Ethiopia's institutions and policymakers to reorient domestic policies towards a holistic approach, with economy-wide productive capacities building at the core of policy design and implementation, including through mainstreaming productive capacities and the PCI in university curricula and centres of higher education and training.

(i) Improving national policy coordination and implementation mechanisms and enhancing the effectiveness of institutions to safeguard and facilitate the process of sustainable development.

(j) Enhancing the benefits of international trade and regional integration within the African Continental Free Trade Area (AfCFTA).

The above-mentioned objectives will be operationalised through six interlinked pillars: (I) Agriculture modernisation, manufacturing and value addition; (II) International trade and integration; (III) Infrastructure (including transport, energy, and water); (IV) Innovation and technology, and the creative economy; (V) Human development and private sector; and (VI) Institution building and coordination.

4.1. Strategic orientation

The main objective of the programme is to strengthen the capacity of Ethiopia's policymakers and entrepreneurs to build productive capacities, and to foster export diversification and structural transformation, and to implement policies and institutional arrangements to facilitate inclusive, inclusive and sustainable development and subsequently to prepare the country for graduation with momentum from the LDC status.

Looking at how to adjust the country's development strategy, it is essential for Ethiopia's policymakers to espouse a paradigm shift in development policy formulation and implementation away from the current practice of traditional, fragmented and short-term interventions towards multisectoral, comprehensive and long-term programme-based approaches to development. This should include efforts to break free from old mindsets, organised around traditional productive sectors and established institutions and policies, some of which hold back the envisioned transformation of the economy. Breaking away from traditional and disjoint efforts will involve applying new ideas, lessons from successful experiences and practical approaches in evaluating where Ethiopia has fallen short in its industrialisation agenda, and in plotting a new path forward. In the short- and medium-term periods, Ethiopia needs to prioritise the restoration of peace and political stability by effectively addressing the root causes of violent conflicts as these are among the key factors that affect Ethiopia's performance in the PCI, with a negative impact on its key components.

The PCI provides a framework for evidence-based policy formulation. The potential for Ethiopia to improve its PCI performance is evident. However, such a potential must be effectively harnessed though pragmatic and forward-looking policies and strategies. In promoting the placing of the PCI at the centre of the policy discourse, there should be continuous engagement of Ethiopia key institutions in the processes on which to anchor the PCI. Placing the fostering of productive capacities at the centre of Ethiopia's trade and development policies would require political commitment matched by actions.

The Holistic Productive Capacities Development Programme for Ethiopia is aligned with the *Transforming Our World: The 2030 Agenda for Sustainable Development*, the United Nations overarching global development strategy. It serves the process of achieving in particular, Goal 1 (No Poverty), Goal 4 (Quality Education), Goal 7 (Affordable and Clean Energy), Goal 8 (Decent Work and Economic Growth), Goal 9 (Industry, Innovation and Infrastructure), and Goal 10 (Reduced Inequalities).

The Holistic Productive Capacities Development Programme is also aligned with and intended to support the realisation of Ethiopia's *Ten Years Development Plan: A Pathway to Prosperity, 2021-2030*. The country's overall development strategy, which lays a vision of making Ethiopia an "African Beacon of Prosperity", is expected to achieve the following outcomes: (a) Improvement in income levels and wealth accumulations so that every citizen would be able to satisfy their basic needs and aspirations; (b) Basic economic and social services such as food, clean water, shelter, health, education, and other basic services should be accessible to every citizen regardless of their economic status; (c) Creating an enabling and just environment where citizens would be able to utilise their potentials and resources so that they lead quality life; (d) Improvement in social dignity, equality, and freedom where citizens can freely participate in every social, economic, and political affairs of their country regardless of their social background.

The Holistic Productive Capacities Development Programme is aligned with strategic pillars and key areas of the Ten Years Development Plan and concerns

Placing the fostering of productive capacities at the centre of Ethiopia's trade and development policies would require political commitment matched by actions

particularly the listed priorities: Quality Economic Growth, Economic Productivity and Competitiveness, Technological Capability and Digital Economy, Private Sector-led Economic Growth, Institutional Transformation, Regional Economic Integration, as well as Shared Prosperity, Sustainable Development Financing, Resilient Green Economy, Gender and Social Inclusion, and Access to Efficient Civil Services. These key priority areas indicated in Chapter III of the Ten Years Development Plan are the basis for the Homegrown Economic Reform and policy direction at the macroeconomic and sectoral levels and include (a) Multi-sectoral and Diversified Sources of Growth and Job Opportunities, (b) Sustainable and Inclusive Financial Sector Development, (c) Harnessing the Demographic Dividend, (d) Quality and Efficient Infrastructure Development, (e) Sustainable Urban Development, and (f) Peace, Justice, and Inclusive Institutions.

The Holistic Programme's activities contribute to the overall macroeconomic plan particularly insofar as economic growth and structural transformation are concerned (Chapter IV of the Ten Years Development Plan), and facilitate the development of sectors such as agriculture, manufacturing industry, trade, and tourism, as well as, construction industry, mining, urban development, all listed in Chapter V of the Ten Years Development Plan. The Holistic Programme pays substantial attention to the infrastructure aspects of the Ten Years Development Plan, including transport, water resources, energy, and innovation and technology (as per Chapter VI).

Moreover, the Holistic Programme is also aligned with the proposed *National Import Substitution Strategy (NISS) for Selected Manufacturing Industry Sub-sectors in Ethiopia* (2023). By emphasising the building of productive capacities and advancing structural transformation and economic diversification, as well as promoting particular sectors for development though backward and forward linkages coming from the existing comparative advantage, including agriculture and beyond, such as, for example, leather sector, or nutraceuticals, the Holistic Programme effectively supports the process of import substitution.

The alignment of the Holistic Productive Capacities Development Programme for Ethiopia with the *Ten Years Development Plan: A Pathway to Prosperity, 2021-2030*, as well as key sectoral strategies, enables the Programme to become an integral and strategic instrument in the implementation of the State's development vision.

4.2. Priority interventions

The priority areas for policy interventions are captured in five main pillars, depicting the key processes to advance sustainable development, structural transformation and economic diversification, and foster productive capacities in Ethiopia:

Pillar I: Agriculture modernisation, manufacturing and value addition

Pillar I(a): Modernisation of agriculture through building linkages and diversification

As with most countries in Africa, Ethiopia's productive capacities are linked strongly to its **natural capital**, including **agriculture**. Ethiopia's Ten Years Development Plan 2021-2030, places agriculture modernisation among the priority tasks for structural transformation. The National Productive Capacities Gap Assessment of Ethiopia acknowledges that the share of agriculture is declining in the GDP, which is to be expected while an economy undergoes a process of structural change, and points, however, to the sectoral challenges. Agriculture in Ethiopia is heavily reliant on rain, which makes it highly vulnerable to the adverse effects of climate change. Indeed, its environmental fragility and the progressive impact of climate change put additional pressure on the sector. Agricultural jobs are generally precarious, and households engaged in agriculture have the highest poverty rate. Technological uptake is limited in both agriculture and industry. Ethiopia's dependence on primitive farming techniques, rainfed agriculture, poor rural development and access to adequate and appropriate finance entrenched socioeconomic vulnerability and widespread poverty particularly in rural areas. The economy is lacking linkages between agriculture and industry, tourism, and other services sectors. One of the outcomes of this are the challenges smallholders face in selling their produce.

Nevertheless, potential for horizontal diversification and the development of agro-processing industries exists. Untapped commercial agriculture potential is related to its high domestic demand, as well as possible exports opportunities, partly in connection with the regional economic integration processes. The NPCGA calls for the overall modernisation and transformation of the sector by facilitating backward and forward linkages, especially between agriculture and the industrial and services sectors. Indeed, the important role of agriculture in Ethiopia calls for urgent actions aimed at boosting investment in agriculture and ensuring that the sector is well targeted with a special focus on research and development of indigenous crops and better variety seeds. Efforts aimed at improving agriculture should also include improving production and marketing systems, diffusing technology and disseminating information, as well as assisting in establishing acceptable practices in agriculture to meet international standards. Given the role of agriculture in export and employment, diversification of Ethiopia's exports including agro-processing needs to be explored.

The potential of the country's natural capital and agriculture to address the challenges of unemployment, food-security and capital accumulation, as well as diversify exports and foster backward and forward linkages in the economy is, thus far, largely untapped. In this sense, the National Quality Infrastructure will require improvements to be able to ensure the safety and quality of its products both for domestic consumption and exports. Business and other social linkages with agri-business, hotel chains and other catering service providers are also effective ways of increasing farm production, productivity and income.

Furthermore, agriculture is key to promoting growth with employment. For Ethiopia, the agriculture sector or the rural economy at large is key to pursue policies for employment-rich growth to expand the number of jobs so as to absorb the growing labour force, and raise the incomes generated by these jobs (by means of productivity gains) as key to combat the prevalence of poverty and underemployment. Reaching these objectives will involve implementing a range of mutually supportive policies aimed at building productive capacities and fostering structural transformation. In this context, public investment in priority areas (particularly in rural infrastructure, irrigation and electrification, as well as high quality rural extension services and community service centres) is required to set in motion a virtuous circle. In the virtuous circle, investment boosts productivity in the agriculture sector, and overall economic growth creates employment, which, in turn, entails increased income for workers, giving rise to increased consumption that supports the expansion of aggregate demand. Import leakages apart, expanded aggregate demand ideally creates incentives for new or additional investment to meet the growing demand. Sectoral upgrading and value addition, together with supporting policy measures help to ensure an improved quality of jobs created, leads to development gains. This circle could then be reiterated at a higher level of investment, growth, employment, and income.

This means that holistic programmes such as this one should facilitate valorisation of Ethiopia's rural economy and maximise the development gains from agriculture by creating virtuous cycles between investment in agriculture, improved productivity, employment opportunities and

The NPCGA calls for the overall modernisation and transformation of the agriculture sector by facilitating backward and forward linkages

aggregate domestic demand to enhance economy-wide productive capacities and structural economic transformation.

Therefore, practical policy and operational lessons from successful economies in Africa, Asia and Latin America will be brought to the Ethiopian policymaking as part of the Holistic Programme. Similarly, training and capacity building activities will be delivered in critically important areas of agro-processing, ensuring a robust National Quality Infrastructure (NQI) and to facilitate the meeting of international food safety and quality standards. The NQI process will be facilitated through collaboration with the International Organisation for Standardisation (ISO), in line with the MoU between UNCTAD and ISO and based on the cooperation model adopted in the implementation of the pilot Holistic Productive Capacities Development Programme for Angola. Support to the development of specific value chains will equally be delivered through a format tested under the Angola pilot, whereby focus is put on the Training of Trainers and institutional support to the delivery of agricultural extension services. Policy-level support to agro-processing will benefit from technical advisory services under the framework of a Production Transformation Policy Review, where UNCTAD is partnering with OECD and UNIDO.

The livestock sector can go beyond improving food and nutrition security, and can increase exports, create jobs and income while enhancing participation in regional and global value chains

Specifically, the draft of the National Import Substitution Strategy (NISS) (2023) lists agriculture sector development among important tasks pointing to the potential for increased domestic production of cereals and vegetables, as well as sugar and dairy products, emphasising the challenge of the existing reliance on imports (especially wheat, sugar and some animal products).

NISS also lists the **food and beverage** subs-sector, as being directly linked to the modernisation of the agriculture sector, among the priority manufacturing sub-sectors to be developed. Ethiopia's food and beverage sub-sector includes the production of grain products, bakery and confectionary, other foods products, frozen, canned, and dried food, syrup, seasoning, oils, general food, animal food, and the production of alcoholic and non-alcoholic beverages. The related processing industry is believed to have the potential to drive agricultural productivity and rural economic transformation, if the systemic agro-processing challenges in the value chains are addressed through the government interventions. The sector contributes to 35 percent of employment in the industry, yet, the production capacity utilisation of manufacturers remains low.

