UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT

UNCTAD

Enhancing Productive Capacities in the United Republic of Tanzania

A Coherent and Operational Strategy

UNITED NATIONS

UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT

UNCTAD

Enhancing Productive Capacities in the United Republic of Tanzania

A Coherent and Operational Strategy

UNITED NATIONS
Geneva, 2022

United Nations publication issued by the United Nations Conference on Trade and Development.

UNCTAD/ALDC/2022/3

Sales No. E.22.II.D.14
ISBN: 978-92-1-113042-3
eISBN:978-92-1-001408-3

ACKNOWLEDGEMENTS

This Report was prepared by Patrick N. Osakwe, Chief, Trade and Poverty Branch, UNCTAD, under the overall direction of Paul Akiwumi, Director, Division for Africa, Least Developed Countries and Special Programmes, UNCTAD. The Report is one of the main outputs of the 12th Tranche UN Development Account Project on "Coherent Strategies for Productive Capacity Development in African Least Developed Countries" which was launched in the first quarter of 2020 and is being implemented in Burkina Faso, Rwanda and Tanzania.

The Report benefitted from discussions and dialogues with officials of the Ministry of Industry and Trade, Tanzania, and participants at the Hybrid National Workshop on Coherent Strategies for Developing Productive Capacities in Tanzania, held 29-30 April 2021.

Paulette Lacroix and Regina Ledesma provided secretarial and administrative support to the project. The cover was prepared by Magali Studer. The overall layout, graphics and desktop publishing were done by Nathalie Loriot.

TABLE OF CONTENTS

EXECUTIVE SUMMARY

Tanzania is confronted with the daunting task of developing productive capacities and transforming the structure of its economy in a rapidly changing global environment characterized by, among others, rapid technological progress, the phenomenon of global value chains, climate change, the shift in global economic power, and constraints on the use of trade policy instruments to foster industrialization and other national development goals. These challenges have now been compounded by the coronavirus (COVID-19) pandemic which became evident in the first quarter of 2020 and has led to massive infections and deaths, disrupted trade and investment flows, and triggered a global recession in 2020. It is evident that to effectively cushion the effect of the pandemic in Tanzania and ensure that it does not jeopardize the achievement of national development goals, there is the need to build resilience to shocks through the development of productive capacities. To this end, there is the need for the government to place the development of productive capacities at the center of current and future development policies with a view to laying a solid and robust foundation for sustained and inclusive growth.

Against this background, this report presents a coherent and operational strategy for the development of productive capacities in Tanzania. The phrase “operational strategy” for the development of productive capacities is used in this report to refer to a set of country-specific policies and an action-plan designed to support and achieve the goal of productive transformation in an economy. The operational strategy presented here revolves around six pillars: setting clear and realistic goals and targets; lifting core binding constraints to the development of productive capacities in the country; addressing issues of policy incoherence; harnessing gender potential for productive transformation; developing, promoting and diversifying exports; and making regionalism work for productive transformation. Under the core pillars identified, the report highlights as well as discusses strategic policy measures and an action plan to enhance the development of productive capacities in Tanzania. The report also provides insights into two issues that are vital to the effective implementation of the strategic measures and action plan proposed. The first is the importance of having an effective resource mobilization and allocation strategy and the second is the need to have a credible system for monitoring and evaluation of implementation of proposed policy actions.

ABBREVIATIONS

AfCFTA	African Continental Free Trade Area
BIS	Basic Industry Strategy
BOT	Bank of Tanzania
BRELA	Business Registration and Licensing Authority
COMESA	Common Market for Eastern and Southern Africa
CET	Common External Tariff
CTI	Confederation of Tanzania Industries
DRC	Democratic Republic of Congo
EAC	East African Community
EPZ	Export Processing Zones
EWURA	Energy and Water Utilities Regulatory Authority
FYDP	Five Year Development Plan
GCLA	Government Chemist Laboratory Authority
ICT	Information and Communications Technology
LDC	Least Developed Country
LTPP	Long-Term Perspective Plan
MEST	Ministry of Education, Science and Technology
MFP	Ministry of Finance and Planning
MHCGEC	Ministry of Health, Community Development, Gender, Elderly and Children
MIT	Ministry of Industry and Trade
MVA	Manufacturing Value Added
MWTC	Ministry of Works, Transport and Communication
NACTE	National Council for Technical Education
NBS	National Bureau of Statistics
NEMC	National Environment Management Council
OSHA	Occupational Safety and Health Agency
PAPSS	Pan African Payments and Settlements System
PCI	Productive Capacities Index

SADC	Southern African Development Community
SAP	Structural Adjustment Programme
SEZ	Special Economic Zone
SIDP	Sustainable Industrial Development Policy
SMEs	Small and Medium Enterprises
STEM	Science, Technology, Engineering and Mathematics
TAEC	Tanzania Atomic Energy Commission
TANESCO	Tanzania Electric Supply Company Limited
TBS	Tanzania Bureau of Standards
TDV	Tanzania Development Vision
TMDA	Tanzania Medicines and Medical Devices Authority
TRA	Tanzania Revenue Authority
TVET	Technical and Vocational Education and Training
URT	United Republic of Tanzania
VETA	Vocational Education and Training Authority
VAT	Value Added Tax
WEF	World Economic Forum
WMA	Weights and Measures Agency

1

INTRODUCTION

Tanzania is a least developed country (LDC) in East Africa with a population of about 59.7 million in 2020. Among African LDCs, it is unique in the sense that it successfully went through a transition from a centrally planned to a market economy, has enjoyed decades of political stability, and is blessed with abundant natural resources: arable land, forests, fish, minerals, rich biodiversity, and wildlife resources. Tanzania also occupies a strategic geographical location because it is a major seaport hub in East Africa and has borders with eight countries: Burundi, Democratic Republic of the Congo, Kenya, Malawi, Mozambique, Rwanda, Uganda, and Zambia.

As in other LDCs, Tanzania is confronted with the daunting task of developing productive capacities and transforming the structure of its economy in a rapidly changing global environment characterized by, among others, rapid technological progress, the phenomenon of global value chains, climate change, the shift in global economic power, and constraints on the use of trade policy instruments to foster industrialization and other national development goals. These challenges have now been compounded by the coronavirus (COVID-19) pandemic which became evident in the first quarter of 2020 and has led to massive infections and deaths, disrupted trade and investment flows, and triggered a global recession in 2020.

Before the onset of the COVID-19 pandemic, Tanzania had very good economic performance as well as prospects for growth and development. Following several years of political reforms and improvements in economic governance, it experienced rapid and sustained economic growth, which culminated in its reclassification from low-income to lower-middle-income country in July 2020. Since the turn of the millennium the economy has grown at more than 6 percent and in per capita terms by more than 3.5 percent despite rapid population growth. Interestingly, over the past three decades its growth performance has been consistently above that of the average for Africa. For example, in the period 2011-18, per capita output growth in Tanzania was 3.5 percent compared with 0.14 percent for the continent (Table 1). This is a major departure from the situation in the decade 1971-80 when output per capita grew by merely 0.46 percent compared with 1.56 for the continent. When assessed at the global level, its economic growth performance has also been impressive. For example, in the period 2014-19, the annual average real output growth rate for Tanzania was about 6.8 percent compared to 5.2 percent for middle-income developing countries, 4.4 percent for LDCs, 4.3 percent for developing countries, 3 percent for the world, and 2.8 percent for Africa (Figure 1).

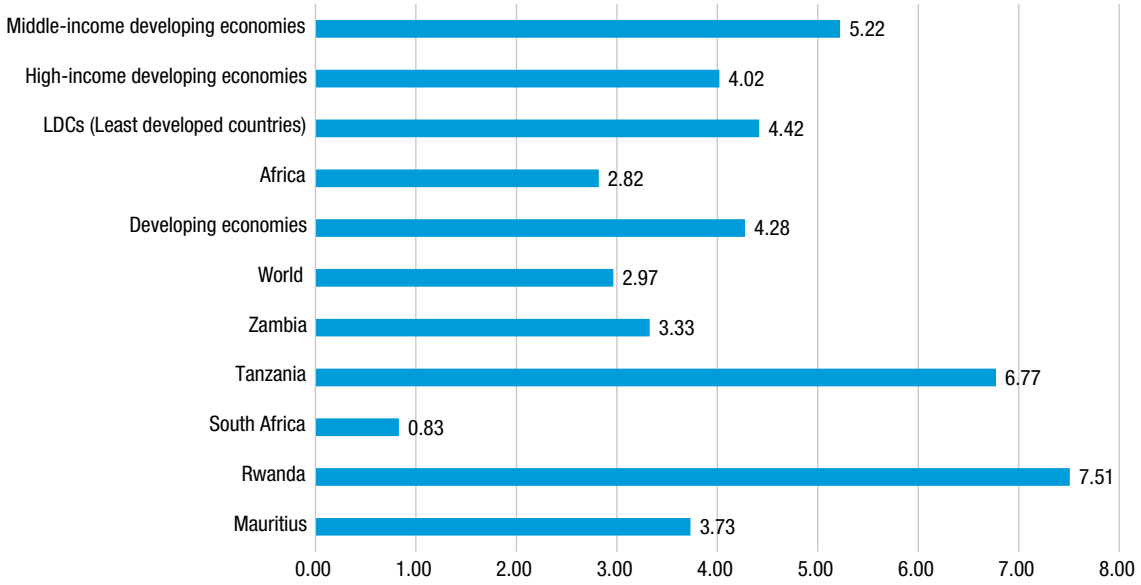
In addition to the remarkable growth experienced by Tanzania over the past two decades, the country has also made progress in terms of macroeconomic stability, with the inflation rate dropping from 26.8 percent in 1995 to 7.2 percent in 2010 and 3 percent in 2020. Similarly, the current account balance shifted from a deficit of 8.4 percent in 1990 to a deficit of only 2.2 percent in 2019. Despite these significant and welcome developments, it is evident that the country is facing challenges in social development. For example, despite the high growth observed in the past two decades, poverty is widespread in the country. Figure 2 presents the evolution of poverty in the country in the past two decades. It shows that some progress has been made in reducing poverty but that the poverty rate remains high irrespective of whether one is using the national or international poverty line. Based on the national poverty line threshold of $1.35 per day, the poverty rate fell from 35.6 percent in 2000 to 25.7 percent in 2020. And using the international poverty line threshold of $1.90 per day, the poverty rate fell from 86.2 percent in 2000 to 50.5 percent in 2020. These figures imply that in 2020 the number of poor people in Tanzania was 15.3 million based on the national poverty line and 30.1 million using the international poverty line.

Table 1: Annual average real GDP growth rate for Tanzania (%)

	Output growth	Per capita output growth
1971-80	3.67	0.46
1981-90	2.73	-0.37
1991-20	4.15	1.23
2001-10	6.56	3.61
2011-18	6.65	3.52

Source: UNCTADstat

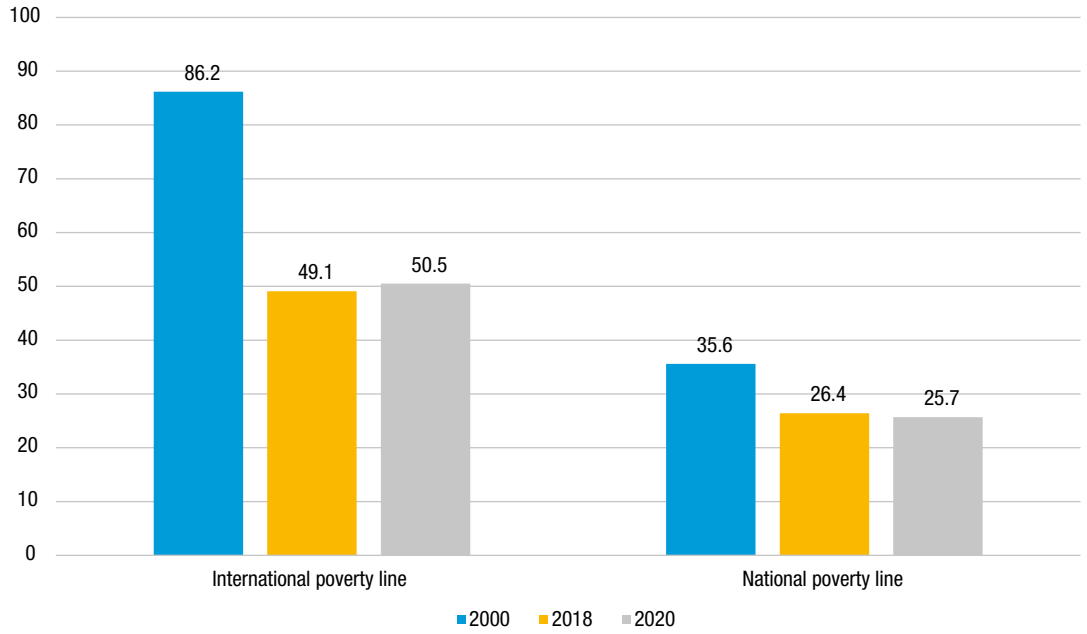
Figure 1: Output growth across selected countries and groups (2014-2019)



Source: UNCTADstat.