The **livestock sector** also offers ample opportunities for diversification through modern beef industry, alongside a labour-intensive manufacturing of leather and leather products, integrating actions to effectively address emerging sustainability challenges regarding the livestock-environment and livestock-public health nexuses. Developing the livestock sector must start by clustering breeders and herders to maximise scale economies and improving the quality and quantity of livestock by investing in improved extension services, veterinary and training and capacity building in animal husbandry. Such efforts should include addressing the poor state of livestock infrastructure, limited availability of processing facilities and bottlenecks in the supply chain, which hinder efficient movement of livestock and its product downstream, thus preventing reciprocal livelihood. If properly developed and harnessed, the livestock sector can go beyond improving food and nutrition-security, and can increase exports, create jobs and income and help the country to link into regional and global value chains in leather and leather products. *The Holistic Programme will assist in mapping the possibilities for mobilising private and public investment to the sector, as well as in instilling operational lessons from successful countries in Africa, Asia and Latin America, with the aim to boost the productivity, quality and safety of Ethiopia's livestock sector, as well as to develop market entry mechanisms for labour-intensive leather and leather products.*

Ethiopia has also untapped potential in **nutraceuticals and health foods** (super foods), technically known as "functional foods" and food supplements, which have or are alleged to have health-enhancing properties beyond their nutritional value. This includes food supplements that are derivatives from plants and fruits processed into concentrated forms such as liquids, tablets or capsules. More broadly the term 'nutraceutical' is used to describe both of these aspects, including fruits, vegetables, roots, leaves, and grains that are known or considered to have health/related benefits. Specifically, in the case of Ethiopia, an UNCTAD (2022) report indicates the need for enhanced efforts to maximise production and benefit from export opportunities of nutraceuticals such as frankincense, teff and sesame.

However, there has always been sectoral underproduction and underutilisation due to supply side constraints, a lack of efficient distribution systems, including poor rural transportation networks, the lack of farm inputs such as fertilisers, and limited knowledge about the existence of such foodstuffs that are rich in micronutrients, resulting in lost opportunities to improve the functioning of the health system. Improved seed varieties that can withstand weather shocks, better awareness about the health benefits as well as improved production, storage and distribution systems supported by scientific research and regulations are key for harnessing the potential of nutraceuticals in Ethiopia. Ethiopia can also tap the global nutraceutical market, which was estimated at US$382.5 billion in 2019. Consumer demand is rapidly increasing in many regions including the United States, Europe, Asia and the Pacific, Latin America and the Middle East, with the market estimated to reach US$600 billion in 2030. The United States, Europe and Japan account for more than 90 percent of the global nutraceuticals market. Greater product awareness, higher disposable income levels and the evolution of specific wellness diets in society have contributed to this significant growth in consumer demand. In addition, the Internet has provided an abundance of information regarding the cause, prevention and treatment of various ailments and diseases. With the often-unwanted side effects of prescription medication, consumers seek to derive medicinal benefits from food by way of supplementing their diet with herbal and dietary supplements. According to an UNCTAD (2022) study, the rising demand for nutraceuticals is driven by several factors, including higher incomes, growing consumer awareness of health issues as populations age, greater focus on preventing rather than curing illness, wariness about modern medicine's invasive procedures and severe side effects, greater interest in and knowledge about traditional cures in other cultures and concerns about environmental and social sustainability (notably in the case of organic produce). The global market for plant-based food is changing fast, supported by a shift in the public belief in the capability of plant-based food to assist in treating their health issues. A new holistic approach recognising that whole plant diets can work across a range of medical issues is now underpinning the growth in this type of product. However, to effectively benefit from the increasing global demand, Ethiopia needs to build its capacities to improve the international food safety and quality standards, in parallel with developing the supply capacity. This is because that major markets have introduced a multitude of standards – both public and private – which makes it extremely difficult for exporters to penetrate unless they meet the required standards. This issue is particularly pertinent to nutraceuticals, which are products sold for their contributions to health and human wellbeing. *The Holistic Programme will help Ethiopia to address supply and demand side constraints facing the nutraceuticals sector, and agriculture as a whole, to be able to maximise developmental gains of the potential that the country holds.*

> The Holistic Programme helps Ethiopia to address supply and demand side constraints facing the nutraceuticals sector, and agriculture as a whole

For example, specialty products such as nutraceuticals require effective and market-friendly labelling, packaging, and branding. Added to this, **Geographical Indications** (GIs) can help add value to the products by supporting the branding and marketing of locally produced nutraceuticals. Ethiopia's producers also need to set up Codes of Practice, establishing marketing and surveillance mechanisms with the potential benefits in terms of greater economic profits, fostering quality-production, strengthening collective action, as well as improved management of biodiversity resources. Ideally, efforts to register GIs or trademarks should be part of a broader marketing and sustainability strategy. This requires establishing a reputation for quality and reliability and, very likely, partnering with foreign firms who have the marketing expertise and connections to successfully establish a brand. Branding and trademarks should also be linked to improving the safety and quality of nutraceutical products with the aim of meeting international standards. With the right marketing and improved trade infrastructure, selling nutraceutical products directly to international markets would greatly benefit Ethiopian producers and the overall export capabilities of the country. *The implementation of the Holistic Programme for Ethiopia will be key to addressing the demand side challenges and market entry requirements, while protecting specialty products through trademarks or GIs and by fostering partnership with leading global brands and trademarks. UNCTAD's expertise and longstanding support to developing countries with a view to identifying GI potential for specific products will be mobilised.*

Furthermore, in order to effectively harness the potential of the agriculture sector, including livestock and nutraceuticals for job creation, poverty reduction and sustainable growth and development, Ethiopia needs to address **land ownership** rights as part of the overall property rights and ensure the full access of the whole population, including women and marginalised groups, to productive assets such as land and capital. Deliberate policies and concrete actions are necessary to promote gender equality, improve the productivity and growth prospects of the agriculture sector for job creation, income generation, development, and value addition. To move towards a level playing field, it is necessary to remove gender-based obstacles in agriculture and entry barriers to the poor. These should include legal reform of land tenure; bans on gender-based discrimination in marketplace settings; establishment of well-resourced funds to address gender inequality, including providing capital funding for female-led projects; creation of land-purchasing cooperatives for women; subsidies for female farmers to reduce dependence on male family members; targeted training for women, adjusted to their time-poverty and schedules dependent on reproductive and care responsibilities; creating platforms and networks supporting linkages and provision of market intelligence for female entrepreneurs, among other actions. These actions are also necessary to target poor households and other vulnerable sections of society who lack productive assets due to unequal distribution of land and capital.

The Holistic Programme will support the Government in its policies to address the bottlenecks of the agricultural sector's development, including through research on sectoral economic diversification, creation of backward and forward linkages and an enabling environment for sectoral advancements, addressing gender-based obstacles, and ensuring environmental sustainability. Substantial focus will be on supporting smallholder farmers. In addition to analytical and policy support provided for commodity value addition, as well as agricultural value chain development models piloted in Angola, UNCTAD will use the Farming as a Business training package – closely related to the EMPRETEC Programme – to provide concrete support to smallholder farmers.

Pillar I(b): Industrialisation through manufacturing

The rationale for pursuing structural transformation is to achieve faster productivity growth and move towards higher value-added activities. This is usually associated with the industrial/

manufacturing sector, which plays a key role in a country's development. Ethiopia needs to give a high priority to industrial policies and strategies which aim to change the capital-labour ratio of the economy, by attracting investment into labour-intensive manufacturing and integrating domestic firms into manufacturing global value chains (GVCs) and by fostering production linkages between domestic and foreign firms. This means that the starting point for Ethiopia should be to identify key comparative advantages and binding constraints to industrialisation as well as intervention strategies to address the challenges. Only then will it be possible to foster backward and forward linkages and technological upgrading in these sectors, while at the same time relieving constraints to production transformation. To that end, focusing on natural resource-based activities such as agriculture can be the basis for developing downstream industries, such as food processing, geared mainly towards domestic and regional markets, but also global markets. It can also yield other types of products (e.g., agricultural raw materials) that can be further processed before exporting. To this end, such measures as the provision of industrial extension services, temporary export tariffs reduction and support to firm clustering can be critically important. These actions can also be complemented by enhanced regional cooperation on some agricultural commodity chains of production, processing, and marketing (e.g., rice, maize, wheat, sugar, meat and dairy products) which have the potential to meet increasing regional demand through regional integration schemes, particularly in the context of AfCTA.

The Ten Years Development Plan 2021-2030 emphasises the role of manufacturing in country's development. The major focus areas of manufacturing industry development plan are: (i) enhancing capacity utilisation; (ii) strengthening coordination; (iii) raising production and productivity from existing industrial establishments; (iv) satisfying domestic demand as well as supplying export markets by producing competitive industrial products such as foodstuffs, wearing apparel, housing materials and pharmaceuticals; (v) encouraging manufacturing industries that utilise locally produced inputs; (vi) raising the variety, quantity and quality of exportable industrial commodities; (vii) strengthening the value chain, interlinkages, and interdependencies within the manufacturing industry; (viii) attracting new investments in large numbers, varieties and qualities into manufacturing by introducing, based on studies, new investment incentives and simplified procedures, as well as enhancing the role and partnership of the private sector to that end; (ix) coordinating the development of heavy metal and engineering industries, chemical and pharmaceutical industries, and other high tech industries; (x) strengthening the cluster organisation system; (xi) expanding small- and medium-scale industries and creating an enabling environment for transitioning to the next stage of development; and (xii) expanding job opportunities.

> The starting point for Ethiopia should be to identify key comparative advantages and relieve binding constraints to industrialisation

The objectives of manufacturing industry development are to create employment opportunities by improving the production and productivity of existing manufacturing plants and by attracting new high quality investments; to expand manufacturing industries that can produce strategic commodities that can substitute imports; to produce high quality export goods in volume and variety; to increase the share of manufacturing in the gross domestic product by creating a conducive environment for improved participation of private investors in the subsector; and to ensure that the development of manufacturing industry is consistent with the country's sustainable and green economy development strategy.

The following main targets have been set in the Ten Years Development Plan to achieve the objectives of manufacturing development plan for the period 2021-2030:

- to increase average capacity utilisation of the manufacturing industry from 50 percent to 85 percent;
- to raise the domestic market share

of locally manufactured industrial products from 30 percent to 60 percent by expanding manufacturing industries that produce substitutes of strategic import goods;

- to raise the competitiveness of the manufacturing industry by improving product quality;
- to raise the number of small and medium-scale manufacturing enterprises from 2,000 to 11,000 by attracting high quality investments and focusing on those industries that employ advanced technologies;
- to create a total of 5 million new job opportunities in the manufacturing industry during the ten years period by raising the number of job opportunities created annually from 175 thousand in 2019/20 to 850 thousand in 2029/30.

At the same time, NISS has identified four additional priority sub-sectors within manufacturing, as those possessing the greatest potential, namely, (a) textile and apparel, (b) leather and leather products, (c) chemical and construction, (d) metal and engineering, in addition to the aforementioned food and beverages. Ethiopia has a growing textile and apparel manufacturing sector, with over 340 medium and large-scale companies operating in the industry and a relatively well integrated supply chain – encompassing spinning, weaving, knitting, dyeing, and finishing. The sector is labour intensive; hence it contributes to employment generation and has substantial export potential. The leather and leather products sector has shown significant production growth in recent years; yet, exports show a slight decline. Currently, there are 32 tanneries, over 200 footwear manufacturers, and over 100 leather product manufacturers. The sector has been identified as a potential driver of economic growth, value addition, job creation, and export earnings, because Ethiopia has the largest population of livestock in Africa. However, production of leather and leather products is underdeveloped as the county currently imports a significant amount of leather inputs.

Ethiopia's chemical and construction inputs sector is a diverse one consisting of several industries including chemicals, plastic and rubber, paper and pulp, wood and furniture, and glass and glass products. It is considered the backbone of manufacturing and the supplier of inputs to all major industries. However, the sector remains relatively underdeveloped with a significant reliance on imports for both inputs and finished products. At the same time, the Ethiopian metal industry sector can be divided into basic metal industries which produce primary metal products from ore and scrap, and engineering industries which produce secondary products from primary metal products such as machinery, transport equipment, and electronic equipment. This sector can be an important contributor to the country's economy, providing employment opportunities and contributing to economic growth. However, Ethiopia is highly dependent on imports of metal and engineering products to meet its domestic demand.

Moreover, NISS lists pharmaceuticals as a possible option within the economic diversification policies. The pharmaceuticals sector in Ethiopia shows promising potential for growth, but it requires due attention to fully realise its capabilities. Currently, the industry is at a nascent stage with a growth rate of 15 percent, which highlights the increasing demand for pharmaceutical products in the country.

The NPCGA of Ethiopia acknowledges that the contribution of manufacturing to the overall growth and employment has remained low. Manufacturing exports represent a low percentage of total merchandise exports. This reflects the small share of manufacturing value added in GDP. This is why export diversification, value addition and manufacturing should remain on the top of the development agenda and the process of industrialisation to ensure the "right" type of structural transformation, by avoiding jobless growth, the development of sectors with limited poverty reduction potential and indeed other challenges associated with the low-income trap. The solution lies in a dynamic industrial policy that taps the comparative advantages of the country, together with regional and global opportunities with a focus on labour-intensive manufacturing. Fostering industrialisation is critical for accelerating structural transformation. The Government needs to play a central role in the industrialisation process by taking on a more proactive and catalytic function to stimulate the manufacturing sector's development, including through creating enabling environments for business and investment. Establishing an enabling environment for the manufacturing sector is the objective of the Ethiopia Tamrit "Ethiopia produces" programme. By establishing a national system that creates a favourable environment for the sustainable development and competitiveness of the manufacturing industry sector, it will enable the manufacturing industry to carry out economic structural transition targeted for the success of the country's economic reform and development plan. The programme's specific objectives concern:

- Identifying, analysing and addressing the problems faced by the manufacturing sector, and communicating with relevant stakeholders on sustainable solution measures and also take ownership at every level;
- Streamlining the provision of government services and internal procedures to the sector and improve utilisation of the average production capacity of manufacturing industries;
- Supporting research and development to ensure the sustainable development and competitiveness of the manufacturing industry;
- Increasing the use of domestic products, improving the investor's view of the sector and making more investors engage in the manufacturing industry sector to build an industrial society;
- Supporting effective communication work to make the manufacturing industry movement a national agenda with the participation of the country's top leaders.

Therefore, the Holistic Programme will further aim at identifying sectors of Ethiopia's economy which have potential for expansion, with a view to achieving productivity gains and export diversification, and will support further development, strengthening and integration of already identified industries. A strategic focus will be on labour intensive manufacturing, such as in the textiles, apparel, and leather and leather products sectors. The Production Transformation Policy Review process will help in identifying such industrial sectors with high potential. For their further development, UNCTAD's eCommerce support will be mobilised to tap into the country's digitalisation potential through an eTrade Survey, eTrade strategy and tailored technical assistance to strategy implementation. At the same time, with the support of relevant agencies, UNCTAD will work towards enhancing the environmental sustainability of industrial transformation, including through facilitating the implementation of waste management programmes.

The Holistic Programme will also support building the capacities of Ethiopia in exploring new products and sectors where it has untapped potential. The capacity building initiative in this area will make use of the latest economic methodologies, including the Product Space Approach, to identify products where Ethiopia is likely to enjoy a competitive advantage. Overall, the proposed intervention strategy will be designed to accelerate industrialisation that should not be pursued at the expense of other sectors such as agriculture and services but in a mutually supportive manner, facilitating backward and forward linkages, especially between agriculture and the industrial sectors.

> The State needs to play a central role in the industrialisation process through a proactive and catalytic function to stimulate manufacturing

Pillar II: International trade and integration

Trade is at the core of the Ten Years Development Plan 2021-2030. The major areas of focus in the trade development plan are developing institutional implementation capacity; strengthening coordination that enhances growth; modernising trading systems; increasing the volume, variety and quality of export products; putting in place a trade system that is modern, competitive, efficient, and conducive for trade participation; and ensuring availability of foreign exchange by expanding export market destinations. In addition, actions are foreseen for ensuring that the consumers benefit from modern transactions by establishing a modern marketing system, strengthening efforts to ensure the quality and safety of products and services, improving inspection and regulatory work, reforming the long market chains, and ensuring fair competition. On the other hand, priority will continue to be given to creating a vast market for Ethiopian products through full accession to the WTO, reaping the full benefits of the AfCFTA, and reaching bilateral and other multilateral trade agreements with selected countries.

Ethiopia need to take further policy, regulatory and institutional reforms to improve the delivery and competitiveness of the services sector regionally and globally

In the international context, the principal objectives of the trade development plan are to establish a modern, equitable and competitive domestic marketing system; to increase the variety, quantity and quality of export products mainly by focusing on value addition; to expand trade destinations by strengthening regional and international trade relations; and to increase the amount of foreign exchange earnings. The document proceeds with ambitious plans, including to increase merchandise export revenues from USD 3.0 billion to USD 18.5 billion by raising USD 6.7 billion from agriculture, USD 9 billion from manufacturing, USD 2.1 billion from mining, and USD 0.7 billion from electricity and other commodities (FDRE, 2021).

Pillar II(a): Export orientation through special zones and intensification of services trade

Ethiopia's Ten Years Development Plan 2021-2030 and the draft of the National Import Substitution Strategy (NISS) (2023) emphasise export production as a driver of growth. In this respect, the Government of Ethiopia, like many developing countries, intends to expand the role of the special zones to boost domestic production for export. *The Holistic Programme will support the development of tailored business plan(s) for export processing zones (EPZs) and special economic zones (SEZs), as well as industrial parks (IP). It will also organise study tours, targeted training and capacity-building activities on best practices and lessons learnt from the management of industrial parks and special zones in other developing countries. The support will be coordinated, lessons shared, and expertise mobilised partly through the New Global Alliance of Special Economic Zones (GASEZ) to boost SEZ development, consisting of seven global, regional and national associations representing over 7,000 special economic zones (SEZs) and UNCTAD.*

Ethiopia has a well-known comparative advantage in the services sector particularly in the air transport sector. In view of the strategic importance of air service exports to the country's economic development, foreign exchange earnings and economic specialisation into high-end services sector, Ethiopia need to take further policy and regulatory as well as institutional facilitation and related measures to improve the delivery and competitiveness of the services sector regionally and globally. Facilitating the growth and expansion of knowledge and technology intensive services sectors such as ICTs, design and manufacturing based services, banking and insurance, real estate, construction and transport services is critically important for job creation, poverty reduction and achieving structural economic transformation.

In order to increase the value of export, Ethiopia needs to, among others, meet various international standards. *The Holistic Programme will be providing support to standards setting bodies with a view to enabling Ethiopia's exporters to meet international standards as they diversify exports and export destinations. This will be done in collaboration with ISO under the UNCTAD-ISO MoU and a cooperation model piloted in Angola. These standards include technical barriers to Trade (TBT); sanitary and phytosanitary standards (SPS) and other non-tariff measures (NTMs). The Holistic Programme will build capacity of standards bodies* as they guide Ethiopian enterprises in their endeavour to meet the demands of an increasingly sophisticated export markets and ensure the beneficial integration of Ethiopia into the global economy/multilateral trading system through inter alia the building block of regional integration.

At the same time, *the Holistic Programme activities will also include identifying possible export markets and defining policies and measures that can help to strengthen links with regional and global value chains.* This can help Ethiopia overcome the challenges of its small market size (due to the low purchasing power of the population) and generate economies of scale in production. *The Holistic Programme will also focus on measures to reduce the costs of transport and alleviate non-tariff measures (NTMs). In this regard, UNCTAD's Sustainable Freight Transport Assessment, coupled with case studies on priority products' market access, will be a useful tool to identify bottlenecks and the potential in Ethiopia's transport infrastructure, as per pillar III. Technical assistance will, on this basis, be provided to the process of formulating policies, legislation and strategies for the development of transport and trade logistics infrastructure. In addition, investment opportunities through Public-Private Partnerships (PPPs) will be identified and support to PPP project development provided, in line with the model piloted in Angola. To alleviate the impact of NTMs, an NTM data collection exercise will be carried out or updated for Ethiopia, and capacity building in that regard provided through the UNCTAD NTM programme will take place.*

Pillar II(b): Foreign direct investment (FDI) and remittances

As with many developing countries, Ethiopia faces acute challenges in fostering capital accumulation through domestic private and public investments alone. There is a need to attract and benefit from FDI, given that domestic private sector has limited capacity to generate the level of investment needed to develop productive capacities and drive structural transformation. Ethiopia's policies need to create a virtuous circle in which investment boosts growth and growth creates employment, which, in turn, entails increased income for workers, giving rise to consumption that supports the expansion of the aggregate demand. However, promoting investment for inclusive development calls for a macroeconomic policy approach that goes beyond the narrow goal of macroeconomic stability. This broader approach calls for expanding the number of instruments and coordinating macroeconomic policies with other policies to stimulate the development of productive capacities. In this context, fiscal policy becomes more important than monetary policy. The measures should target financing public investment in physical and human capital by accelerating public and private investments in infrastructure and raising spending on education and training. To do so will require strengthening Government capacity to fight inflationary pressure, mobilise and manage fiscal and other sources of revenue, whether domestic or external. At the national level, this can be done initially through domestic resource mobilisation, which entails changes in fiscal policy and tax administration. Given the paucity of development finance from external sources and in the light of the growing economic importance to Ethiopia of remittances from nationals living and working abroad, there is a need for greater and coordinated efforts, including by building confidence among the diaspora for national capital formation and formulating diaspora friendly policies to attract and benefit from remittances. Intensifying or redirecting remittances towards productive investment schemes should be seen as a desirable policy objective.

The reference to foreign direct investment in the Ten Years Development Plan 2021-2030 concentrates on the aim to enhance export. The NPCGA calls on the international community to support attracting FDI. "FDI home countries can assist Ethiopia in building its negotiating capacities to attract and target FDI outside of the extractive sectors and enhance linkages between foreign investors and the domestic private sector. Support by FDI home countries can further include putting in place appropriate investment insurance or guarantee schemes. Measures are also key to harnessing the potential of FDI to upgrade production and facilitate participation in regional and global value chains" Ethiopia subsequently needs to leverage domestic and foreign direct investment, including greenfield FDI, as these are critical for development and structural transformation.

FDI home countries can assist Ethiopia in building its negotiating capacities to attract and target FDI outside of the extractive sectors

The Holistic Programme therefore will:

- *Through its Investment Policy Review Programme, assess the investment policies and strategies to help attracting higher levels of FDI, while ensuring greater development benefits.*
- *Review international investment agreements (IIAs).*
- *Provide support to Ethiopian Investment Commission to promote and facilitate investment in Sustainable Development Goals related projects. This includes policy advice, capacity building, the exchange of best practices, assistance in the design of investment promotion strategies for specific target sectors like renewable energy, health, agribusiness, and the development of online investment guides to promote and facilitate investment (iGuides). The iGuides online platforms, designed by UNCTAD and the International Chamber of Commerce, provide international investors with essential up to-date information on rules, economic conditions, procedures, business costs and investment opportunities.*
- *Through UNCTAD's Investment Promotion and Facilitation Programme, provide technical assistance with a view to developing action-oriented strategies and concrete, directly employable tools for attracting investment and targeting investors to provide sustainable investment to the sector.*

Pillar II(c): Regional integration within the African Continental Free Trade Area (AfCFTA)

The launch of the AfCFTA on 21st March 2018 in Kigali and the subsequent commencement of trading under the AfCFTA on 1st January 2021 is a game changer. An integrated continental market of 1.2 billion people growing to 2.5 billion by 2050 with an estimated GDP of US$ 2.6 trillion, provides immense opportunities for export diversification, industrialisation and structural transformation for the Ethiopian economy.