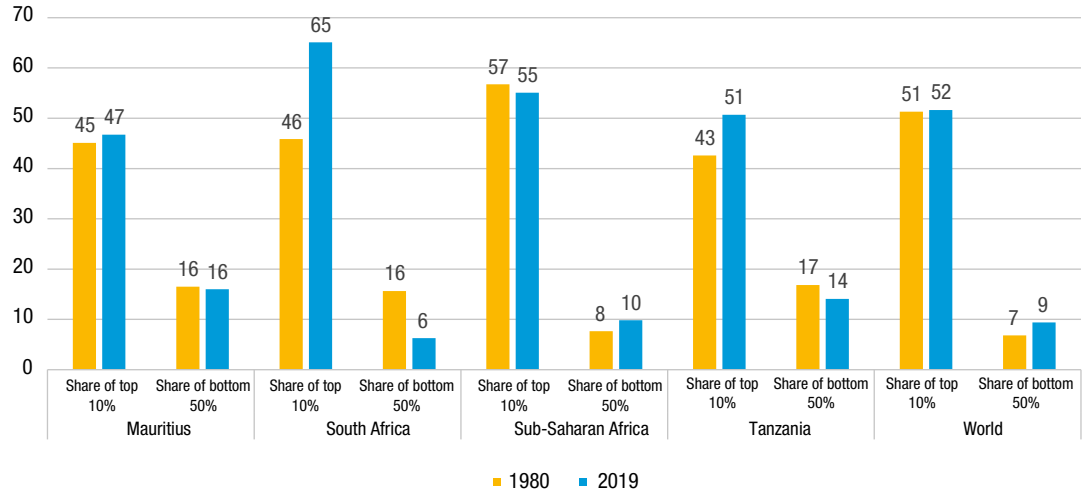
The growth and poverty statistics discussed above imply that Tanzania has very low growth elasticity of poverty. This conclusion is in line with estimates from a recent study indicating that the growth elasticity of poverty in Tanzania is -0.26 compared to -1.9 for sub-Saharan Africa (World Bank 2021). A key reason for the low growth elasticity of poverty in Tanzania is the fact that the high growth observed in the country over the past few decades went hand in hand with an increase in income inequality, reflecting the fact that recent growth has not been inclusive. The income share of the top 10 percent of the population increased from 43 percent in 1980 to 51 percent in 2019 while the income share of the bottom 50 percent decreased from 17 to 14 percent over the same period. This pattern of changes in inequality is quite different from what has been observed in sub-Saharan Africa where the income share of the top 10 percent decreased from 57 percent in 1980 to 55 percent in 2019 and the income share of the bottom 50 percent increased from 8 to 10 percent over the same period (Figure 3). These statistics indicate that a major challenge for Tanzanian policymakers is how to make the growth process more inclusive to enhance prospects for achieving the governments' goal regarding poverty reduction. This challenge has been compounded by the COVID-19 pandemic which has halted the trajectory of high and sustained economic growth in Tanzania and is eroding the tremendous gains in development achieved by the country in the past few decades.

Figure 2: Evolution of the poverty rate in Tanzania (%)



Source: World Bank (2021b) and URT (2020).

Figure 3: Income inequality in selected countries and groups (%)



Source: World Inequality Database.

The first COVID-19 case in Tanzania was reported on 16th of March 2020 and by 14th of May 2020 the number of reported cases had increased to 509 and the number of deaths was 21. Since mid-May 2020, the government stopped regular reporting of the number of cases and deaths in the country. This measure coupled with the fact that the pandemic is still unfolding with no end in sight, makes it challenging to get a clear picture of the human cost of the crisis and the socio-economic consequences for development. Notwithstanding this constraint, there is some evidence that the crisis has had a significant negative impact on the real economy. For example, in the period 2014-19, preceding the onset of the crisis, annual average real output growth in Tanzania was 6.8 percent and in 2020 it was just 2 percent.[1] This suggests that the real output cost of the crisis in 2020, measured as a deviation of output from trend growth, is about 4.8 percentage points. It is evident that to effectively cushion the effect of the pandemic and ensure that it does not jeopardize the achievement of national development goals, there is the need to build resilience to shocks through the development of productive capacities. To this end, there is the need for the government to place the development of productive capacities at the center of current and future development policies with a view to laying a solid and robust foundation for sustained and inclusive growth.

Against this background, this report presents a coherent and operational strategy for the development of productive capacities in Tanzania. The phrase "operational strategy" for the development of productive capacities is used in this report to refer to a set of country-specific policies and an action-plan designed to support and achieve the goal of productive transformation in an economy. The operational strategy presented here revolves around six pillars: setting clear and realistic goals and targets; lifting core binding constraints to the development of productive capacities in the country; addressing issues of policy incoherence; harnessing gender potential for productive transformation; developing, promoting and diversifying exports; and making regionalism work for productive transformation.

The rest of the report is structured as follows. The next section of the report (2) begins with an examination of the demand, supply, and export structures of the economy of Tanzania, which provides a context for the discussions in subsequent sections of the report. Section 3 provides an assessment of the state of productive capacities development in Tanzania. It also discusses the challenge of capacity underutilization and the impact of COVID-19 on the development of productive capacities. Section 4 highlights the stages of industrial development for productive transformation in Tanzania while section 5 contains an analysis of the country-specific constraints to the development of productive capacities in the country. Section 6 identifies as well as discusses strategic policy measures and an action plan to enhance the development of productive capacities in Tanzania while the final section (7) focuses on selected strategy implementation issues.

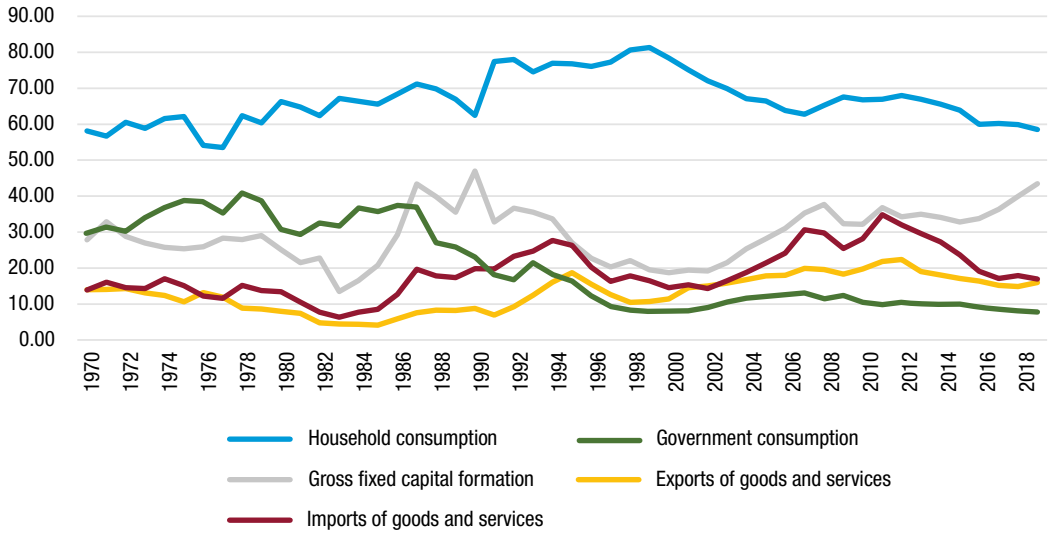
[1] It should be noted that with a population growth rate of about 3 percent, a real output growth rate of 2 percent implies that real per capita output growth in 2020 was about -1 percent. This is the first time that real per capita output declined in the country in over 25 years.

2

THE DEMAND, SUPPLY AND EXPORTS STRUCTURE OF THE ECONOMY

To provide a context for an understanding of the drivers of Tanzania's recent growth and the challenges it is facing in building productive capacities to foster sustained and inclusive development, this section provides an overview of the demand, supply and trade structures of the economy. The evolution of components of aggregate demand in Tanzania in the period 1970-2019 is presented in figure 4. It shows that household consumption is the dominant component of aggregate demand, accounting for between 60 to 80 percent of gross domestic product (GDP) over the past five decades. Between 1970 and 2019, the annual average share of household consumption in GDP was about 66.9 percent. Gross fixed capital formation is the second most important component with a share of 29.4 percent followed by government consumption with a share of 20.7 percent. Imports and exports of goods and services accounted for 18.7 percent and 13 percent, respectively. It is interesting to note that government consumption reached a peak of 41 percent in 1978 and has displayed a declining trend since then, reaching a historic low of 7.8 percent in 2019. Gross fixed capital formation attained a peak of 47 percent in 1990 and then declined significantly in the 1990s, reaching a low of 19 percent in 2000. Since the beginning of the new Millennium, it has maintained a rising trend and from 2006 it has consistently accounted for more than 30 percent of GDP, which is quite high. The high investment ratio reflects the fact that boosting investment has been an important element in government programmes to engender sustained growth in Tanzania. It also reflects the fact that investment has been the main driver of growth in the economy in the past few decades. For example, a recent growth accounting exercise conducted for Tanzania indicates that in the period 1990-2016, 71 percent of real output growth in the economy was accounted for by capital accumulation, 19.2 percent by labour and 9.8 percent by total factor productivity (Masenya et al, 2018).

Figure 4: Trends in components of aggregate demand in Tanzania, 1970-2019, (% of GDP)



Source: UNCTADstat

The sustained increase in gross fixed capital formation observed in Tanzania over the past few decades is a welcome development in terms of prospects for building productive capacities because capital accumulation is one of the three core processes involved in enhancing productive capacities. The other crucial processes are structural change and technological progress. In this context, by maintaining a sustained increase in investment, Tanzania is laying a good foundation for enhancing productive capacities. In recent years, a large part of the increase in capital formation in Tanzania is due to investments in buildings and structures. Table 2 shows that buildings and structures accounted for 65.5 percent of capital formation in Tanzania in 2013, 79.5 percent in 2016 and 90.6 percent in 2019. This indicates that the asset category "buildings and structures" does not only dominate other assets in capital formation but that its dominance is also increasing over time. The asset category "machinery and equipment" is the second important component, but its importance has declined over the years. Regarding the relative roles of the public and private sectors in capital formation, it is interesting to note that about 70 percent of fixed capital formation in the country comes from the private sector and 30 percent from the public sector. Foreign direct investment (FDI) contributes to private investment in Tanzania, but its importance has declined since 2016 (World Bank 2021). Furthermore, most of the FDI flows to the country are in the extractive sector which has very limited linkages to the rest of the economy and also low potential for employment creation. In this regard, a key challenge for the government is how to ensure that future flows go to strategic sectors, such as manufacturing and high value-added agricultural activities, deemed necessary to foster growth and transform the economy. Within the public sector, in 2019 the central government accounted for about 85 percent of public sector fixed capital formation while parastatals and other public institutions accounted for about 15 percent (MFP 2020).

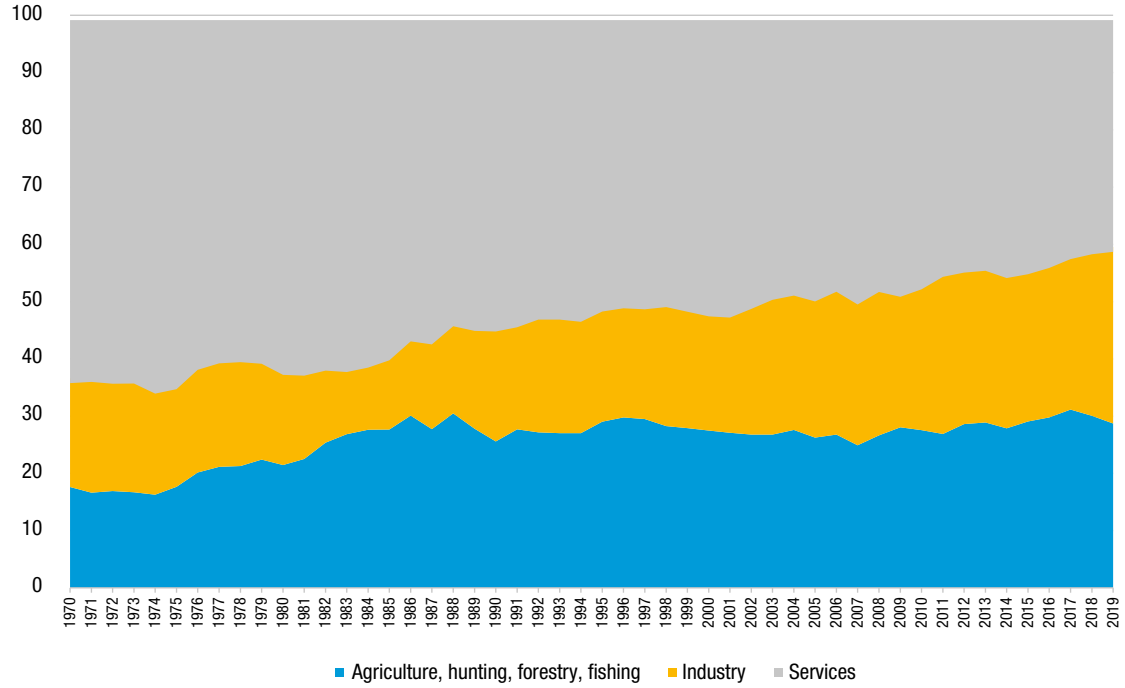
Table 2: Capital formation by type of asset (% of total)

	2013	2016	2019
Buildings and structures	65.5	79.5	90.6
Transport equipment	5.1	4.3	3.5
Machinery and equipment	13.2	9.8	6.3
Other machinery and equipment	3.6	3.9	3.2
Animal resources yielding repeat products	1.1	1.2	1.0
Intellectual property products/R&D/professional services	2.2	3.0	2.6
Changes in valuables and inventories	9.4	-1.8	-7.3

Source: compiled using data in MFP (2020).