Ten Years Development Plan 2021-2030 refers to AfCFTA in the context of strengthening Ethiopia's global and regional partnership. The ongoing negotiation for accession to the World Trade Organization (WTO) as well as the ratification of the African Continental Free Trade Area proves Ethiopia's Homegrown Economic Reform's commitment to boost the trade and investment partnership both at the global, continental and regional levels. The significance of linking Ethiopia's economy with that of the continent and the region is paramount, particularly considering that Ethiopia is a landlocked developing country (LLDC). The NPCGA calls for enhancing benefits from regional integration. Ethiopia's development strategies, including the Ten Years Development Plan 2021-2030, should go hand in hand with fostering regional cooperation within the provisions of AfCFTA. All sectors in Ethiopia are believed to have the potential to considerably benefit from the AfCFTA in terms of exports to and imports from the rest of Africa. AfCFTA can also boost Ethiopia's services exports to and facilitate imports of agricultural inputs and machinery from the rest of Africa.

The Holistic Programme will support Ethiopia in devising policies to enhance benefits from the regional economic integration through international trade, production value chains and investment. UNCTAD's Empowerment Programme for National Trade Facilitation Committees (NTFCs) will be among the tools utilised in this regard, leading to the development of a National Trade Facilitation Roadmap.

Pillar III: Infrastructure (including transport, energy, and water)

Ethiopia is one of the largest and most populous landlocked developing countries in the world. Improving transport and trade logistics as well as transit systems at regional and sub-regional levels may force the country to re-engineer entirely its own transit system to transform it from a multiple and costly cargo clearance one to a single and simplified clearance one, which is tailored to local conditions and specificities. An efficient transport and trade logistics will not only reduce transit time and related costs but also will eliminate sources of inefficiency and uncertainty of delivery of consignments. Concerted efforts to a coordinated corridor facilitation and closer collaboration with transit neighbours can bring several benefits by improving border-crossing, better information sharing and by collectively identifying key infrastructure bottlenecks for actions between Ethiopia and its transit neighbours for resolving key transit-transport challenges.

For LLDCs such as Ethiopia, regional integration and cooperation, is crucial. Efficient and effective transit transport, including through harmonised and consolidated transit procedures and measures to enhance predictability in the delivery of consignments which will significantly reduce handling and hedging costs that account for a significant portion of transit and transport costs, is needed. Joint regional efforts to build regional transport infrastructure and reduce transit time through corridor facilitation are equally important to improve export competitiveness and business attractiveness of countries such as Ethiopia. Therefore, particular attention should be paid to a development-led approach to regional integration which requires not only a coordinated set of policies to collectively address structural vulnerabilities, but also a greater provision of regional public goods (hard and soft infrastructures including energy (electricity) infrastructure.

Despite significant investment in the expansion of roads, railways, energy, irrigation and various infrastructures, there has been significant deficiency in and inefficiency of physical infrastructure. "Integrating and coordinating the planning, development, and service provisions of infrastructures at sectoral level continues to be an issue. The limited spatial equity in the distribution of infrastructure and enabling services also remains one of the key challenges to sustainable development." The transport sector faces several challenges which can be categorised into the following major thematic groups: limited private sector participation; financial constraints; congestion and high vehicular pollution; limited domestic capacity; lack of fuel efficiency standards; inadequate incentives for clean transport technologies; inadequate transport infrastructure; lack of environmental and social elements in bidding and procurement guidelines.

> Despite significant investment in the expansion of roads, railways, energy, irrigation, Ethiopia suffers from deficiency in and inefficiency of physical infrastructure

According to the Ten Years Development Plan 2021-2030, the main focus areas of the transport sector development are expansion of transportation infrastructure and services; provision of efficient logistics services; increasing the participation of private investors in the sector; strengthening the sector's institutional implementation capacity, including mainly human resources, organisation, policies and legal frameworks.

A number of numerical plans have been put forward, including in the expansion of road transport infrastructure, transportation services, the length of railway, aviation infrastructure, inland water transport system (developing water transport infrastructure), and improvements in the country's global ranking for logistics performance, as well as in reducing transport sector's greenhouse gas emissions.

Transport related connectivity is critical for Ethiopia's development considering it is a landlocked country. In this context, efforts have been made to mitigate this geographical predicament. "The fully-electrified Addis Ababa–Djibouti railway, which became operational in early 2018, not only connects the country with Djibouti Port but also links other cities on the way, as well as industrial parks and dry ports. It facilitates the bulk transport of goods and passengers." Ethiopia also works towards enhancing its international connectivity by effectively utilising existing initiatives such as the LAPSSET (Lamu Port – Southern Sudan – Ethiopia Transport Corridor). Indeed, the Ten Years Development Plan 2021-2030 envisages increasing the number of intercity transboundary public road transport links with neighbouring countries.

Ethiopia's **energy** sector faces critical challenges in meeting steadily increasing energy demands. More importantly, the use of energy (electricity) in productive sectors and for productive transformation remains one of the lowest, also by the standards of Sub-Saharan Africa. The NPCGA has identified the following key binding constraints for sector's development: limited electrification and access to modern energy sources; limited energy source diversification; weak transmission and distribution capacity; inadequate financing for investment in clean energy; inadequate domestic knowledge and skills in renewable energy; unstable institutional arrangements and inadequate standards; limited supply of locally produced clean energy equipment and technology; weak incentive mechanisms. The main focus areas of the energy development plan, within the Ten Years Development Plan 2021-2030, is ensuring access to energy supply; providing the rural population with clean energy supply technologies; providing high quality electric power service; building a reliable electric power infrastructure; ensuring healthy financial position of the energy sector; encouraging private investment in the sector; and developing skilled and ethical manpower. The targets concern raising power generation capacity, and increasing power transmission lines, electricity export, the number of electricity customers and the coverage of grid-based electricity, as well as reducing electric power wastage.

Ethiopia faces significant shortages in **water** supply despite being the source of major cross-border or transboundary rivers and major lakes. In the context of national development, agriculture heavily relies on a rain fed system, which is highly vulnerable to rainfall variability. Moreover, Ethiopia depends mainly on hydropower for energy, which is subject to significant variability due to changes in water flows caused by seasons and unpredictability in rainfall patterns and drought. Finally, access to safe water and sanitation is limited. The Ten Years Development Plan 2021-2030 concentrates on water resources development, including the provision of potable water and sanitation services as well as irrigation and river basin development. The main focus areas are: improving access to potable water supply and sanitation services; expanding climate resilient potable water supply systems; ensuring the sustainability of existing potable water supply facilities; harnessing renewable energy as an alternative source of energy for organisations engaged in supplying potable water in rural areas; strengthening urban sewerage disposal systems by building the necessary infrastructure facilities; expanding integrated river basin development schemes; ensuring fair and equitable utilisation of boundary and transboundary water resources to support the provision of clean water, sanitation and hygiene services to vulnerable communities which may be affected by natural and manmade disasters; and providing consistent and sustainable support to regional states and pastoral areas that need special assistance. Additional focus areas of the water resources development plan include: expanding medium and large-scale irrigation schemes; applying improved irrigation technologies; creating employment opportunities for young people with intermediate education and skill levels in modern irrigation; strengthening public-private partnerships and expanding financing options in order to reduce Government expenditure in irrigation development; avoiding time and cost overruns in irrigation development projects and, at the same time, ensuring that they meet the required quality standards; strengthening institutional capacity and human resource development; establishing water users associations and making them bear maintenance costs for irrigation facilities; ensuring proper inclusion of the issues of gender and disabilities; and developing a system that can integrate irrigation development with other economic sectors.

The Holistic Programme will:

- *Support the policies aimed at enhancing connectivity within the country and with neighbours, including, through improved customs clearance processes.*
- *Strengthen the capacity to address transport and logistical challenges and broader sustainability and resilience aspects, including better access to affordable finance for transport infrastructure, services and logistics. Support to this will be provided through the Transport and Trade Logistics support programme at UNCTAD.*
- *Support policies aimed at enhanced water management, including increased irrigation schemes, and mitigating consequences of climate change resulting in prolonged droughts and water deficiencies.*
- *Support the developments and policies aimed at enhanced access to electricity, and reliability and efficiency of the energy production sector.*

Key activities concerning connectivity, transport and logistics will include facilitating collaboration between Ethiopia and its transit neighbours as well as fostering agreements; organising expert meetings on issues related to trade facilitation and logistics; and forums to raise awareness and improve the understanding of key issues/themes and to formulate solutions; research and analysis in support of informed and sound policy making in the transport and logistics; improving access to investment and finance in sustainable transport and logistics, including through innovative sustainable finance and PPPs.

Pillar IV: Innovation and technology, and the creative economy

Technology and innovation are vital ingredients of fostering productive capacities and transforming productive structures into higher value-added activities that involve more skilled and technology-intensive production. It is critical in developing e-commerce and the overall digital economy. This means that countries such as Ethiopia should promote policies that facilitate fostering technological capabilities, acquisition and transfer including by enabling firms and farms to undertake technological learning in order to upgrade their productive capabilities. These can be done by acquiring new and more advanced technologies. However, for firms and farms whose output is geared towards domestic markets, new and advanced technologies may not always be appropriate. Ethiopian firms are more likely to find relevant technologies in countries that produce such technologies at relatively lesser costs. They can learn and acquire technologies (such as capital equipment, organisational know-how and types of inputs used) from friendly developing countries, rather than from advanced or developed economies, or can develop and use home-grown technologies which can transform production structures based on comparative advantages of Ethiopia.

According to the NPCGA, the key binding constraints to ICT development concern: limited ICT infrastructure; lack of broadband and secure internet connectivity; low technical literacy; power supply irregularity; insufficient financing; low capacity for harnessing the power of innovation. Particularly, Ethiopia has low number of digital skilled experts with only few professionals possessing advanced digital skills. High-end ICT skills are essential to facilitate a vibrant digital economy, design and support complex digital systems, as well as to spur innovation. Ethiopia also faces financial, infrastructural, technical and regulatory challenges in the ICT sector, despite consistent efforts to create an enabling environment for technological upgrading and innovation.

The main focus areas of innovation and technology development in the Ten Years Development Plan 2021-2030 are building and organising infrastructures that support the development of innovation and research activities; building human resource capacity; creating, supporting and enabling key institutions and establishing operating procedures; building a national data centre that would help increase economic and social benefits through the creation and consolidation of a digital economy; enhancing institutions' use of public services through online systems by improving internet connectivity and use; introducing a standardised national system of addresses; developing computational technologies and national databases; and enhancing the use of electronic means for accessing public services. The numerical targets include: expanding infrastructures for innovation and technology development; building innovation and technological capacity and improving service delivery; increasing access to mobile and internet services; expanding and strengthening innovation and technology development enterprises; providing support to 3,000 selected tech start-ups with high economic and social impacts; raising the share of private sector jobs in the areas of technology and digitalisation.

> There is a lack of clear policy, regulatory and institutional frameworks to facilitate effective integration of research and innovation into the economy, as well as a lack of a skills inventory

The NPCGA calls for the increased investment in ICT and innovation. "Technology and innovation are central to boosting Ethiopia's productive transformation and development gearing toward an economy, which is more digitally intensive. The review of the country's ICT landscape indicates that ICT remains one of the most underdeveloped elements of Ethiopia's productive capacities due to multiple constraints. Technology acquisition, adaptation, and use needs to be promoted through targeted interventions, if the country is to achieve multi-sectoral and diversified development."

Moreover, there is a lack of a clear policy, regulatory and institutional frameworks to facilitate effective integration of research and innovation into the economy, as well as a lack of a skills inventory and inadequate alignment of the planning of human resource to development needs, mainly due to a lack of reliable and timely data on the demands of the labour market. Scarcity of frequency spectrum, a resource necessary for the operationalisation of some of the infrastructure is an issue. Other deficiencies include: low internet connectivity, inadequate and unreliable power supply, especially in the rural areas; limited number of computers in schools; limited or no computer laboratories; inadequate broadband coverage. Poor state of infrastructure and equipment especially in universities, as most universities lack science equipment to carry out experiments, is another challenge. Low investment in high-level technical human resource and research causes human capital deficiencies. This is because education and training do not adequately meet the needs of industry and there is limited development of technological capabilities in industry. In connection, inadequate funding of research and innovations, which is mainly donor-driven, fragmented, and uncoordinated, partly results in uncoordinated priority setting at both the national and international levels.

Ethiopia needs to strengthen the use of Science, Technology, Engineering and Mathematics (STEM) at all education levels, including incentivising students, particularly girls, in the STEM programmes. This may be achieved by establishing linkages of programmes especially in priority areas as identified and defined under the Ten Years Development Plan. Furthermore, it is important for the Government to increase investment in the identification and follow-up of the most excellent and suitable students for STEM at early stages as well as strengthening STEM research centres and increasing the number of science schools. At the tertiary education level, the Government of Ethiopia may focus on significantly increasing the rate of students enrolled in STEM, in both, public higher learning institutions and TVET, which in turn would increase enrolment rates. Additionally, the Government should support the establishment and operationalisation of new and existing Centres of Excellence with a focus on science, technology and innovation. Partnership can be reinforced with different sectors in order to build skills that have practical application in health, education, and industry, as well as cyber security. This may be supplemented by initiatives to develop local content and facilitate citizens (including people with disabilities) to access digital devices that will enable them to use online services.

Ethiopia's creative economy is another sector with a significant potential. It includes: music, visual arts (painting, drawing, illustration, sculpting), film and photography, product/industrial design and craft, fashion, architecture, performance art (theatre, dance, circus), new media (digital art, graphic design, gamification), as well as, street art, sport, culinary arts. Ethiopia would benefit from a comprehensive mapping of its cultural and creative industries – building on experience of other developing countries – as well as assistance in developing a coherent Cultural and Creative Industries strategy to help guide policy and programme efforts towards optimally supporting the creative economy. Training and capacity building are a cornerstone of such policy-level support, both with a view to elaborating the strategies and to implementing them efficiently. Creative economy working groups could be tasked to lead the development of such activities, with UNCTAD's support. A central issue in implementing the strategy will be to address enabling factors (such as the legal and policy and institutional frameworks) and capacity gaps within the private and public sectors, both in terms of ahead-of-the-curve training and linkages to finance, and networks at the regional and international levels, as well as dedicated business development services.

The Holistic Programme will:

- *Within the TrainForTrade programme, facilitate the blended learning strategy to boost the digital economy by promoting digital transformation for its expected effects in better integration into the multilateral trading system, sustainable development, economic diversification, MSMEs promotion, and the reduction of vulnerability to shocks. The strategic goal is to foster the creation of secure and efficient digital economies through three pillars: the design of collective rules, the availability of data, and the creation of a trustable administrative system.*
- *As part of the UNCTAD's E-commerce and Digital Economy Programme, which helps developing countries to accelerate digital transformation, the Holistic Programme will: provide technical assistance to countries, to help them develop diagnostics studies, policies and strategies that promote e-commerce and the digital economy and provides support in policy coordination and implementation; facilitate capacity building by providing training and capacity building to help policymakers to develop the skills and knowledge necessary to overcome challenges and benefit from opportunities of e-commerce and the digital economy; conduct research and analysis on e-commerce and the digital economy to inform policy decisions and identify best practices; advocate for the interests of developing countries in international discussions and negotiations related to e-commerce and the digital economy.*

Ethiopia would benefit from a comprehensive mapping of its cultural and creative industries – building on experiences of other developing countries

This can include advocating for policies and regulations or promoting collaboration between governments, the private sector, and development partners, such as through the "eTrade for all" initiative.

In addition to supporting development of an e-commerce strategy to propel the growth of e-commerce in the country and an eTrade strategy, as well as setting up a national task force on e-commerce to coordinate engagements on e-commerce, *the Holistic Programme will focus on harnessing the business potential of information and communication technologies for development and expanding digital trade support services, including aforementioned e-commerce strategies and platforms for enhanced sales, purchases and procurement.* This will include all aspects related to e-commerce, e.g., policy frameworks, standards, security, and intellectual property rights. *UNCTAD can also assist in mainstreaming ICT into national sectors. For instance, UNCTAD can support the establishment of a Regional Centre of Excellence for Science, Technology and Innovation, to promote the application and productive use of the ICT sector.* This will facilitate the forging of linkages and partnerships with different sectors to build the necessary skills for the practical application of new technologies in health, education, agriculture and industry.

Pillar V: Human development and private sector

Pillar V(a): Building human capital

"Considering that more than 65 percent of Ethiopia's population is below the age of 30, representing a substantial human resource boon for the coming decades, paying particular attention to nurturing human capital will determine Ethiopia's potential to develop its productive capacities to a significant degree. An ever-large percentage of ready-for-work youth and working age adults can be a key source of growth if properly and timely utilised. However, the dividend from the demographic transition will be a missed one, if not immediately harnessed for sustainable development." Despite progress in terms of access to education through enhanced investment in the sector, there are a number of binding constraints to human capital development: inadequate educational facilities; poor quality of education; inadequate financing; gender bias; conflict and other shocks; but foremost, mismatch between education and labour market needs. The Ten Years Development Plan 2021-2030 acknowledges the relevant demographic challenges and focuses on human resource development, including through improved education.

Skills and capacity development, integral to the Human Capital component of the PCI, will require fostering better linkages between industry, academia and the Government. Existing architecture for engagement does not seem to address the questions surrounding curriculum development with a view to ensuring development of skills relevant to enhanced economy wide competitiveness. The reshoring decisions anticipated, in the aftermath of the supply chain disruptions witnessed during the pandemic, will require, inter alia, skilled workforce if Ethiopian enterprises are to be plugged more effectively into the global value chains. In this regard, *the Holistic Programme will support mechanisms for fostering better linkages between academia, industry and the Government. It will support the relevant institutions in the reformulation of educational policies to ensure the greater market absorption of graduates.*

Pillar V(b): Facilitating private sector development

Entrepreneurial capabilities are the skills that firms and farms need in order to manage their business activities and engage in innovation and productivity growth. Entrepreneurial capabilities incorporate the technology, knowledge and information required to mobilise resources in order to build domestic enterprises that transform inputs into outputs – outputs that can competitively meet present and future demand. They also include abilities to invest, innovate, upgrade and create goods and services. As such, they refer to the competencies and technological learning needed to induce economic change. In recognition of the contribution of the private sector to economic growth and poverty reduction, Ethiopia should encourage private sector development by enhancing private sector capabilities, as well as improving governance and business regulations. In addition to facilitating access to finance and easing ways of conducting business, it is instrumental that Ethiopia supports the development of domestic entrepreneurial capabilities. To that end, the Government of Ethiopia needs to take measures across the board to strengthen infrastructure – from enhancing road and ICT networks to ensuring greater access to credit and reduced costs of trade finance. In doing so, the Government also needs to attract investments into new projects, as well as into the upgrading and maintenance of already existing infrastructure. Policies must also contribute to building effective and mutually supportive PPPs through constructive government – private sector relationships.

"Ethiopia's private sector's development is still at a nascent stage. Despite progress in socioeconomic outcomes through State-led investments, success in igniting private sector growth has been very limited." The key binding constraints concern: unfavourable business environment; inadequate infrastructure services; barriers to regional trading; procedural obstacles and non-tariff barriers (NTBs); limited access to finance; political instability and ethnic-biased policies; as well as limited skills of entrepreneurs. At the same time, a strategic approach towards building productive capacities and structural transformation would require effective institutional and coordination mechanisms that encourage robust private sector engagement. The Ten Years Development Plan 2021-2030 foresees a critical role of the private sector in country's development. As far as the structural reform is concerned, it necessitates an increasing role and participation of the private sector in the economy.

The Holistic Programme will support the Business Management Organisations (BMOs) in their advocacy role with a view to giving voice to private sector input in all the coordination mechanisms. Activities will include information and knowledge sharing under the rubric of the UNCTAD research and analysis work on contemporary questions in the WTO and AfCFTA. Activities will in particular focus on MSME policy and capacity building, and special entrepreneurship training through UNCTAD's EMPRETEC programme. They will also aim at boosting linkages between MSMEs, improving business intelligence and taking advantage of export markets in the various sectors of the economy. The EMPRETEC programme identifies and reinforces personal business competencies through a process of dynamic product innovation and market penetration, as well as self-assessment skills. Participants in such capacity building activities develop clear ideas about what they want to do with their businesses in the short and the long run. With these goals in mind, EMPRETEC helps business owners to improve their core business behaviours, innovation potential and competitiveness. This influences the operations, and above all, the results of their businesses. Entrepreneurship skills development is also required for economic diversification, product transformation, job creation, improved market access and greater trade opportunities.

"As is the case elsewhere in Africa, capitalising on new productive and trade opportunities under the AfCFTA will depend, in part, on Ethiopia's ability to develop a critical mass of medium and large enterprises and entrepreneurs, capable of competing and tapping regional and global opportunities. This should include effective policies that equip and incentivise micro-, small- and medium-sized enterprises (MSMEs) to expand and improve

In addition to facilitating access to finance and easing ways of conducting business, it is instrumental that Ethiopia supports the development of domestic entrepreneurial capabilities

their productivity, as well as establishing a conducive business environment that attracts new domestic and foreign investment. MSMEs' development and particular sector's international expansion must be supported by the international community (capacity building, financing, creating enabling international environment for cooperation) and aided by foreign companies (transfer of know-how and technology, investment, financing, facilitating access to markets and participation in regional and global production value chains) for mutual benefits."

Therefore, UNCTAD will:

- *Assist in policy, regulatory and institutional frameworks to facilitate development of dynamic, vibrant and competitive domestic private sector through UNCTAD support to Entrepreneurship Policy Frameworks (EPF), including National Entrepreneurship Strategy development.*
- *Train existing and potential entrepreneurs through the EMPRETEC entrepreneurship training programme, as well as training of trainers on the delivery of the EMPRETEC training workshops (ETW) and training of master trainers to train more trainers for the country.*
- *Build capacity of national institutions to become National EMPRETEC Host Institution.*
- *Map (research) the entrepreneurship ecosystems to pave the way for their National Entrepreneurship Strategies (NES) in line with the Entrepreneurship Policy Framework (EPF) methodology.*
- *Link EMPRETEC trained entrepreneurs to other projects on the ground, providing dedicated tools and linkages to access finance.*
- *Establish institutional mechanism to improve public-private sector dialogue to address evolving needs and demands of the private sector through institutionalised mechanism for regular dialogue for consensus building on a way forward.*

Pillar VI: Institution building and coordination

"Ethiopia faces weak institutional architecture and a lack of independent institutions that are capable of the accomplishment of its functions." The key binding constraints concern: weak capacity in policy design and implementation; and weak regulatory quality. This translates, for example, into institutional challenges to the development of the agricultural sector, food-processing and subsequently, sectoral export-orientation. The Ten Years Development Plan 2021-2030 emphasises the importance of strong and effective institutions for the successful implementation of the development strategy, whereas the Ethiopia Timrit programme emphasises the importance of effective institutions as catalysers of the manufacturing industry's development and proposes clustering mechanisms to improve coordination. Strategic coordination of the manufacturing sector's development is among the key prerequisites for further advancements and addressing structural bottlenecks. Indeed, the Ethiopia Tamrit programme emphasises the role of thematic cluster committees to oversee the Tamrit implementation activities, coordination, and monitoring of progress towards targeted thematic outcomes. Five types of cluster committees are being introduced: Finance and Customs, Infrastructure and Manufacturing Inputs Supply, Regions and City Administrations, Capacity Building and Research Institutions, Investment and Private Sector Mobilisation.