In addition to the demand side issues discussed above, the supply or production side of the economy provides another perspective on the evolution of the structure of the economy. Among the three major output sectors, historically the service sector has been the dominant sector, followed by the category "agriculture, hunting, forestry and fishing," and finally industry (Figure 5). Over the period 1970-2019, the annual average share of services in GDP was 53.2 percent, while "agriculture, hunting, forestry and fishing" and industry accounted for 26 and 21 percent, respectively. While the service sector remains the dominant sector, its share of output has declined significantly in the past few decades, reaching a historic low of about 40.5 percent of GDP in 2019. The declining share of the service sector has gone hand in hand with an increase in the share of industry, particularly in the past two decades. In contrast, the share of "agriculture, hunting, forestry and fishing" has been relatively stable over the past two decades.

Figure 5: Real output value added by sector, 1970-2019 (% of GDP)

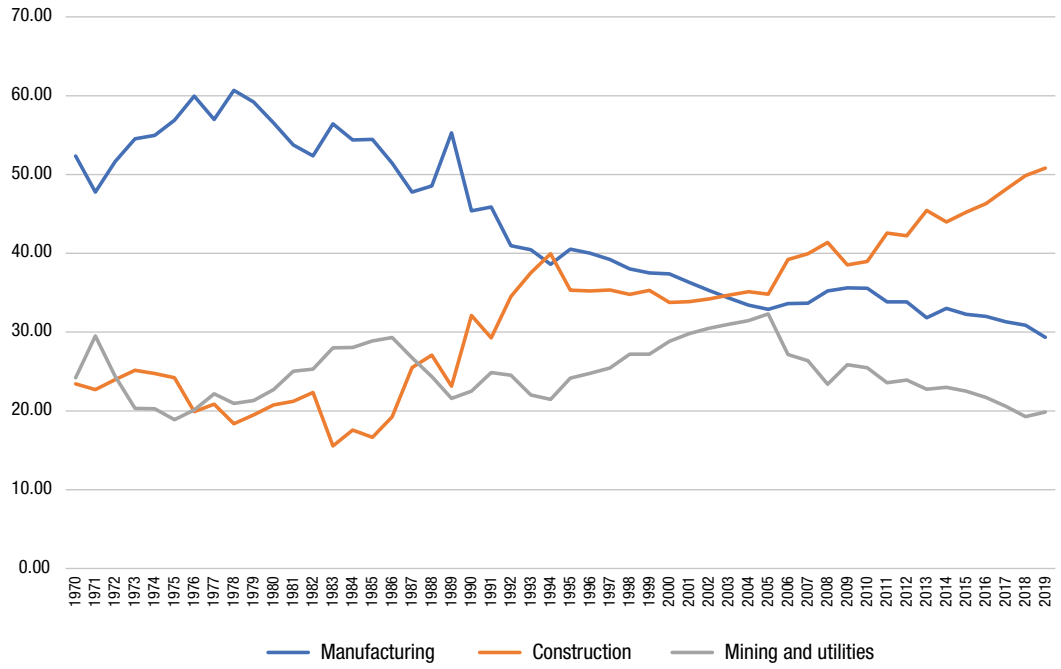


Source: compiled using data from UNCTADstat.

Regarding the structure of industry, on an annual average basis, manufacturing accounted for 43.3 percent of industrial output in the period 1970-2019 while construction accounted for 32 percent and mining and utilities 24.7 percent.[2] However, these averages mask important changes that have taken place in the composition of the industrial sector over the past few decades. In the 1970s manufacturing activities accounted for more than 50 percent of industrial output while construction and mining and utilities each accounted for between 20 to 30 percent of industrial output (Figure 6). After reaching a peak of about 61 percent of industrial output in 1978, the share of manufacturing has been on a declining trend and in 2019 it accounted for only 29 percent of industrial output. By contrast, the share of construction has been increasing since the mid-1980s and in 2019 it accounted for about 51 percent of industrial output. The changing composition of industrial output away from manufacturing reflects the low level of manufacturing development in the country. While successive governments have made efforts to harness Tanzania's manufacturing potential, progress has been modest as evidenced by the very low level of manufacturing value added (MVA) per capita recorded in Tanzania over the past few decades (Figure 7). To put the discussion in a comparative perspective Tanzania's per capita MVA performance is compared with that of an upper middle-income African country (South Africa) and a high-income African country (Mauritius). In 1970 per capita MVA in Tanzania was $47 compared with $190 in Mauritius and $601 in South Africa. By 2019 per capita MVA in Mauritius had increased to $1239, in South Africa to $657 and in Tanzania to just $90. The extremely low value of per capita MVA in Tanzania, the declining share of manufacturing in industrial output, and the low contribution of manufacturing to GDP are worrisome given the increasing emphasis the government is placing on reviving and boosting manufacturing activities and the fact that manufacturing is a dynamic sector with tremendous opportunities for sustained employment creation.

[2] In terms of total value added (GDP), the annual average share of manufacturing in GDP in the period 1970-2019 was 11 percent. It should be noted that in the past 10 years (2010-2019) the annual average share of manufacturing was 9 percent, which is less than its share of 12 percent in 1970.

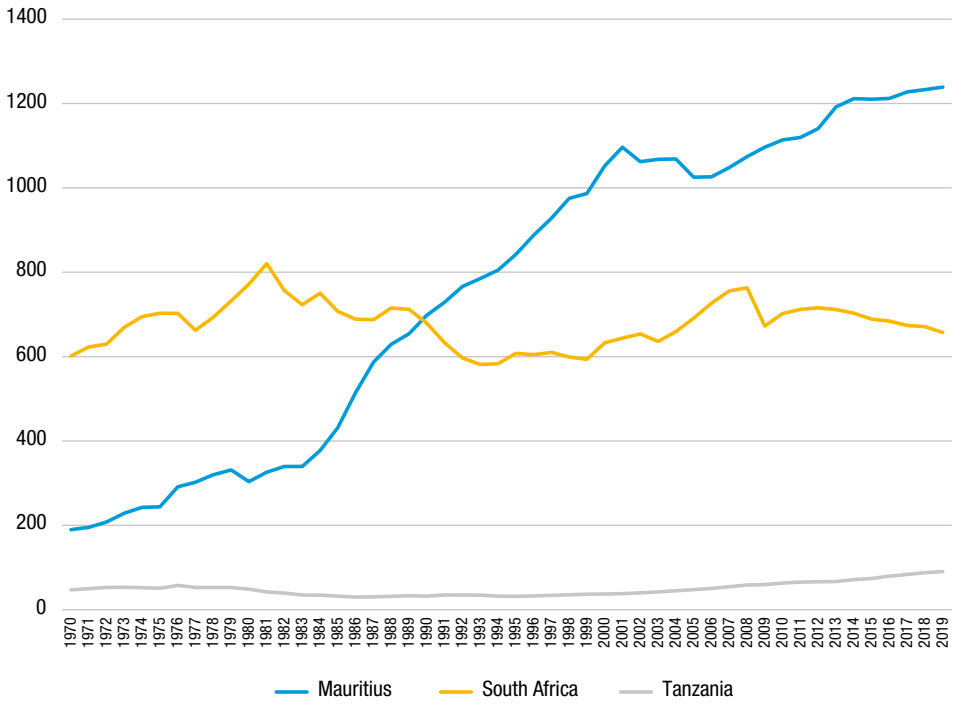
Figure 6: Composition of industrial output by sector, 1970-2019 (% of total)



Source: compiled using data from UNCTADstat.

As in other African economies, trade is important to fostering economic development in Tanzania. The country relies on exports for foreign exchange earnings needed to import vital inputs for domestic industries. In addition, access to international trade expands market size thereby permitting Tanzania to exploit economies of scale in production and to make better use of existing production capacities. Trade also has the potential to create jobs needed to absorb an estimated 1 million youths who enter the labour market each year (MFP 2021). Over the period 2011-19 the annual average share of trade in goods and services was about 45 percent of GDP. However, the role of trade has declined significantly in the past decade from a peak of about 56 percent in 2011 to about 31 percent in 2019. Although trade is important in the development of Tanzania, the country accounts for an insignificant proportion of global trade. In the period 2011-19 the annual average share of Tanzania in global exports of goods and services was 0.04 percent and its share of global MVA was 0.03 percent. These numbers are far below its share of global population, which was 0.70 percent in the period 2011-19. The weak performance of Tanzania in global trade reflects its historically weak manufacturing and industrial performance, which is not surprising because countries that have very good industrial performance also have very good trade performance. For example, in 2019, the industrialized economies accounted for 65 percent of global exports and the emerging industrial economies accounted for 29 percent. By contrast, the main exporters of agricultural products in developing and transition economies accounted for only 0.91 percent and the main exporters of minerals and mining products in developing and transition economies for 0.89 percent.

Figure 7: Per capita MVA in constant 2015 US dollars



Source: compiled by author using data from UNCTADstat.

There are several weaknesses in the pattern of Tanzania's trade that need to be addressed to better harness the potential of trade for development than has been the case in the past. First, is the concentration of exports both in terms of products and markets. In 2019 minerals accounted for 46.5 percent of total merchandise exports and its share rose to 55.6 percent in 2020 (Table 3). Interestingly, gold accounts for most of the mineral exports of Tanzania, with a share of 95 percent in 2019. Diamond and other mineral exports account for a very small percentage of mineral exports. Manufactured goods are the second most important exports of Tanzania with a share of 16.1 percent in 2019 and 15 percent in 2020. Among the traditional exports (coffee, cotton, sisal, tea, tobacco, raw cashew-nuts, and cloves) raw cashew-nuts is the most important export with a share of 7.1 percent in 2019 and 5.9 percent in 2020. Tanzania's high concentration of exports in a single mineral (gold) exposes it to external shocks and is a source of macroeconomic instability and vulnerability.

Table 3: Merchandise export shares by product (%)

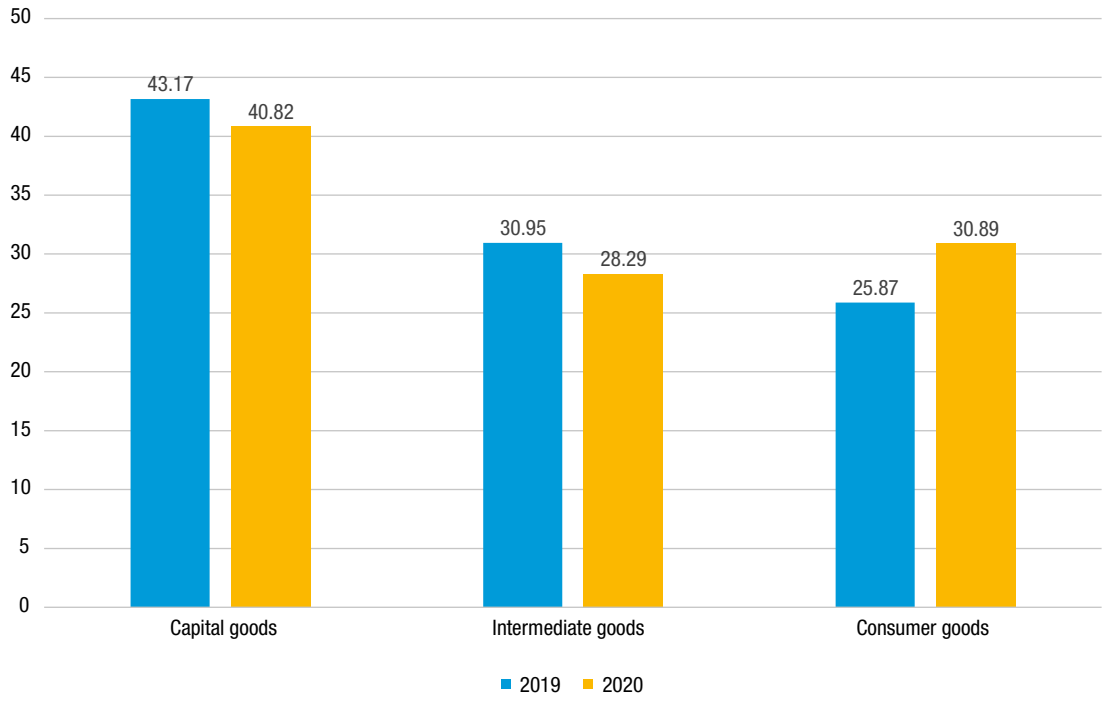
	2019	2020
Coffee	3.07	2.40
Cotton	1.83	1.44
Sisal	0.69	0.30
Tea	0.91	0.53
Tobacco	2.93	2.45
Raw cashew-nuts	7.06	5.93
Cloves	0.18	0.28
Minerals	46.50	55.58
Manufactured goods	16.09	14.99
Other exports	20.73	16.10
Total	100	100

Source: computed using data in BOT (2021).

In addition to product concentration, exports are also concentrated in terms of destination markets. For example, in 2019, 19.4 percent of exports went to South Africa, 17.4 percent to India, 7.9 percent to United Arab Emirates, 6.5 percent to Switzerland, and 6.2 percent to Vietnam. Together the five countries accounted for 57 percent of total merchandise exports in 2019. Gold was exported to South Africa, India, and Switzerland, while oil seeds, tobacco, coffee, and cashew nuts were mostly exported to United Arab Emirates, India, and Vietnam. Tanzania is a member of the East African Community (EAC) and the Southern African Development Community (SADC). On 21st March 2018, the government signed the African Continental Free Trade Area (AfCFTA) agreement and on 9 September 2021 it was ratified by parliament. Against this backdrop, regional cooperation plays an important role in its external trade. In 2019, about 38 percent of total exports was to African countries, 35 percent went to Asia, 15 percent went to the European Union, 2.3 percent went to America, and other countries accounted for 10.2 percent. Regarding exports within Africa, SADC accounted for 65 percent of Tanzania's exports to Africa while the EAC accounted for 32 percent. Within SADC, the main export destinations were South Africa and the Democratic Republic of Congo (DRC).

Regarding imports, in 2019 six countries (China, India, United Arab Emirates, Japan, South Africa, and Saudi Arabia) were the source of about 30 percent of total merchandise imports in 2019. Machinery, tractors, and electronic products were imported from China and petroleum products were imported from Saudi Arabia and United Arab Emirates. The imports from India, Japan and South Africa were mostly iron steel and motor vehicles (MFP 2020). An interesting feature of the import structure is that capital and intermediate goods dominate imports. For example, in 2019 capital goods accounted for 43 percent, intermediate goods for 31 percent, and consumer goods for 26 percent (Figure 8). In 2020, there was a decrease in the share of both capital and intermediate goods while the share of consumer goods increased from 26 to 31 percent. Capital goods imports are mostly machinery, transportation goods, and building and construction materials while intermediate goods comprise oil imports, industrial raw materials and fertilizer.

Figure 8: Composition of merchandise imports (% shares)



Source: computed using data in BOT (2021).

Another weakness in Tanzania's export pattern is the predominance of primary commodities in exports and the low technology content of products exported. In the period 2011-2019 primary commodities accounted for 34 percent of exports, which is quite high but far below what it was in the decade of the 1990s where it was as high as 76 percent (Table 4). While there has been a decrease in the share of primary products in exports, there has also been an increase in the share of resource-based manufactures from about 13 percent in the period 1991-2000 to about 22 percent in the period 2011-2019. Regarding other technological categories, in the period 2011-2019 low technology manufactures accounted for 7.5 percent, medium technology manufactures for 5.4 percent and high technology manufactures for 1.8 percent. The low technology content of exports is worrisome because what a country exports matters for growth and inclusive development. History has shown that rich countries tend to export sophisticated products with high technology content so if a country aspires to achieve a higher level of development it must make increasing the technology content of its exports one of the items on its priority list.

The third weakness in the pattern of Tanzania's trade is the low level of export competitiveness, which makes it challenging to penetrate foreign markets particularly for manufactured goods. In the global competitiveness report for 2019, Tanzania ranked 117 out of 141 economies considered (Schwab, 2019). But the main components of the index where it had a ranking worse that its overall ranking were ICT adoption (133), skills (126), innovation capability (123) and infrastructure (121). Some of the factors contributing to the low competitiveness of its exports include low labour productivity, high trade costs, lack of diversification, and low levels of technological innovation. A recent study indicates that total factor productivity has contributed less than 0.2 percentage points to Tanzania's growth in the past decade, reflecting the fact that growth has been driven by factor accumulation rather than by productivity improvements (World Bank 2021). Although some gains have been made in labour productivity in Tanzania over time, the pace of progress is still very low. For example, is estimated that labour productivity in Tanzania is about 69 percent less than in Kenya. Furthermore, in Tanzania across sectors labour productivity is highest in the services sector followed by industry and then agriculture. Consequently, the reallocation of labour from agriculture to mostly services has had a positive impact on overall productivity growth in the economy. Going forward, there is the need for Tanzania to strengthen efforts to boost productivity growth and make it the key driver of economic growth to reduce dependence on factor accumulation.

Table 4: Tanzania's exports by technology category, Lall classification, (% of total)

	1991-2000	2001-2010	2011-2019
Primary products	76.01	42.08	34.13
Resource-based manufactures: agro-based	6.15	7.05	8.02
Resource-based manufactures: other	6.71	15.02	13.93
Low technology manufactures: textile, garment and footwear	3.01	3.14	2.93
Low technology manufactures: other products	1.19	2.44	4.56
Medium technology manufactures: automotive	0.63	0.56	0.38
Medium technology manufactures: process	0.52	2.43	2.74
Medium technology manufactures: engineering	0.75	1.51	2.23
High technology manufactures: electronic and electrical	1.01	0.65	1.27
High technology manufactures: other	0.24	0.38	0.54
Unclassified products	3.78	24.74	29.26

Source: UNCTADstat.

3

PRODUCTIVE CAPACITIES IN TANZANIA: AN ASSESSMENT

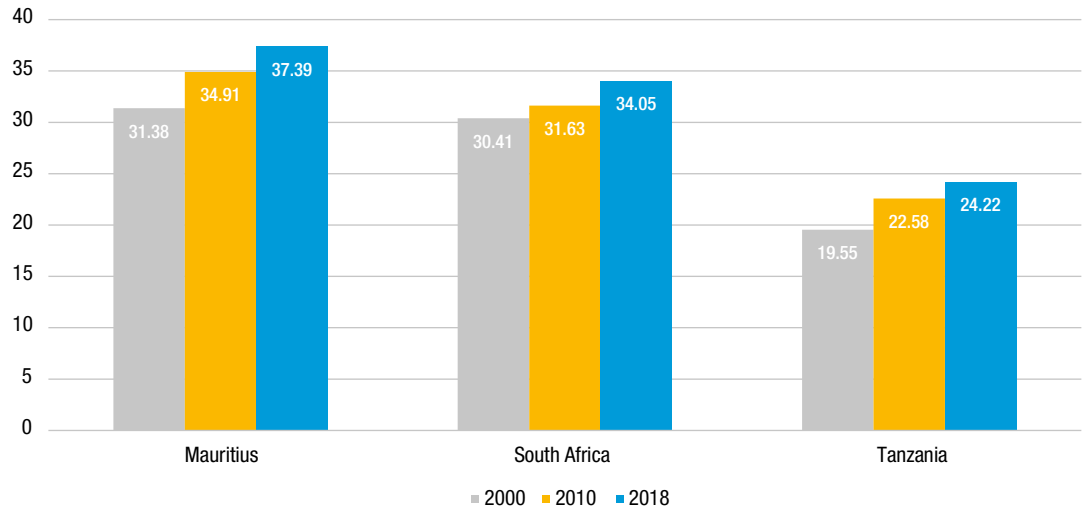
This section of the report focuses on three issues that are critical to understanding the nature and scope of productive capacities development in Tanzania and underscores the need to have a holistic approach to fostering productive transformation in the country. It begins with an assessment of the state of productive capacities development in Tanzania using the recent Productive Capacities Index (PCI) developed by UNCTAD. The analysis of the PCI is followed by a discussion of the degree of utilization of existing productive capacities in Tanzania and, finally, an analysis of the impact of the COVID-19 pandemic on the development of productive capacities in the country.

The state of productive capacities development

UNCTAD (2020) developed and launched the PCI to enable policymakers and researchers to assess the status of productive capacities development in economies and provide support to the design and implementation of economic policies. The PCI is based on information extracted from a set of 46 indicators covering 193 countries. It has eight core components: human capital, natural capital, energy, transport, information and communications technology (ICT), institutions, private sector, and structural change. The index scores lie between 0 and 100, with higher numbers indicating a higher level of development of productive capacities. Figure 9 presents the evolution of the PCI scores for Tanzania in the past two decades. To permit a comparative analysis, the scores for South Africa and Mauritius are also provided. South Africa and Mauritius are relevant benchmarks for comparison for the following reasons. Tanzania's development vision is to progress from middle to high income country, so it is useful to see how it is doing in relation to countries that have achieved these milestones: South Africa is an upper middle-income country and Mauritius a high-income country. The two comparators are also relevant because they are regarded as economically successful African countries, with relatively higher levels of industrialization. In addition, they are interesting cases because Mauritius is a small country in terms of population while South Africa is much bigger in size, so they provide a diversity of development experience.

Based on the overall PCI scores, Tanzania has made modest progress in the development of productive capacities in the past two decades, with its score increasing from 19.55 in 2000 to 22.58 in 2010 and 24.22 in 2018. Nevertheless, PCI scores also indicate that Tanzania has a very low level of development of productive capacities. In 2018, its score was 24.22 compared to 34.05 for South Africa and 37.39 for Mauritius. To provide a better understanding of the PCI scores, the evolution of the eight components is presented in table 5. The following observations can be made from the table. The first is that in absolute terms the most significant progress made between 2000 and 2018 were in the areas of human capital and institutions. The human capital score rose from 31 in 2000 to 41 in 2018 and the score for institutions rose from 33 to 42 over the same period. The second observation from the table is that in terms of rates of change, the most significant improvements were in ICT and structural change, although they both started from a relatively very low base. Positive improvements were also observed in human capital, institutions and the private sector. The final observation from the table is that the scores for natural capital, energy and transport have been flat or stable over the years with no major changes.

Figure 9: Productive capacities in Tanzania and comparator African countries



Source: computed using data from UNCTADstat.

Table 5: Trends in Components of Productive Capacities in Tanzania (2000-2018)

	Human capital	Natural capital	Energy	Transport	ICT	Institutions	Private sector	Structural Change
2000	31	60	19	13	3	33	62	8
2001	32	60	20	13	3	34	62	10
2002	32	61	19	13	3	35	62	10
2003	33	61	20	13	3	35	62	10
2004	34	61	20	12	3	35	62	10
2005	35	60	19	12	3	33	62	12
2006	36	60	19	13	3	37	64	12
2007	36	60	19	13	3	37	65	12
2008	37	60	19	13	4	37	66	13
2009	37	60	19	12	4	37	67	13
2010	39	60	19	11	4	39	68	13
2011	40	60	19	11	4	39	68	13
2012	40	60	19	11	5	39	68	13
2013	41	60	17	12	5	40	68	13
2014	41	60	18	12	5	41	68	13
2015	42	60	18	12	5	41	68	13
2016	41	60	18	12	5	42	69	13
2017	41	60	18	12	5	42	69	14
2018	41	60	18	12	6	42	69	14

Source: UNCTADstat.

The analysis conducted above indicates that Tanzania has made some progress in the development of productive capacities in the past two decades but that its level of development of productive capacities is relatively low compared to what is observed in middle income and high-income African countries. To get an idea of the core areas where there are significant gaps in the development of productive capacities, table 6 presents the annual average scores for the eight components of the PCI over 2000-2018 as well as the gaps in each component when compared with South Africa and Mauritius. A negative gap for a category implies that the score for that category in Tanzania is below that of the comparator. The table shows that with the exception of natural capital, where Tanzania does better than Mauritius, in the other components of the index Tanzania has important gaps relative to South Africa and Mauritius. The most significant gaps are observed in institutions and the private sector. But there are also substantial gaps in energy, structural change and human capital. To complement the analysis based on the PCI, table 7 provides additional information on the structure and drivers of production in Tanzania, Mauritius and South Africa. It indicates that both the scale and complexity of production are less in Tanzania compared with South Africa and Mauritius. Regarding the drivers of future production, it also shows that Tanzania is at a low level relative to South Africa and Mauritius in the following areas: technology and innovation; human capital; global trade and investment; institutional framework; and sustainable resources.