The NPCGA calls for strengthening institutions and improved policy and coordination, as the "inadequate institutional capacities continue to limit Ethiopia's progress towards the development of its productive capacities." Institutional incapacity concerns the low quality of administration, the inadequate structure of state institutions, and a lack of transparency in procedures, including in reference to public finance (e.g. in collecting taxes, etc.). Policy design and implementation capacity gaps have become a challenge in different government institutions that are involved in the policy design, implementation, coordination, and service delivery of development plans. Specific capacity shortfalls occur in the design of a results-based performance management system, database management, project design and management, monitoring, evaluation, and reporting system for up-to-date information on implementation status. As a result, the Homegrown Economic Reform Agenda has not been supported by a robust monitoring and evaluation framework with key performance indicators. Hence, there is a need for establishing fit-for-purpose institutions through diagnosis of the context and the country's needs based on its long-term vision and aspirations.

In order to facilitate mainstreaming of productive capacities and PCI, *the Holistic Programme will include support to institutions of higher learning in the development of a cadre of experts on the statistical and technical underpinnings of the PCI methodology.* Such support will lead to sustainable in-country capacity that will facilitate the formulation of data-driven, evidence-based new generation holistic trade and development policies. *It will also support mechanisms for engendering direct linkage of skills development to the requirements of the industry. A review and alignment of overlapping mandates and roles needs to be conducted. The Holistic Programme will thus aim at reviewing these institutional and coordination mechanisms, as well as their oversight and recommend effective improvements. The Holistic Programme will also build capacity for effective policy coordination. It will incorporate the clustering coordinating mechanism provisions, as per the Ethiopia Timrit programme, among the solutions.*

The Holistic Programme activities will include regular sensitisation on developments on multilateral, regional and bilateral trade negotiations, study tours on coordination and oversight best practice in other jurisdictions with comparable systems. As a way of encouraging a whole-of-government and a whole-of-society approach to trade and other economic policies formulation and implementation, lessons can be learned from management structures put in place in other countries implementing Holistic Productive Capacities Development Programmes.

4.3. Stakeholder analysis and capacity assessment

The main stakeholders of the Holistic Productive Capacities Development Programme for Ethiopia will include policymakers, advisors, experts, relevant sectoral ministries, institutions, research and development centres, science and technology entities, and private sector and civil society actors and academia (See details in Table 4.3).

4.4. Financing, modalities and implementation

The total estimated budget for operationalizing the Programme is US$ 10,000,000 for the duration of the Programme (7 years). The estimates comprise all project support costs, except for UNCTAD's in-kind contribution for the substantive and technical implementation of the project, as well as for the coordination of the implementation across the identified areas and sectors of interest to Ethiopia. As the Programme is financed externally, Ethiopia is encouraged to mobilise the core resources from the country's development partners. UNCTAD will make available its expertise in the various components of the holistic programme. This has been the practice, so far, with Angola's Programme being support by generous funding from the European Union. Experience to date shows that mobilising programme resources through bilateral donors ensures ownership of the Programme by the Government and enhances the long-term predictability and sustainability of the Programme.

Based on robust academic work and lessons learned from practical implementation, a comprehensive,

Specific capacity shortfalls occur in the design of a results-based performance management system, database management, project design, monitoring & evaluation

Table 4.3
Stakeholder analysis and capacity assessment

National stakeholders	Type and level of involvement in the Programme	Capacity assets	Capacity gaps	Desired future outcomes	Incentives
The Government of Ethiopia, including the following institutions: Ministry of Industry, Ministry of Planning and Development, Ministry of Finance, Ministry of Trade and Regional Integration, Ministry of Innovation and Technology; Ministry of Agriculture, Ministry of Transport and Logistics, Ministry of Education, Ministry of Water and Energy, Ministry of Labour and Skills Development Ethiopian Investment Commission, the Ethiopian Industrial Parks Development Corporation, and relevant regional entities and other parastatal bodies.	The Government of Ethiopia has the ownership of the Programme and has decisive voice on its sectoral direction intensity and implementation. Consultations have already taken place with government institutions and others as key stake- holders in Programme formulation and implementation. These stakeholders will be closely involved in the design and implementation of the Programme, highlighting priorities and needs, as well as facilitating contact on capacity building, as well as providing information on the potential involvement of civil society, private sector and academia.	The Government has the intimate and holistic knowledge of the economic situation, development challenges and needed interventions. Policymakers and experts have technical abilities and substantive sectoral knowledge.	The institutional capacities of public ministries of Ethiopia in formulating and implementing policies are limited due to scarcity of financial and technical re- sources. Their technocratic capacity needs to be significantly enhanced. Therefore, they need support to foster productive capacities and structural eco- nomic transformation consistent with the aspirations of the country's medium- and long-term plans and strategies.	The ultimate outcome of the Programme is building productive capacities, export diversification and structural eco- nomic transformation. In the context of government institutions, improved administrative and policy co- ordination and enhanced effectiveness of development policies institutions are the target.	Co-operation within Ethiopia Holistic Programme will allow ministries to ensure greater effectiveness of their policies and will provide them with the appropriate tools to deliver on the objectives of the Holistic Programme and in accordance with the country's medium- and long-term plans and strategies.
Private sector, Business Management Organisations (BMOs), including the Ethiopian Chamber of Commerce and Private Sector Associations	Stakeholders can provide crucial input in the needs of the private sec- tor as key development actors. They can also inform Programme design by sharing their experiences on past and current sectoral development challenges, as well as to give voice to the private sector on trade and development policy formulation.	Knowledge of the institutional context of the beneficiary country, first- hand experience of the policy gaps that must be addressed in the Programme and articulating key binding constraints on private sector development.	Private sector needs vibrant and dynamic entrepreneurs, business intelligence and capacity to expand business operations nationally, regionally, and internationally. It also need access to finance and electricity and ability to use ICT. While there are many well-designed policies to support the private sector in place, these are sometimes incoherent, and could benefit from a more holistic approach.	Entrepreneurs improve their knowledge and expertise having taken advantage of targeted and tailored capacity building and improved educational/ skills- programmes in innovation and market opportunities in domestic and ex- port markets. Improved polices to support entrepreneurship enable the private sector to grow and provide. employment for a growing population.	UNCTAD's dynamic and modern entrepreneurship development programmes, business linkages and export opportunities. Skills formation (entrepreneurial skills) and the prospect of improved and more coherent implementation of development policy is in the interest of the private sector as it undergoes modernisation.
Civil Society	Ethiopia's civil society groups will be involved in all substantive steps of the Programme, including participation in implementation, monitoring and evaluation.	Ethiopia's civil society is fragmented, uncoordinated and sometimes government policies create barriers and impediments for the functioning of the civil society knowledge of the economic conditions and the predicaments to development, including socio-economic challenges.		The local knowledge and concerns of Ethiopia's civil society are taken into account and addressed by development policies and measures, including in the context of the current Holistic Programme.	Ethiopia's civil society will benefit from the opportunities to have their views and voices taken into account in the design and implementation of the Holistic Programme as key to realise the aspirations of the country's visions, policies, and strategies.

programme-based approach should be adopted in the management of the Ethiopia Programme to ensure coherent and consistent implementation of policies and strategies. Such an approach should be organically linked to national policies and it should be seen as a viable way of addressing broader development objectives. The guideline is based on decades of experience in the challenges facing project-based approaches that have not resulted in economy-wide transformation with substantial impacts on job creation and unemployment reduction. Project-based approaches also lack predictable financial resources as the funding does not correspond to the timespan of the project, thus undermining its long-term impact and sustainability. Moreover, in most cases, project-based approaches focus on addressing only narrow aspects or a limited set of development challenges, and they do not adequately address wider development needs and aspirations. Sometimes, projects are not linked or realigned with national policies, strategies or vision documents with adverse impacts on national ownership capacities. As a cornerstone of the holistic programme approach, careful attention should be paid to ensuring that such a comprehensive approach is home-grown, and country driven. This is particularly important to improve the domestic absorptive capacities of developing countries and enhancing the allocation of development aid to productive sectors by shifting away from narrow project-based interventions towards addressing the potential of wider economic sectors, such as trade and development. Therefore, it is critically important that Ethiopia mobilises resources from the country's development partners for the realisation of the Programme.

The implementation strategy of the UNCTAD Ethiopia Programme will be designed in consultation with the Government of the Federal Democratic Republic of Ethiopia. Actions will be carefully sequenced to ensure synergies with the institutional and policy focus of the Government. Interventions will be aligned and realised in an integrated fashion to support the overall implementation of government policies and strategies. Each of the programme components will be implemented in holistic approaches shifting away from traditional project-based or sector specific interventions.

The Programme, combined with other national initiatives, will contribute to spurring Ethiopia's sustainable growth and development, anchored on the building of productive capacities and enhancing structural transformation.

The Programme components and cross-cutting areas will draw upon the breadth of UNCTAD's expertise, and will be implemented to support institutional coordination, and the implementation of coherent trade and industrial policies, as well as supportive macroeconomic policies for Ethiopia.

To this end, a National Steering Committee will be assigned, where possible based on existing governance structures, consisting of senior government officials – usually Ministers – and representatives of the private sector, academia and civil society entities, which meets at least twice a year to provide political guidance and overall supervision for the implementation of the Programme. The National Steering Committee will be supported by a Technical Committee. The latter body will serve as the national counterpart institution for UNCTAD's operational activities, overseeing the implementation of day-to-day activities and consisting of technocrats including senior officials at director-level and principal secretaries. The Secretariat will mobilise all national stakeholders at the technical level for the effective and coordinated implementation of the UNCTAD Ethiopia Programme. The National Steering Committee will be chaired by the Minister of Industry or the ministry designated by the Government of the Federal Democratic Republic of Ethiopia to be the national focal institution for the holistic programme. Each year, throughout the lifecycle of the Programme, the Steering Committee will review the progress made, measure the results achieved, adjust the Programme interventions, if and when necessary, and approve the workplan for the subsequent year of implementation. This will be done based on a yearly implementation plan, experiences, challenges encountered, lessons learned and milestones achieved.

The Programme will have a dedicated team of project experts, consisting of one National Programme Coordinator and an administrative assistant to be designated by UNCTAD and hosted by the Ministry of Industry and one Programme Coordinator and administrative assistant to be hosted at UNCTAD. Project Staff will be recruited, managed and administered in accordance with the United Nations staff rules and regulations governing country-based programmes, and in consultation with the Government of the Federal Democratic Republic of Ethiopia.

As part of its contribution, UNCTAD will designate a team of Programme implementation experts, consisting of professional staff from relevant Divisions, in accordance with Programme components, and the overall Programme objectives. An UNCTAD-wide task force, consisting of Directors from each Division, will oversee the UNCTAD-wide implementation of the Programme. The taskforce will interface with the National Steering Committee to guide the coordinated implementation of Programme components and the Programme as a whole. More specifically, UNCTAD, through the Division for Africa, Least Developed Countries and Special Programmes (ALDC) will mobilise the inhouse expertise of UNCTAD. UNCTAD's key divisions with expertise and competences in the identified Programme components will be involved in the implementation of the Programme. UNCTAD will also bring operational, technical and substantive expertise, which it gained in the conception, design and successful implementation of other country-specific programmes, such as through its successful delivery of the EU-UNCTAD Joint Programme for Angola: Train for Trade II. In addition, UNCTAD will leverage its broad network of international partners and Centres of Excellence in various technical domains in the delivery of the substantive activities.