Table 6: Benchmarking Productive Capacities in Tanzania

	Tanzania (annual average 2000-2018)	GAP relative to Mauritius	GAP relative to South Africa
Overall productive capacities index (PCI)	22.22	-12.26	-9.91
Human capital	37.32	-11.32	-8.30
Natural capital	59.98	8.36	-4.72
Energy	18.76	-11.53	-10.14
Transport	12.30	-7.57	-1.90
ICT	3.99	-6.9	-3.84
Institutions	37.85	-34.75	-24.23
Private sector	65.76	-19.5	-15.48
Structural Change	11.99	-8.46	-12.99

Source: computed using data from UNCTADstat.

Table 7: Structure and Drivers of Production in Tanzania, Mauritius and South Africa

	Tanzania	South Africa	Mauritius
Complexity of production	2.7	5.4	4.5
Scale of production	2.0	4.5	2.8
Technology and innovation	2.8	4.5	5.1
Human capital	2.8	4.5	5.2
Global trade and investment	2.2	5.6	6.0
Institutional framework	4.4	5.0	6.5
Sustainable resources	4.9	5.3	6.2
Demand environment	3.9	5.5	3.5

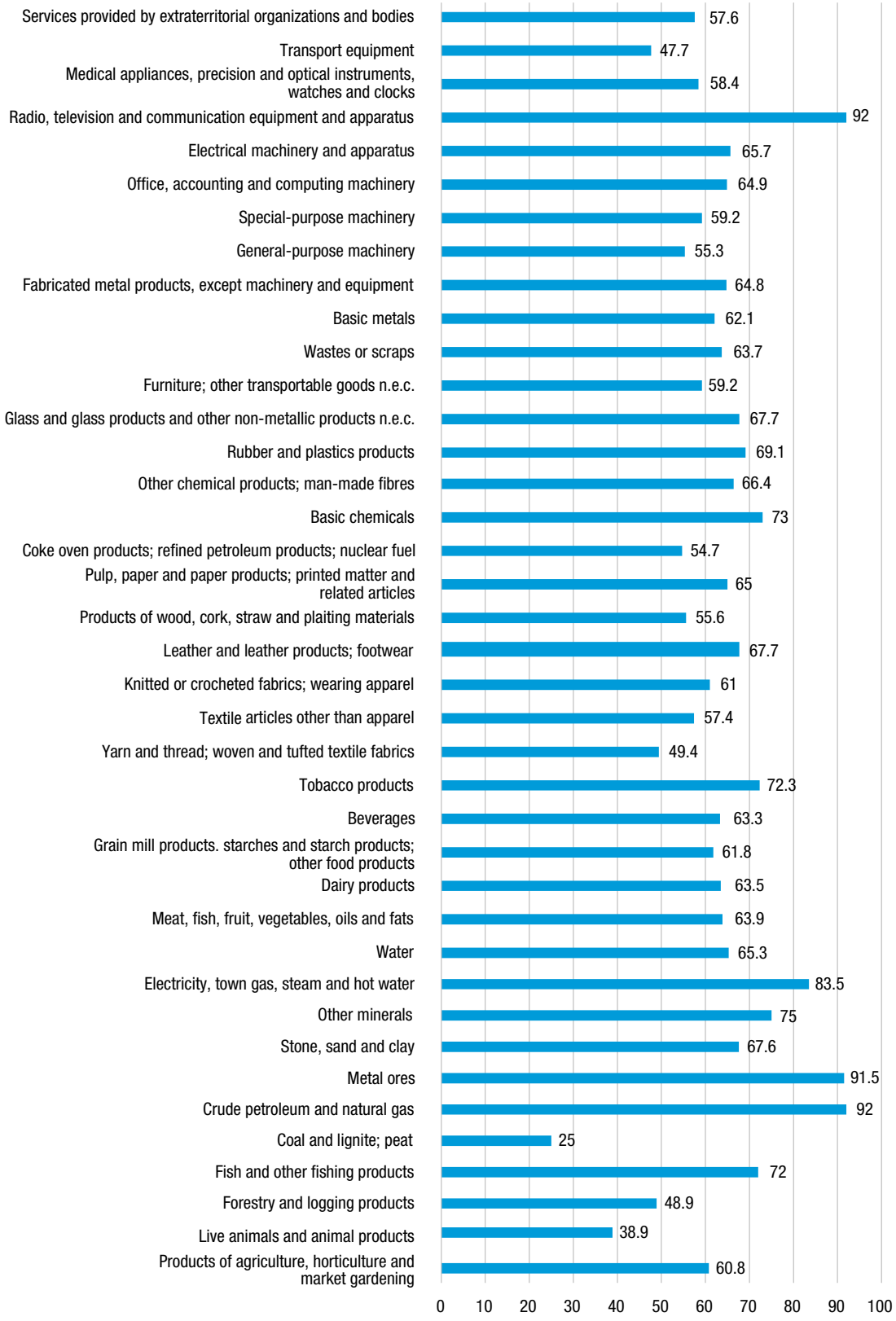
Note: The assessments in the table are based on scores ranging from 1 to 10, with higher values reflecting better performance.
Source: compiled based on data in WEF (2018).

Utilization of existing productive capacities

Sustained progress in developing productive capacities over time requires creation of new productive capacities as well as making good use of existing capacities. In Tanzania, as in other African countries and LDCs, there is the tendency for governments to focus efforts on building new productive capacities even though existing capacities are underutilized and not maintained. High underutilization of installed production capacity is not only a sign of inefficiency in production but also a challenge to the effective development of productive capacities in the medium to long term. There is very limited public information on capacity utilization rates in Tanzania industries. The most comprehensive survey on Tanzania that is publicly available is the 2013 Census of Industrial Production published by the National Bureau of Statistics. It suggests that the average capacity utilization rate in Tanzanian industries is about 62.7 percent, indicating that there is a lot of idle capacity in industries. A more recent survey of industrial production conducted in 2016 but published by the National Bureau of Statistics in 2018, suggests that the average capacity utilization rate across industrial products in Tanzania Mainland in 2016 was 63.7 percent, which is close to the figure for 2013 obtained from the Census of Industrial Production. Interestingly, the average rate discussed above masks important variations in capacity utilization rates across industrial products. For example, a few industrial products had relatively high utilization rates in 2016: radio, television and communication equipment industry had a utilization rate of 92 percent; crude petroleum and natural gas also had a rate of 92 percent; metal ores had a rate of 91.5 percent; and electricity, town gas, steam and hot water had a rate of 83.5 percent (Figure 10). By contrast, the following industrial products had very low utilization rates: coal and lignite (25 percent); live animals and animal products (38.9 percent); transport equipment (47.7 percent); forestry and logging products (48.9 percent); and yarn and thread, woven and tufted textile fabrics (49.4 percent).

Among the surveyed establishments indicating they experienced underutilization of production capacity in 2016, the key reasons identified as high constraints are: insufficient/reliable power supply; insufficient domestic demand; inadequate access to financial services; high cost of credit; shortage of domestic inputs; use of old plant/machinery and equipment; poor transport facilities/high transport cost; and plant maintenance problems due to lack of spare parts (Table 8). In addition to the high constraints highlighted above, a significant number of respondents also identified plant maintenance problems due to shortage of skilled labour and insufficient water supply as moderate constraints.

Figure 10: Average capacity utilization rates in 2016, by product, Tanzania Mainland (%)



Source: compiled using data from NBS (2018).

Table 8: Reasons for capacity underutilization in industries 2016, (# of respondents)

Reasons	High	Moderate	Low	Not Applicable
Insufficient domestic demand	393	257	237	514
Shortage of domestic inputs	319	270	252	560
Shortage of imported inputs	96	165	211	929
Old (Obsolete) plant/machinery and equipment	262	228	244	667
Plant maintenance problems due to lack of spare parts	209	259	289	644
Plant maintenance problems due to shortage of skilled labour	174	229	281	717
High cost of credits	330	209	195	667
Inadequate access to financial services	385	235	194	587
Insufficient/reliable power supply	505	337	216	343
Insufficient water supply	174	215	242	770
Loss of products due to strikes/ stoppages etc	71	99	162	1,069
Price competition from imports	162	94	215	930
Uncompetitiveness of export due to high cost of materials	179	132	192	898
Uncompetitiveness of export due to high cost of fuel	126	166	186	923
Uncompetitiveness of export due to high cost of electricity	145	149	197	910
Uncompetitiveness of export due to high cost of labour	108	163	204	926
Uncompetitiveness of export due to poor quality of products	110	151	203	937
Quality competition from imports	150	175	214	862
Lack of access to regional markets	181	160	222	838
Lack of access to international markets	194	181	225	801
Poor transport facilities/high transport cost	216	219	224	742
Inability to grant credits to customers	169	155	218	859
Counterfeits	80	97	155	1069
Others	106	23	35	1,237

Source: compiled using data from NBS (2018).

Impact of COVID-19 on productive capacities

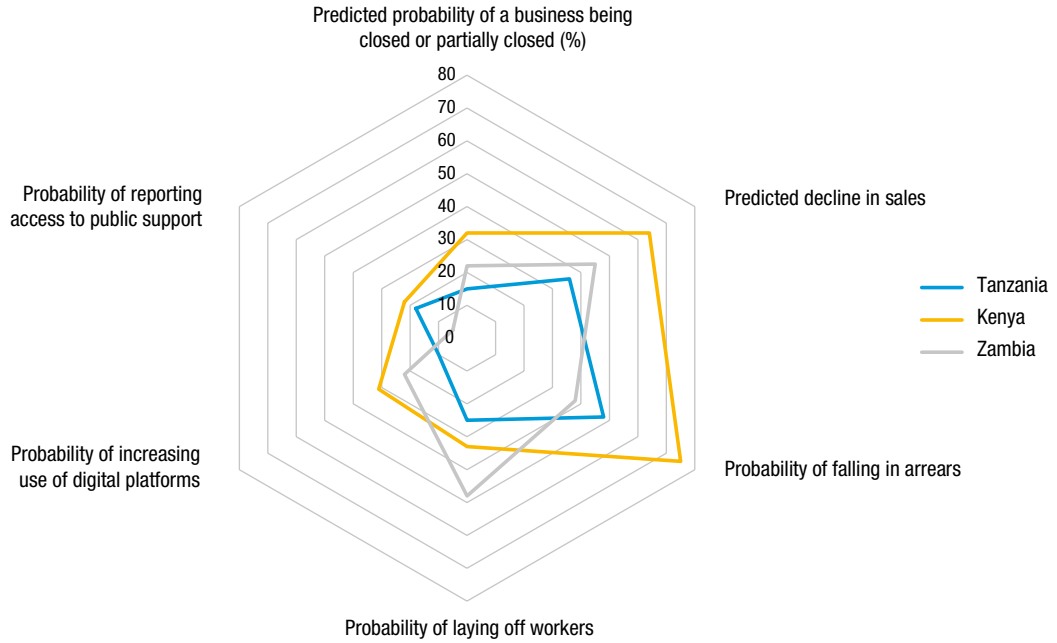
Tanzania was already facing challenges in developing productive capacities before the onset of the COVID-19 pandemic. But the socio-economic crisis triggered by the pandemic has compounded these challenges and, if not well managed, will reverse the modest gains made in the past few decades. The pandemic led to a significant reduction in Tanzania's real output from an annual average growth of about 7 percent in 2014-19 to 2 percent in 2020. This reduction in domestic growth coupled with the global recession induced by the crisis weakened domestic demand and had dire consequences for producers and export-oriented service firms in Tanzania. As a result of the lockdowns, travel restrictions, and other measures imposed by national authorities to curb the spread of the virus, domestic firms faced difficulties accessing inputs (such as labour and imported intermediate and capital goods), which had a negative impact on domestic industries, particularly those relying heavily on imported inputs. As a result of the crisis, industrial output growth fell from 10.3 percent in 2019 to 2.5 percent in 2020, agricultural output from 5.8 percent to 2 percent and services from 4.2 percent to 0.9 percent (World Bank 2021b).