4.5. Sustainability

The sustainability of Programme interventions and outcomes is vital for a wider impact of the Programme beyond its lifespan. This requires realigning Programme objectives and implementation with Ethiopia's Ten Yeara Development Plan 2021-2030. This also needs to be looked at within the context of the progress Ethiopia makes towards achieving the Sustainable Development Goals (SDGs). In other words, throughout the implementation of UNCTAD Ethiopia Comprehensive Programme, it will be important to consider the likelihood that the Programme will have a lasting effect on Ethiopia's development, including beyond the lifespan of the Programme. Relevant Ethiopian institutions, donors and UNCTAD, as Programme executing agencies, should make all efforts to improve the likelihood that the outcomes of the Programme and its impact will be sustained into the future.

The proposed shift from traditional project-based approaches towards more comprehensive programme- based intervention allows to clearly identify immediate impacts (outcome) of the Programme, practical lessons learned in the implementation period, together with remaining gaps and limitations for future actions. A programme-based approach also provides implementing agencies and institutions, as well as donors with new tools, as it helps in policy operationalisation, experimentation and rediscovering of new ways and means of addressing binding constraints. Programme sustainability also depends to a great extent on national ownership and commitment at policy and political levels for an effective and coordinated implementation of the proposed Programme's content.

Predictable funding is also key for the sustainability of the proposed Programme intervention and its components.

In this regard, many of the specific activities conducted within the Programme will have specific outputs and impacts to address binding constraints on development and trade, create institutional capacity to address these, and enable Ethiopia to ensure continuity. A fundamental aspect of this Programme is not only to address binding constraints on trade and development, but it is also to improve policy coordination mechanisms, analyse outcomes, including remaining challenges, and chart the future course of actions, consistent with the Ten Years Development Plan 2021-2030 of the country.

UNCTAD aims to provide Ethiopia with the expertise the country needs to continue to increase its productive capacities to engage with the multilateral trading system in an increasingly beneficial way, even after UNCTAD's direct interventions have ceased. By building institutional and human resources capabilities, including through experience sharing and study tours, the Programme will also build national policy ownership capacities, which is critical for continuity and sustainability.

4.6. Risks and assumptions

Potential or perceived risks and mitigation strategies

During both the planning and implementation phases of this Programme, there may be risks that need to be mitigated to ensure the successful delivery of Programme's objectives. These risks vary in their likelihood, in their degree of impact on the Programme and the extent to which they can be controlled. The table below briefly details some of the potential risks to the Programme's success, along with the actions that will be taken to mitigate such risks (See Table 4.4).

Assumptions

The Programme's success also relies on certain assumptions. The foremost key assumption is that appropriate and adequate funding is secured and released in a timely manner such that a National Programme Coordinator in Ethiopia and Geneva can be recruited and be on board in time for the Programme's implementation.

For the Programme to be completed as outlined, strong commitment and support from the Government of Ethiopia is critical. As the Government of Ethiopia is the key stakeholder in the Programme, full support and ownership of the programme are considered as an assumption, and not a risk of the kind described above.

Linked to the above assumption, for the Programme to make progress it must be assumed that the programme's participants, who will be drawn from Ethiopia's public and private institutions, as well as academia, will be available during the Programme's implementation phases, as well as during the evaluation of outcomes (results).

4.7. Performance and monitoring

In addition to a comprehensive evaluation at the finalisation of the Programme, the Programme will be subject to mid-term evaluation based on the accomplished activities and results thereof. UNCTAD, as part of the day-to-day management of the Programme, will ensure that Programme implementation is in accordance with agreed terms and conditions. UNCTAD, through its Programme Coordinator, Programme Manager and the Evaluation and Monitoring Unit (EMU), and in consultation with the donor(s) and the Government of Ethiopia, will also document completed activities, record the outcomes and results, draw lessons from the implementation processes including identification of challenges, limitations and opportunities, which will form input to the evaluation and monitoring of the Programme implementation. The day-

Table 4.4
Risks and mitigation actions

Risk	Mitigation actions
Intensification of the violent conflict inhibits Programme's implementation.	The Government of Ethiopia will ensure the political conditions for the effective implementation of the Holistic Programme.
Change in the structure and mandate of relevant government ministries (counterpart institutions) results in disruption of the Programme's implementation.	Throughout the Programme, necessary actions to be taken by all of the key partners (UNCTAD, donors, and the Government of Ethiopia). Frequent exchange of information and communication will ensure that the actions necessary for the Programme's completion are understood by all parties. In the event that a rearrangement of the structure or responsibilities of Ethiopia's Ministries, Departments and Agencies (MDAs) occurs, the process of re-establishing the Programme's activities in the new structure should cause minimal possible disruption.
Entrepreneurs and trade officials trained and developed throughout the Programme do not continue to offer their expertise in Ethiopia.	The identification of key personnel to be trained though UNCTAD's various programmes will ultimately be made by Ethiopia's Government MDAs and business umbrella bodies. How- ever, UNCTAD will communicate to the Government the necessity of selecting would be trainees with a view to the likelihood of those personnel remaining in the service of the country in the longer term. UNCTAD will stress the importance of providing appropriate incentives to the personnel and entrepreneurs trained in order to keep them in the service of Ethiopia's interests.
Training materials and curricula developed during the Programme are not accepted or implemented by the relevant Ethiopian institutions.	UNCTAD will work closely with the relevant institutions in a partnership that ensures their needs are met and implementation guide- lines provided. Such a partnership will involve joint determination of the goals and form of any materials and curricula, and close connection with the trainees from the relevant public and private sector institutions.
Lack of commitment to the Programme by local institutions hampers implementation.	Through recent activities UNCTAD has built considerable consensus within the Ethiopian stakeholders regarding the importance of the proposed Programme. This is key in ensuring ownership for a coordinated implementation of the Programme content. UNCTAD will continue to emphasise the importance of efforts to improve Ethiopia's trade and development prospects with contributions to the realisation of the Ten Years Development Plan 2021-2030. This ongoing engagement should create an enabling environment in the Ethiopian policy making institutions, private sector and other stakeholders more broadly that will be supportive of the programme's aims and implementation strategy. Furthermore, UNCTAD will ensure that the Programme's implementation involves sufficient in-country contact between key UNCTAD staff members and national stakeholders to create 'Programme- Champions' for Ethiopia.
Identified key international development partners fail to engage effectively with the Programme for funding.	Ethiopia's government will use its existing network of relationships with donors and institutions in the international development community, and regional partners in particular, to advocate for the importance of this Programme and its sustainability. For each activity in the Programme that requires participation of international development partners, UNCTAD will also help in identifying potential funding nations or motivate reluctant donors or multilateral funding agencies.
The knowledge transmitted by UNCTAD through the training of entrepreneurs and experts is not put in full use in the process of formulation and implementation of national strategies, plans and visions.	UNCTAD will work to ensure that the training provided will help to develop key expertise and skills needed in the identified areas. UNCTAD will design the interventions in cooperation and collaboration with national stakeholders to ensure activities are specific to Ethiopia's context and meet the country's needs.
The change in Ethiopia's strategic and policy approaches to trade and development that ham- per the realisation of envisaged Programme's activities and outcomes.	The Programme will be aligned with Ethiopia's development objectives and aspirations. The Programme will work with the ongoing efforts to structurally transform the economy.

to-day management of the Programme will be handled by the implementing entity, UNCTAD, including the National Programme Coordinator and implementation staff. Other stakeholders and partners to this Programme will only be involved for periodic and end of-life assessments. General oversight of the Programme will be assigned to key staff in UNCTAD, who may delegate this responsibility as necessary. Programme staff will continuously monitor the implementation of the Programme and inform the Programme manager, counterpart Ethiopian institution(s) and donor country(ies) on whether key milestones are being met and whether resource use is appropriate.

Reporting on the Programme's implementation and its outcomes will follow standard project performance reporting, including information on implementation strategy, achievements (outcomes), lessons learned, challenges faced and the way forward.

Monitoring and evaluation (M&E)

Continuous technical and financial monitoring is the responsibility of UNCTAD in consultation with the relevant entity in Ethiopia. The beneficiary shall establish a technical and financial, monitoring system to the Programme, which will generate progress reports and safeguards related to internal control. Financial reporting will be in accordance with the financial regulations and rules of the United Nations as approved by the General Assembly.

Programme's Results Oriented Monitoring and Evaluation may take place twice during the Programme's lifecycle. That is, mid-way in the implementation process (mid-term review) and the final evaluation via independent consultant(s), starting from the sixth month of Programme activities, which will be finalised at the latest in 6 months before the end of the operational implementation phase. The budget for independent evaluation will be borne from the overall Programme budget.

UNCTAD, the Government of Ethiopia, and donor(s) shall analyse the conclusions and recommendations of the mid-term evaluation and jointly decide on the follow-up actions to be taken and any adjustments necessary, including, if indicated, the reorientation of the Programme. Reports of the independent evaluation and monitoring will be submitted to UNCTAD, The Government of Ethiopia, and donor in order to take into account any recommendations that may result from the M&E.

An independent external evaluator will be identified through consultations with key stakeholders. The Terms of Reference for Programme's evaluators and the timing for Programme's evaluation shall be deter- mined by joint consultations between UNCTAD, the Government of Ethiopia and the donor(s).

The recruited evaluator shall inform UNCTAD at least 30 days in advance of the dates foreseen for the external evaluation. The beneficiaries shall collaborate efficiently and effectively with the monitoring and evaluation expert and provide him or her with all the necessary information and documentation, as well as access to the Programme's premises and activities.

A component of the performance monitoring and evaluation will also include feedback from participants involved in the training, seminars and workshops to be undertaken as part of the Programme. The feedback will be gathered in order to ensure that the activities of the Programme remain closely aligned with the needs of the beneficiary institutions and stakeholders.