Surveys have been carried out by both domestic and international institutions to assess the impact of the pandemic in Tanzania. For example, on 30th March 2020 the Confederation of Tanzania Industries (CTI) carried out a survey of the impact of the pandemic on the industrial sector in Tanzania. The survey results indicate that 97.9 percent of the respondents (mainly manufacturers) stated that their businesses have been negatively affected by the pandemic. The enormous disruption in global supply chains and services created challenges for businesses in the following areas: delays in receiving imported raw materials and inputs as well as in delivery of sales orders; reduction in sales leading to loss of revenue; and lower capacity utilization leading to production losses (CTI 2020). In the Textile and Apparel sub-sector, all respondents to the survey projected a more than 50 percent loss in sales revenue because of the pandemic while in the Pharmaceuticals and Medical Equipment sub-sector it was about 66.7 percent of the respondents that projected a more than 50 percent loss in sales revenue. In both the Chemical and Chemical Products and the Energy, Electrical and Electronics sub-sectors, 50 percent of the respondents projected a more than 50 percent loss in sales revenue. And in the Metal and Metal Products sub-sectors 33 percent of the respondents projected a more than 50 percent loss in sales revenue while in the Plastics and Rubber Products sub-sector the number of respondents was only 25 percent. Regarding production, about 93.8 percent of the respondents indicated that the pandemic would have a negative impact on production. In the following three sub-sectors, 67 percent of the respondents to the survey projected a more than 50 percent loss in production: Textile and Apparel; Pharmaceuticals and Medical Equipment; and Metal and Metal Products. In the Chemical and Chemical Products sub-sector 50 percent of the respondents projected a more than 50 percent loss in production while in the Plastic and Rubber Products sub-sector it was only 25 percent of the respondents.

The World Bank also conducted a survey on the impact of COVID-19 in Tanzania as part of its Business Pulse Surveys. The first round of this survey for Tanzania was conducted from June to July 2020 and some of the main findings are as follows. First, the pandemic had a significant negative impact on firm operations in Tanzania, with the average predicted probability of a business being closed or partially closed at about 15 percent (Figure 11). Among the firms that were open, the average decline in sales in Tanzania was about 36 percent. Interestingly, the study indicates that the impact of the pandemic in Tanzania is lower than in neighboring countries. For example, while 15 percent of the firms in Tanzania were likely closed, in Zambia the number was 22 percent and in Kenya it was 32 percent. Similarly, the average decline in sales in Tanzania (36 percent) is less than the number for Zambia (45 percent) and Kenya (64 percent). The second finding from the survey is that 48 percent of firms in Tanzania were either in arrears or expected to fall in arrears within six months of the survey. This means that almost half of domestic firms are expected to have balance sheet problems, with dire consequences for production and their existence. The third finding of the survey is that Tanzanian firms had a 25 percent probability of laying off workers in response to the pandemic compared to 33 percent for firms in Kenya and 48 percent for firms in Zambia.

Following the approach adopted in Osakwe (2021), we can also attempt to assess the potential impact of the pandemic on medium- and long-term development of productive capacities in Tanzania by examining how it has affected three core processes of productive capacities development: capital accumulation, technological progress, and structural change. Unlike most African countries, Tanzania has relatively high rate of capital formation as evidenced by the fact that gross fixed capital formation accounted for an average share of about 30 percent in the period 1970-2019. Nevertheless, the pandemic has had a negative impact on capital accumulation as reflected in the fact that the annual percent change in gross fixed capital investment fell from 8 percent in 2019 to 2.4 percent in 2020 due largely to the uncertainty created by the pandemic. Domestic investment was also affected because of the difficulties firms faced in accessing raw materials and imported capital and intermediate inputs. Consequently, the annual percent change in capital goods imports fell from 6.1 percent in 2019 to -14.8 percent in 2020. Similarly, the annual percent change in intermediate imports fell from 1.7 percent in 2019 to -18.2 percent in 2020. Foreign direct investment (FDI) was also negatively impacted by the pandemic resulting in the share of net FDI in GDP declining from 1.6 percent in 2019 to 1 percent in 2020 (World Bank 2021a and 2021b).

Figure 11: Impact of COVID-19 on Firms in Tanzania and Selected African Countries



Source: compiled based on data in World Bank (2021a).

Regarding technological progress, the impact of the pandemic is mixed. On one hand it has increased the adoption of digital technologies or platforms particularly in the education and health sectors. On the other hand, the uncertainty created by the pandemic has inhibited firm investment in innovation. Data on spending on research and development in 2020 is not yet publicly available but it is likely to have been negatively affected by the pandemic because of reductions in revenue receipts by domestic firms as well as the challenges faced by the government in mobilization of domestic revenue and external financing. Turning to structural change, the pandemic has had an asymmetric impact on different sectors of the economy and so the ultimate impact on structural change is hard to decipher. Nevertheless, we know that manufacturers, tourism and export-oriented service sectors have been hardly hit by the crisis, indicating that it may have hampered domestic efforts to foster structural change. In sum, both the results of firm surveys and the analysis of macroeconomic data suggest that the pandemic has had a negative impact on the development of productive capacities in Tanzania. The government of Tanzania is conscious of the potential impact of the pandemic on the achievement of its development goals and has taken several measures to cushion the economic impact of the, particularly on the private sector. For example, on the 12th of May 2020 the Bank of Tanzania reduced the discount rate from 7 percent to 5 percent. The government also started expediting action on payment of expenditure arrears, particularly for small and medium sized enterprises (SMEs). Furthermore, exemptions from value added tax (VAT) and customs duties were granted for imports of medical equipment and supplies.

4

STAGES OF INDUSTRIAL AND PRODUCTIVE TRANSFORMATION IN TANZANIA

Since independence in 1961, industrialization has been on the development agenda of successive Tanzania governments, reflecting the historical fact that it is an essential element of the process of economic development. However, the emphasis on industrial development has varied over time and across political regimes in the country. For ease of exposition, Tanzania's history of industrial development has been classified into five phases: industrial development pre-Arusha Declaration (1961-66); state-led industrial development (1967-85); industrialization under the structural adjustment programme (1986-95); private sector based industrial development (1996-2015); and industrialization for human development (2015 to date).

Industrial development pre-Arusha Declaration (1961-66)

In the early 1960s, the level of industrial development in Tanzania was very low, with manufacturing accounting for just 3.6 percent of GDP in 1961. There were only 220 manufacturing establishments employing 10 or more persons in the country in 1961 and the industrial structure was composed mostly of processing of primary products for exports and production of simple consumer goods for the domestic market. Furthermore, foreign investors owned the large companies in the country, namely: Bata Shoes; British American Tobacco; Coca Cola; East African Breweries; Metal Box; and Tanganyika Packers (Skarstein and Wangwe 1986). A three-year plan covering the period (1961-64) was launched by the government as a development framework to guide industrial development in the country. The plan emphasized fostering growth and relied on a model of import substitution of simple consumer goods in which imports of capital and intermediate goods are paid for through export of primary commodities. Inflow of foreign capital was also encouraged through, for example, tax incentives and protection of foreign investment.

Following the union between Tanganyika and Zanzibar on 26th April 1964, a five-year plan was formulated to guide policymaking and development for the period (1964-69). The new plan sought to raise per capita income, foster self-sufficiency in trained manpower, and raise life-expectancy. It also sought to address the constraints to industrial development posed by the small size of the domestic market and lack of capital. Available data indicates that industrial performance did improve during this development phase. For example, the share of manufacturing in GDP increased from 3.6 percent in 1961 to 8.1 percent in 1966 and the annual average growth rate of manufacturing during the period was 12.7 percent, which is about 2 percentage points higher than what it was in 1961. Despite the progress made in terms of manufacturing performance, it became evident that there were limitations in the development model in the sense that it focused on growth and did not address important issues such as structural change, ownership structure of industry, and the high dependence on commodity exports.

State-led industrial development (1967-85)

The adoption of the Arusha Declaration in 1967 fundamentally changed the development strategy of Tanzania from one based on markets to one based on state planning, guided by the principles of socialism and self-reliance. The prevailing government was concerned that the existing development strategies placed too much emphasis on money and industries, which led to an urban bias and neglect of small-scale enterprises. It argued that development does not necessarily begin with industries and that the resources and technical know-how for industrialization were not available in Tanzania. Furthermore, the government believed at the time that people and agriculture were the basis for development and not money and industries. Against this backdrop, the declaration placed emphasis on four factors considered as prerequisites for development: (1) land and agriculture; (2) the people, with a focus on making them understand the importance of hard work as well as knowledge and intelligence; (3) good policies; and (4) good leadership. A key feature of the declaration is the placement of ownership and control of the main means of production and exchange in the hands of the state. This meant that the major industries in the country were owned by the state. The declaration also promoted the use of domestic resources and efforts were made to reduce dependence on foreign capital and private investors. During this period, participation of foreign investors in economic activities was only through joint ventures with the state.

A second five-year plan covering the period (1969-74) was formulated and implemented during this phase. It underscored the need for rural development and established a link between industrial and rural development. It also promoted the use of labour-intensive techniques of production, the development of small-scale enterprises, and the decentralization of industry. Furthermore, there was an extension of the import-substituting model adopted to cover not only the production of consumer goods but also production of intermediate and capital goods. Following the 1973 global oil crisis, Tanzania experienced severe foreign exchange shortages, which made imports of intermediate and capital goods needed by domestic industries challenging, with dire consequences for manufacturing capacity utilization. As a result, the government decided to adopt a long-term industrial strategy for the period (1975-95), anchored on three broad goals: structural change and self-reliance; industrial growth, employment generation and dispersion of industry; and workers participation and equal income distribution (Wangwe et al 2014; Skarstein and Wangwe 1986). The long-term industrial strategy was operationalized through a Basic Industry Strategy (BIS), which prioritized the use of domestic resources to produce goods to meet the needs of the domestic market. Export was to be considered only after satisfying domestic needs. Furthermore, the emphasis was on industrial activities that satisfy basic needs (textiles, footwear, food processing etc) and those that produce intermediate and capital goods needed by domestic industries (steel, chemicals, cement etc). The share of manufacturing in GDP increased from 8.4 percent in 1967 to a peak of 12.2 percent in 1978 and then started declining. By 1983, manufacturing accounted for only 5.2 percent of GDP and the annual growth rate of manufacturing was -3.4 percent. The declining manufacturing and economic performance compelled the government to rethink its development strategy and marked the beginning of the demise of the state-led industrialization strategy.

Industrial development under the structural adjustment programme (1986-95)

The import substitution model adopted under the state-led industrial development strategy had a major limitation in the sense that its sustainability depended largely on the availability of foreign exchange through exports. However, export promotion was not on the priority list of the government at the time and so obtaining foreign exchange became increasingly challenging and eventually led to a balance of payments crisis. The economy was also beset with high inflation and declining agricultural production. The government responded to the crisis by seeking support from the International Monetary Fund and the World Bank, which resulted in the adoption of the Economic Recovery Programme of structural adjustment in 1986. The focus of the programme was largely to restore macroeconomic stability and accelerate structural reforms to lay the foundation for revival and sustainability of economic growth. Under the programme, Tanzania embarked on the liberalization of exchange and trade regimes, removal of distortions in domestic prices and agricultural marketing systems, deregulation of the financial system, and reforms of parastatals and the civil service (Nord et al 2009).

The Structural Adjustment Programme (SAP) enabled Tanzania to establish macroeconomic stability and put the economy on a recovery path. Real output growth increased from 1.9 percent in 1986 to 4.5 percent in 1996. In per capita terms it increased from -1.14 percent in 1986 to 1.74 percent in 1986. Despite the progress that was made in terms of macroeconomic stability and growth, the manufacturing sector suffered setbacks because the unilateral trade reforms adopted under SAP exposed domestic firms to competition and led to the collapse of several industries. For example, by 1993 only two of the twenty-two textile mills in the country were in operation (MIT 2011). Furthermore, real manufacturing value added (MVA) per capita barely changed during this period, increasing slightly from $30 in 1986 to $33 in 1996. The weak performance of manufacturing and the pivotal role of the sector in fostering sustained growth and poverty reduction compelled the government to rethink its industrial development strategy in 1996.

Private sector based industrial development (1996-2015)

Following the expiration of the Basic Industry Strategy in 1995 and the decision by the government not to be directly involved in production activities to permit the private sector to play a more active role in the development process, the Sustainable Industrial Development Policy (SIDP) was formulated in

1996 to cover the period 1996-2020. The SIDP has three core phases. The first phase is the short-term programme covering the period 1996-2000 with a focus on rehabilitation and consolidation of existing industrial capacities. The second phase is a medium-term programme covering the period 2000-2010 with the goal of creating new industrial capacities in activities that can foster competitiveness of the economy. The final phase is the long-term programme covering the period 2010-2020 with a focus on boosting domestic investment in basic capital goods industries (MIT 1996).

In 1999, which coincided with the last year of the first phase of the implementation of the SIDP, the government launched the Tanzania Development Vision (TDV) 2025 aimed at transforming the country into a middle-income country with: high quality livelihood; peace, stability, and unity; good governance; a well-educated and leaning society; and a competitive economy capable of producing sustainable growth and shared benefits. The TDV also sought to diversify the economy from one based on traditional agriculture to one with a substantial industrial sector. Following a review of the policies of SIDP in 2010, the Integrated Industrial Development Strategy 2025 (IIDS) was published in December 2011. It provides a roadmap and strategies to guide implementation of the SIDP with a view to achieving the industrial goals of the TDV 2025.

In the first decade of implementation of the TDV 2025, the government realized that there was no strong framework for monitoring implementation of the vision. To address this issue, it adopted a Long-Term Perspective Plan (LTPP), covering the period 2011/12-2025/26, as an instrument to operationalize the implementation of TDV 2025. It was envisaged that the LTPP would be implemented through three theme-based five-year development plans (FYDP). The first five-year development plan (FYDP I) was for the period 2011/12-2015/16 and focused on "Unleashing Tanzania's Latent Growth Potentials." The second five-year plan (FYDP II) was for the period 2016/17-2020/21 and the focus theme was on "Nurturing an Industrial Economy." Regarding the third five-year plan (FYDP III), it was for the period 2021/22-2025/26 and the focus theme was "Realising Competitiveness-led Export Growth." It should be noted that, of the three five-year development plans, only FYDP I was implemented during the private sector based industrial development phase discussed in this subsection of the report.

In sum, the shift to a private sector based industrial development strategy led to some gains in manufacturing development in Tanzania. Real manufacturing value added (MVA) grew from 4.8 percent in 1996 to 7.1 percent in 2015 and real MVA per capita rose from $33 in 1996 to $74 in 2015. Nevertheless, the role of manufacturing in the economy during this phase was still small relative to potential, as reflected in the fact that the share of manufacturing in GDP in 2015 was only about 8.6 percent.

Industrialization for human development (2015-present)

This phase of industrial development in Tanzania is associated with the implementation of the second and third FYDP. In May 2015, the government decided to integrate the FYDP with the poverty reduction strategy papers, which led to the revision of the focus theme of FYDP II (2016/17-2020/21) from "Nurturing an Industrial Economy" to "Nurturing Industrialisation for Economic Transformation and Human Development. Similarly, the focus theme for FYDP III (2021/22-2025/26) was changed from "Realising Competitiveness-led Export Growth" to "Realising Competitiveness and Industrialisation for Human Development." These changes, with an emphasis on human development, reflect the fact that industrialization is a means to an end rather than an end itself: it is useful to the extent that it enables the country to achieve sustained growth, create decent jobs, and improve the quality of life of citizens.

In an effort to promote industrialization, the government's strategy in the implementation of the FYDP II involved improving the investment environment for the private sector, attracting FDI, and promoting the use of domestic inputs. These efforts resulted in an increase in the number of industries in the country from 52,633 in 2015 to 61,110 in 2019 (MFP 2021). They also led to an increase in the MVA per capita from $74 in 2015 to $90 in 2019. Despite these successes, there is a recognition that more needs to be done to enhance domestic production capacity, enhance competitiveness, and foster human development. Addressing these challenges is the focus of the FYDP III, whose implementation began in July 2021.

5

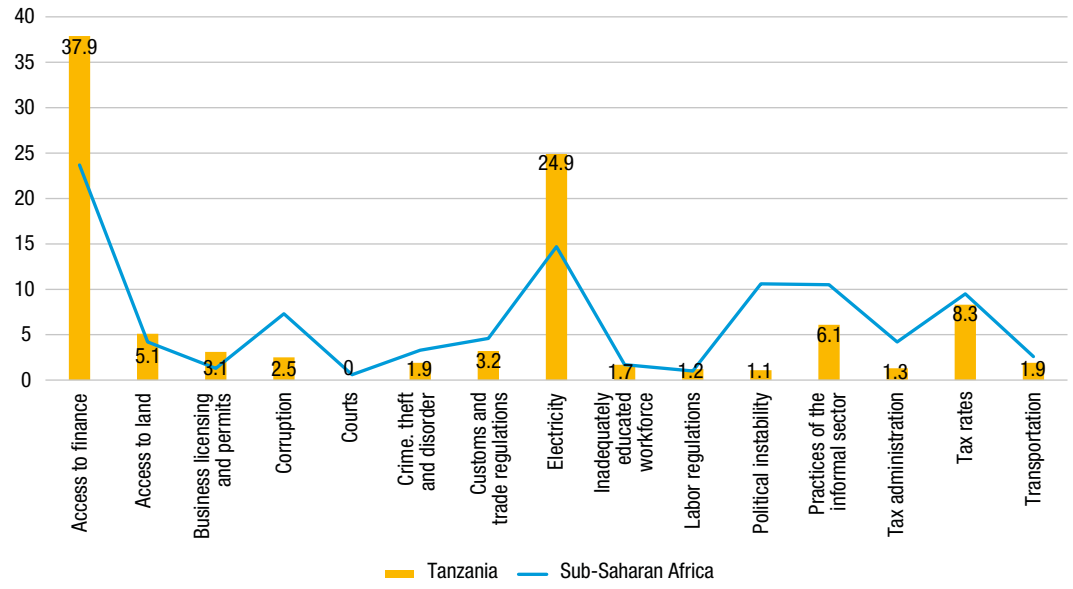
UNDERSTANDING CONSTRAINTS TO DEVELOPING PRODUCTIVE CAPACITIES IN TANZANIA

The assessment of the state of productive capacities development in Tanzania, based on UNCTAD's productive capacities index, coupled with insights from reviews of relevant extant literature indicate that there are many constraints and challenges facing firms and the government in fostering productive capacities development in Tanzania. In this section, we identify and discuss the key binding constraints coupled with other challenges that should be addressed to accelerate progress in building and utilizing productive capacities in Tanzania.

Infrastructure challenges

As in most African countries, poor physical infrastructure is a major obstacle to production in Tanzania. The analysis of the state of productive capacities development in Tanzania presented in section III indicates that the country has very low levels of development in energy, transport and ICT. In addition, in each of these infrastructure categories, Tanzania has significant gaps when compared with South Africa and Mauritius, both of which are African countries that have attained relatively high levels of industrialization and building of productive capacities. Although the infrastructure challenge in Tanzania is evident in all modes (energy, transport, ICT), the energy supply constraint has the most consequential impact on productive capacities because of the vital role of electricity in production. It has been documented that access to electricity affects economic development through increasing productivity, facilitating creation of new enterprises, and reducing household work thereby shifting time allocation from non-productive to productive activities (Pueyo and Maestre (2019). In this context, access to electricity is a necessary, though not a sufficient, condition for building productive capacities in Tanzania. To fully realize the potential of electrification for production and income generation, it must be complemented with access to other factors such as finance, skills, markets, etc. Figure 12 provides further evidence that electricity is a binding constraint to productive capacity development in Tanzania. In a survey of firms conducted by the World Bank, about 38 percent of firms chose access to finance as their biggest obstacle, followed by electricity with 25 percent of respondents.

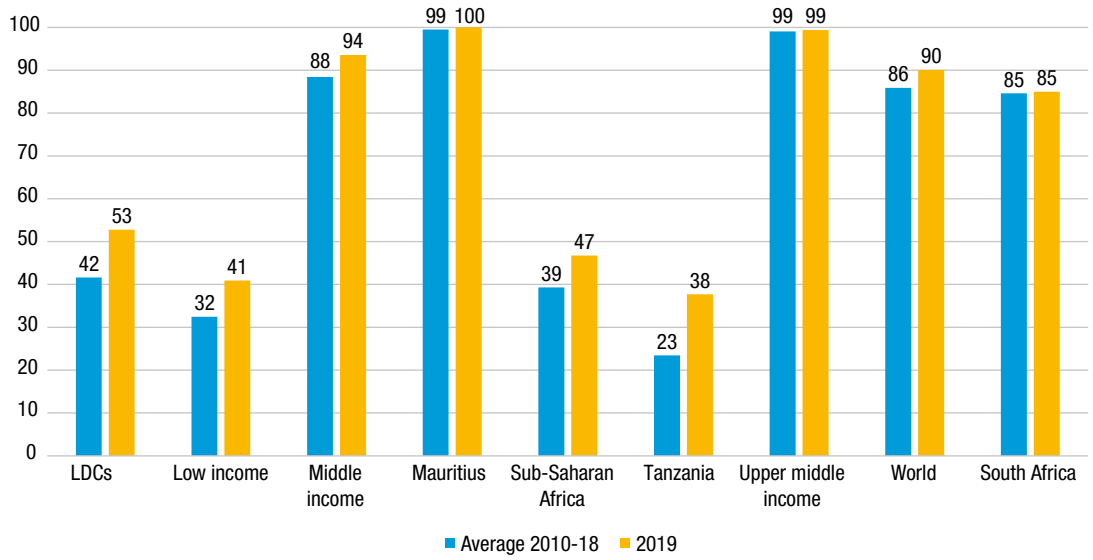
Figure 12: percentage of firms choosing each constraint as their biggest obstacle, 2013



Source: World Bank Enterprise Survey database.

The fact that firms in Tanzania face difficulties in accessing reliable power supply is not surprising given the generally low level of access to electricity in the country. Over the period 2010-18, only 23 percent of the population of Tanzania had access to electricity compared with 39 percent in sub-Saharan Africa, 42 percent in LDCs, 85 percent in South Africa and 99 percent in Mauritius (Figure 13). While some progress has been made on this front, significant challenges remain, as reflected in the fact that in 2019 only about 38 percent of the population had access to electricity, which is still below the figure of 47 percent for sub-Saharan Africa and 53 percent for LDCs. In addition to the issue of lack of availability of reliable power supply, firms also face high energy costs. For example, it is estimated that Tanzanian firms in the textile industry pay $0.12/kwh for power compared with $0.04/kwh in Ethiopia and $0.09/kwh in Kenya (Kweka 2018). The high cost and lack of availability of reliable power supply have had a negative impact on the competitiveness of domestic firms, which should be expected given the fact that energy accounts for as much as 20 percent of production costs of manufacturing firms in Tanzania (Wangwe 2014).

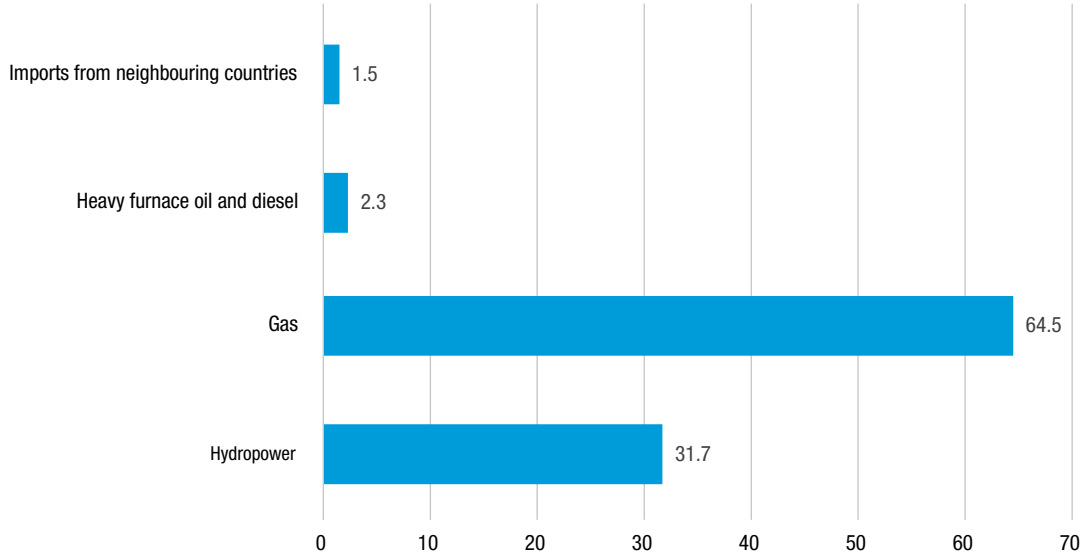
Figure 13: Access to electricity across selected countries and groups, 2010-19 (% of population)



Source: compiled based on data from World Development Indicators.

Most of the electricity generated in Tanzania comes from two sources: natural gas and hydropower. In 2019, natural gas accounted for 64.5 percent of total electricity generated in the country and hydropower accounted for 31,7 percent (Figure 14). This concentration of energy supply is also observed in energy use where 72.5 percent of energy consumed is by residential households, 14.4 percent by industry, 5.8 percent by transportation, 4.2 percent by agriculture, and 3.1 percent for other uses (WTO 2019). Addressing these concentrations in energy sources and use should be an important element of an effective strategy to enhance energy stability and access.

Figure 14: Sources of electricity generation in 2019 (% of total)



Source: compiled using data in MFP (2020)

Interestingly, there is a gender dimension to the energy challenge in Tanzania because women and men tend to operate in different productive activities and also use energy differently at work. For example, women are mostly engaged in agriculture, retail trade, personal services and textile activities while men are engaged in more energy-intensive activities such as in manufacturing and construction (Pueyo and Maestre 2019). It has also been found that the type of fuel used in productive activities also vary across gender, with men using more electricity and diesel while women use more of firewood and charcoal (Ngoo and Kooijman, 2020). The existence of gender occupational segregation coupled with the fact that women face gender-specific constraints (related to land, education, care responsibilities etc), suggest that women and men may derive differential benefits from electrification and productive uses of energy. It is therefore important for governments to take gender considerations into account in the design of energy policies.