Annex: Selected Sectoral Interventions and Responsible Institutions

Table 5.1
ICT and innovation

Constraints	Interventions	Responsible institutions
Low level of ICT-related business services	Support and incentivize development of ICT industries and digital solutions through fiscal and other instruments	Ministry of Innovation and Technology (MInT), Ministry of Industry (MoI), Ministry of Finance (MoF)
Low provision of digital infrastructure	Improve availability and quality of digital infrastructure through attracting investments in the sector, including private actors	MInT, MoI, Ethiopian Investment Commission (EIC)
	Examine the structure, capabilities, and relevance of technology universities and institutes, including R&D support and regional technology centres	MInT, MoI
	Incentivize local manufacturers and assemblers of digital technologies to make them affordable and available	MInT, MoI
	Establish and strengthen linkages between industry and science and technology infrastructure (R&D laboratories and universities), including by restructuring and furnishing laboratories, through encouraging the placing of research students in industrial establishments, by creating joint research awards for industry and universities to encourage collaboration on subjects of relevance to industry, and by providing incentives to university research staff to work with industry	MInT, MoI
Weak adoption and use of e-commerce	Capacity building for strengthening the adoption and use of e-commerce by public and private sectors	MInT, other public institutions and Chamber of Commerce and Sectoral Association (CCSA)
Low digital literacy	Mainstream digital literacy programs in the education curriculum at all levels	MInT, Ministry of Education (MoE)
	Prioritize skills development for digital literacy, including digital financial solutions	MInT, National Bank of Ethiopia (NBE)
Lack of sufficient finance	Improve budget allocation for ICT industry	MInT, MoF
	Mobilize finance through public-private partnership	MOF, CCSA
	Improve a technology finance system, by setting up a venture capital company and/or by establishing technology “windows” in existing financial institutions	MInT, MoF, NBE, CCSA
Connectivity challenges	Improve the quality of digital infrastructure through investment and upgrading. Attract and support private players in the provision of digital infrastructure	MInT, EIC
Lack of organized technology databases	Set up a technology import information service or database to collect data on foreign sources of technology and design technology screening mechanisms	MInT, MoI

Table 5.2
Measures in easing constraints in human capital development

Constraints	Interventions	Responsible Institutions
Lack of skilled labour	Design a strategy to address existing skill gap and strengthen the supply of skills sought by sectors through demand-oriented skilled labour development	Ministry of Education (MoE), Ministry of Labour and Skills (MoLS)
	Set up training centres in industrial parks, ICT park, and special economic zones to encourage investment in skills upgrading through cost sharing mechanism	MoE, Ministry of Industry (MoI), MoLS
	Create an institutional structure and mechanism for forecasting the future needs of the economy and align the output of educational and vocational institutions with the economy's needs	MoE, MoLS
	Establish a dialogue platform between education and training institutions and employers to foster the linkage between the supply and demand sides	MoE, MoLS
	Conduct regular curriculum audit and review mechanism to make it responsive to the needs and expectations of employers	MoE, MoLS
Skills mismatch	Strengthen linkages between industry and educational institutions such as universities, TVET, research institutes and other training providers through continuous feedback and establish arrangements facilitating on-site learning	MoE, MoLS
	Benchmark Ethiopia's education and training systems against major competitors in terms of quantity, quality, relevance, and cost effectiveness, and identify areas of improvement	MoE, MoLS
	Incentivize the private sector to provide relevant and adequate skill retooling to employees through subsidies and tax exemptions	MoE, Ministry of Finance (MoF), MoLS
	Conduct regular skills audits, particularly in TVETs	MoE, MoLS
	Design a national skills development program and prioritize the development of soft skills	MoE, MoLS
	Support universities, colleges and TVETs to equip appropriate training facilities including workshops to carry-out demand-driven trainings	MoE
	Improve business development and entrepreneurial skills through providing tailored trainings	MoE, MoLS
Insufficient facilities	Support universities, colleges and TVETs to equip appropriate training facilities including workshops to carry-out demand-driven trainings	MoE

Table 5.3
Interventions in the transport and logistics

Constraints	Interventions	Responsible institutions
Lack of capable and competent local contractors and consultants	Collaborate with universities and professional associations to develop capacity development program for local contractors and consultants	Ministry of Urban Development and Infrastructure (MUDI), Ministry of Education MoE), Ministry of Transport (MoT)
	Develop a policy to allow foreign companies engaged in the construction sector to partner with local contractors and consultants for effective knowledge and skill transfer	MUDI, Ministry of Finance (MoF), Sector ministries
	Design a monitoring and evaluation framework for knowledge and skill transfer of local contractors and consultants	MUDI
Limited participation of the private sector	Encourage the participation of the private sector in the transport and logistics through developing strategies and implementation manuals	MoT, MUDI
Inadequate mass transport infrastructure	Identify alternative and scalable mass transport infrastructure in collaboration universities and professional associations	MoT, MoE
	Increase investment in roads, logistics and railway	MoT
Limited non-motorized transport facilities	Attract investments in high-quality walking and cycling facilities in major cities and towns	MoT, MUDI
	Identify last-mile connectivity to public transport	MoT, MUDI
Lack of finance	Improve budget allocation for the sector	MoF, MoT
	Mobilize finance through public-private partnerships	MoT, MUDI
Lack of trained manpower in the transport sector	Collaborate with universities to develop a tailored capacity development program to address the skilled manpower constraints of the sector	MT, MoE

Table 5.4
Measures in easing constraints in the energy sector

Constraints	Interventions	Responsible institutions
Lack of capacity in energy policy design and implementation	Design a tailored capacity development program to beef up the capacity of institutions involved in the energy production and distribution	Ministry of Water and Energy (MoWE), Development partners
Lack of clarity on regulations constrain private investment	Review and address gaps in policies and regulations related to private investments in off-grid and other energy investments and tariffs	MoWE, Ministry of Finance (MoF, Development partners
Government monopoly in the production and distribution of energy services	Allow and encourage private sector involvement in the production of energy through relaxing policies and incentives	MoWE, MoF, Development partners
	Assess options for privatization of transmission and distribution of energy services to improve service quality, covering both technical (e.g. network losses) and commercial services	MoWE, MoF, Development partners
Inadequate financing options for clean energy projects	Identify options for alternative sources of financing clean energy projects through relaxing policy and regulatory frameworks	MoWE, MoF, Development partners
	Mobilize finance through public-private partnerships	MoWE, MoF, Development partners
Limited diversification and heavy reliance on hydropower	Assess options for energy diversification through research and policy dialogue	MoWE, Development partners
	Assess the feasibility of alternative modern energy access options to reduce dependence on biomass through research, awareness creation on benefits of renewable energy technologies and supply of affordable renewable energy options	MoWE, Ministry of Education (MoE) Development partners
Weak capacity in designing and managing energy projects	Collaborate with universities and professional associations to develop a capacity development program in energy project management and administration	MoWE, MoE, Development partners
Weak regulatory capacity	Strengthen enforcement capacity through developing tailored capacity building for regulatory bodies	MoWE, sector ministries, Development partners
Lack of locally developed and/or adopted clean energy technologies that fit with local conditions	Identify opportunities for locally developed and adapted clean energy technologies through research, capacity building, encouraging innovations and technology adoptions, experience sharing and stakeholder consultations	MoWE, sector ministries, Development partners
Lack of a coherent and comprehensive incentives for renewable energy technologies	Assess incentive options for investment in renewable energy technologies through research	MoWE, Development partners
	Train public institutions in database establishment and management through training	MoWE, Development partners
Lack of standards on clean energy technologies	Assess and identify standards on clean energy technologies through research and workshops	MoWE, Development partners

Table 5.5
Measures in easing institutional constraints

Constraints	Interventions	Responsible institutions
Weak capacity in policy design and implementation	Design a tailored capacity development program to beef up the institutional capacity in policy design and implementation	Ethiopian Civil Service Commission (ECSC), Sector ministries, Development partners
	Introduce meritocratic recruitment systems in public institutions	ECSC, Sector ministries, Development partners
Weak regulatory quality	Strengthen enforcement capacity through tailored capacity building for regulatory bodies	ECSC, Sector ministries
Weak capacity in the design of results framework and data management	Design a capacity development program focusing on results-based management framework for public institutions	Ministry of Planning and Development (MoPD), Development Partners
	Build capacity of public institutions in database establishment and management through training	MoPD, Development Partners
Inadequate capacity in project design and management	Design a capacity building program on project design and management in collaboration with universities	MoPD, Ministry of Education (MOE)
Lack of capacity in policy evaluation and impact assessment	Develop a capacity building program on impact assessment and policy evaluation in collaboration with universities	MoPD, MOE

Table 5.6
Measures to address constraints in the business ecosystem

Constraints	Interventions	Responsible institutions
Weak and fragmented service delivery	Improve services delivery of government institutions through establishing one-stop shops to create a conducive business environment	Ministry of Trade and Regional Integration (MOTRI), Ministry of Industry (MoI), Ethiopian Investment Commission (EIC), Chamber of Commerce and Sectoral Associations (CCSA)
Non-tariff barriers	Conduct a detailed review of NTBs to identify and prioritize strategies to address trade constraining NTBs	Ministry of Trade and Regional Integration, Ministry of Revenues (MoR), Sector ministries
	Streamline procedures and regulations related to NTBs to ease trade flows	MoTRI, MoR, Sector ministries, Development partners
Trade facilitation constraints	Address the TF challenges through reviewing TF measures in light of the WTO's Trade Facilitation Agreement (TFA) and investments in automation	MoTRI MoR, Sector ministries, Development partners
Limited access to finance	Establish equity financing and venture capital frameworks to mobilize private finance, particularly for agriculture and manufacturing	NBE, Ministry of Finance (MoF), CCSA
	Promote capital finance development through reforming banking laws regarding collateral and security, etc	NBE, Development Bank of Ethiopia (DBE), Commercial Banks
	Provide preferential financing by encouraging public and private banks to direct credit to prioritized sectors.	DBE, Commercial Banks
	Foster the development of non-banking financial institutions (NBFIs)	NBE
Infrastructure and logistics constraints	a) Improve coordination among the different service providers through investment in networking	Ministry of Transport (MoT), MoTRI
	b) Improve coverage and quality of telecommunications through upgrading and encouraging more service providers	MoT, Ethiopian Communications Authority
	c) Streamline and effective coordination of border clearance processes (customs procedures) and establish a dedicated window for agriculture and manufacturing	Ministry of Industry (MoI), Entrepreneurship Development Institute
	d) Improve availability of utilities including power supply and water through investment and upgrading the existing infrastructure	Ministry of Water and Energy
	e) Modernize corporate governance and improve the operational efficiency of logistics enterprises through digital logistics and attract a range of investors into the sector	MoT, EIC
	Coordinate border management through information sharing, harmonization of procedures and close interagency cooperation	MoTRI, MoR
Limited entrepreneurial and managerial capacity	f) Encourage firms to provide entrepreneurship training through subsidized training expenditures, tax incentives, etc.	MoI, MoTRI, Ministry of Education
	g) Develop a comprehensive capacity development program in collaboration with universities and institutes, including business incubation programs to stimulate business start-ups	MoTRI, MoR, CCSA, EDI
	Provide management practices and consulting to improve managerial capabilities	Ethiopian Management Institute, CCSA

Table 5.7
Measures in strengthening coherence and linkages

Constraints	Interventions	Responsible institutions
Inadequate coherence and coordination	Review policies, strategies and plans both vertically and horizontally to foster synergies and reduce mandate overlaps across institutions	Ministry of Planning and Development (MoPD), Sector ministries
	Improve cross-sectoral coordination to ensure complementarity and foster synergies through joint planning and monitoring frameworks	MoPD, Sector ministries
	Map key institutions and stakeholders to foster coherence in reducing overlapping and redundancies	Ethiopian Civil Service Commission (ECSC), (MoPD)
Limited production linkages	Increase the supply of domestically produced industrial inputs through attracting domestic and FDI in commercial agriculture	Ethiopian Investment Commission (EIC), Ministry of Agriculture (MoA)
	Improve availability and affordability of agricultural inputs through enhancing domestic production, especially in the manufacturing industry	MoA, Ministry of Irrigation and Lowlands (MoIL)
	Setting and enforcing national standards on product quality (both agriculture and manufacturing)	Ministry of Trade and Regional Integration (MoTRI), MoA, Ministry of Industry (MoI)
	Support and promote investments in irrigation agriculture through financial and non-financial measures	MoIL, Ministry of Finance (MoF)
	Build the capacity of local suppliers through the clustering of domestic firms to reduce costs through shared facilities and network effects (e.g., through industrial parks and SEZ)	MoA, MoI, MoTRI
	Capacity building and awareness creation on product quality and introduce quality standards award schemes for those firms produce quality products as per the standards	MoA, MoI, MoIL, MoF
	Develop an industrial linkage program, focusing on vendors that manufacture inputs locally to priority sectors and products	MoI, MoTRI
Low demand linkages	Encourage consumption of locally produced products through awareness creation and other incentives	MoI, MoTRI
	Use government procurement to promote purchase of locally produced commodities, especially by public institutions	MoF, MoI, MoTRI
Inadequate finance and other services in the productive sectors that foster structural change	Improve access to subsidized credit with grace periods	Development Bank of Ethiopia, other financial institutions
	Preferential access to FOREX to import critical capital goods	NBE, Ministry of Revenues
	Improve utility services, especially power and water	Ministry of Water and Energy

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