Transport and ICT are the other forms of infrastructure that are obstacles to the development of productive capacities in Tanzania. Although Tanzania has an advantageous geography and rich endowments, access to markets is often difficult for entrepreneurs due to very low transport linkages, particularly between the rural areas and markets. It is estimated that only about 24 percent of the rural population of Tanzania live within 2 km of a paved road (Adam et al 2012). As a result, transport barriers, entrepreneurs face high transport costs which reduces their competitiveness. Of the available modes of transportation (road, rail, sea and air), it is road transport that is the most consequential for productive transformation in Tanzania because it is key to the functioning of other sectors of the economy: trade, industry, agriculture etc. Road transport accounts for about 90 percent of passengers transported and 75 percent of freight traffic (WTO 2019).

A recent study by the African Development Bank indicates that in 2020 Tanzania ranked 41 in transport development among 54 African countries studied, reflecting a deterioration in performance relative to 2018 when it ranked 38. Regarding ICT, it ranked 37 in 2018 and 28 in 2020 (AfDB 2020). While Tanzania's ranking on ICT in 2020 is an improvement relative to 2018, it is starting from a very low base and so more needs to be done by the government to ensure that its performance improves relative to other African countries. The government recognizes the importance of ICT as an enabler of economic development and has made efforts to improve the ICT landscape, resulting in an increase in the number of internet users from 7,520,878 in 2012 to 25,794,561 in 2019. In addition, in 2019, the mobile network population coverage was 94 percent while geographical coverage was 66 percent. Notwithstanding these

achievements, there is low utilization of emerging technologies in the country and adoption of ICT enabled services for productive capacity development is also low. Furthermore, access to broadband services is not available to many people and the cost of provision of these services is high in the rural areas (MCIT 2021). Clearly, addressing the ICT and other infrastructure challenges will require significant investments to reduce identified gaps. It is estimated that the cumulative infrastructure investment gap for Tanzania is about $34 billion in road infrastructure, $31 billion in telecommunication infrastructure, and $10 billion in electricity infrastructure (Table 9).

Table 9: Cumulative infrastructure investment need and gaps (2016-2040)

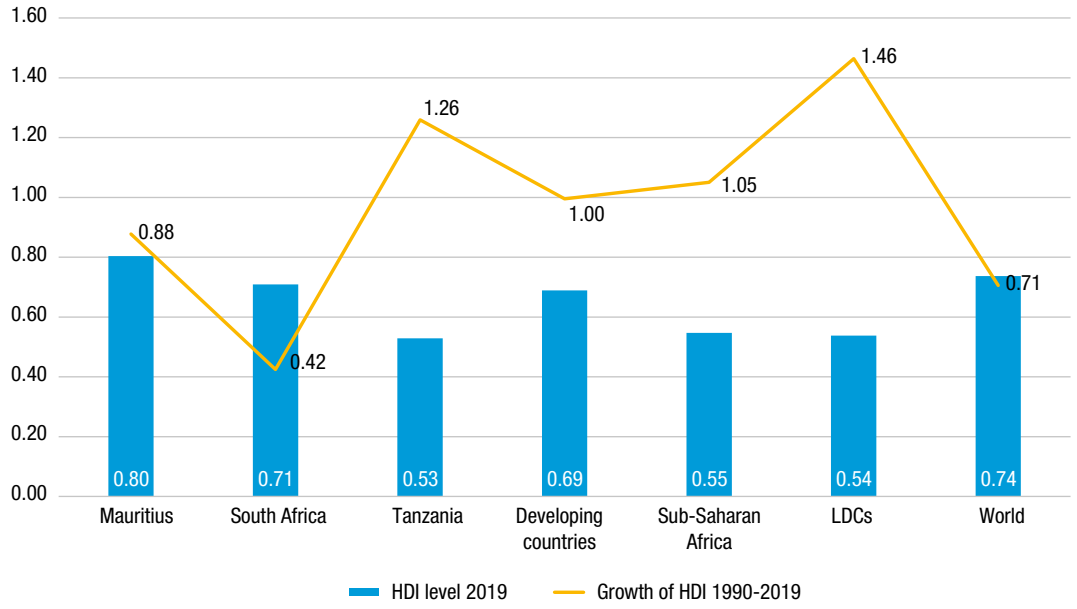
	Investment need (billion $ at 2015 prices and exchange rates)	Investment gap (billion $ at 2015 prices and exchange rates)	Share of investment gap (%)
Road	40	34	29.31
Rail	6	2	1.72
Airports	3	1	0.86
Ports	-	-	-
Telecoms	85	31	26.72
Electricity	63	10	8.62
Water	124	38	32.76
Total	321	115	100

Source: compiled using data in GIHUB (2017).

Human capital and skills challenges

Human capital development is crucial in enhancing productivity, boosting firm competitiveness, and creating competitive advantage in export markets. It is also essential to achieving sustained economic growth and enhancing living standards. Like most LDCs, Tanzania has very low levels of human capital development. In 2019 its human development index was 0.53 compared with 0.54 for LDCs, 0.71 for South Africa, and 0.80 for Mauritius (Figure 15). But the low level of human development masks the fact that in the past two decades the country has also made substantial progress in terms of improving its human capital. For example, the average annual growth of its human development index in the period 1990 to 2019 was 1.26, which is higher than the figures for South Africa (0.42) and Mauritius (0.88), but lower than the figure for LDCs (1.46). Progress has also been recorded in key education indicators, such as the mean years of schooling, which increased from 5.1 years in 2010 to 6 years in 2019. Furthermore, the net enrolment ratio in primary education rose from 84 percent in 2016 to 94.5 percent in 2019 while the ratio for lower secondary education increased from about 33 percent to 35 percent in the same period (MFP 2021). Tanzania has also achieved gender parity in enrolment ratios for pre-primary education.

Figure 15: Level and growth of human development index (1990-2019)



Source: compiled based on data from UNDP.

Despite the progress that has been made in the development of human capital over the past few decades, Tanzania continues to grapple with challenges in this area, as reflected in shortages of skilled labour, which is of serious concern to employers and contributes to capacity underutilization, particularly in the manufacturing sector. It is estimated that low-skill jobs account for about 80 percent of the employed labour force, while medium-skill and high-skill jobs account for about 16.4 percent and 3.6 percent respectively (TPSF 2019). This skill-composition mix is quite different from what the government would like to have, which is 12 percent for high-level skills, 54 percent for middle-level skills, and 34 percent for low-level skills (MFP 2021). One of the reasons for the skills gap is the fact that the formal education provided by educational institutions does not address the needs of enterprises. Employers in the industrial sector are often looking for people with ability to read manufacturing blueprints, work with computerized systems, operate automated manufacturing systems, and have management and communication skills. Yet, educational institutions offer courses that are theoretical and do not address these practical and soft skills. The skills gap is also a consequence of the low quality of technical and vocational education and training and the fact that most firms do not prioritize training and upgrading of skills (Wangwe et al 2014). Firms are often reluctant to provide adequate and relevant training to employees because it would enhance their ability to find other jobs and increase turnover costs for the firm.

As indicated earlier, Tanzania has achieved gender parity in enrolment ratios in pre-primary education. However, men and women have differential access to educational opportunities necessary for participation in productive sectors, which exacerbates the human capital and skills challenge facing Tanzania. Although women represent about 51 percent of the total population, the proportion of children and young people who have achieved a minimum level of proficiency in mathematics is only 24 percent for females compared with 39 percent for males. Similarly, the proportion of children and young people who have achieved a minimum level of proficiency in reading is about 75 percent for females and 81 percent for males (UNWOMEN 2021). The lower opportunities that women have in education is one of the reasons why they are disproportionately engaged in informal activities. For example, in 2018, the share of informal employment in total employment was 87 percent for females compared with 80 percent for men.

Institutional challenges

Efficient and effective institutions play important roles in the development process. They establish the rules governing operation of factor and product markets and interactions among economic agents. In this context, they are essential in fostering the building and utilization of productive capacities. The analysis of the productive capacities index in section III indicated that institutions is one of the components where Tanzania has made important progress in the past few decades. But the analysis also indicated that institutions is one of the areas where there are significant gaps between Tanzania and the two benchmark countries (South Africa and Mauritius). Bourguignon and Wangwe (2018) conducted an institutional diagnostic of Tanzania and found that it has five main weaknesses. First, is the ill-defined structure of public decision making, as manifested in: overlapping responsibilities and lack of coordination across administrative units dealing with related operations; centralization bias; and the existence of long time lags in implementation of laws. Second, is the selective distrust of market mechanisms and the private sector, which for example has led to the use of complex administrative procedures to transfer land for investment purposes and created inefficiencies in allocation of land rights. Third, is an under-performing civil service. For example, it is estimated that in the education sector, the loss due to absenteeism and shirking among teachers is about 2.5 percent of GDP. Fourth, is rent-seeking and corruption, which imposes costs on society because it biases the process of allocation of resources and redistributes resources in a regressive manner. The final institutional weakness is patronage and weak business regulation, emanating largely from the nature of collaboration between the government and business, which often results in decisions being made in ways that uncompetitively grant advantages to major private companies. These institutional weaknesses have been ascribed to lack of capacity or skills to apply rules, weak incentives, and the complexity of rules.

Private sector challenges

The second area where Tanzania has made significant progress, over the past few decades, but also has wide gaps relative to the benchmark countries, is the private sector. A weak and uncompetitive private sector inhibits sustained development of productive capacities because, although governments make policies, it is the private sector that is mainly engaged in production. In fact, it is estimated that the private sector accounts for about 99.6 percent of total industrial production in Tanzania and that its activities are mainly in the manufacture of food products, wearing apparels, and furniture (MFP 2021).

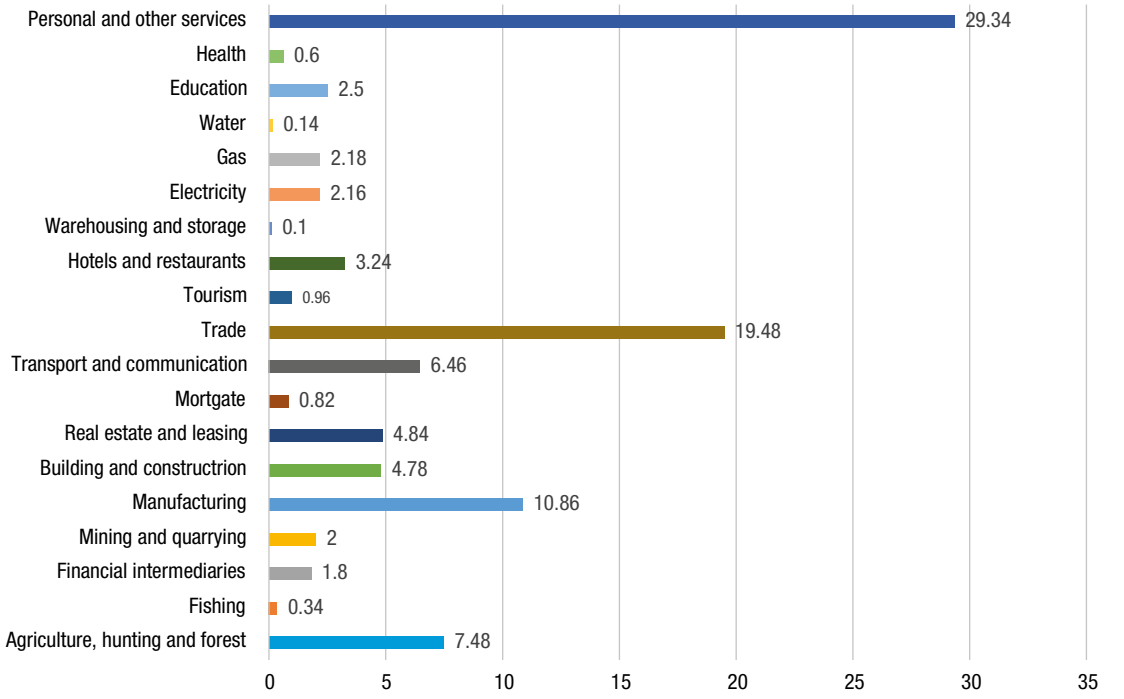
Although the private sector continues to play an important role in the economy, its potential has not been fully harnessed due in part to constraints resulting from Tanzania's enterprise structure. First, is the fact that the domestic private sector is composed mostly of informal enterprises. It is estimated that about 80 percent of private sector workers in micro, small and medium enterprises (MSMEs) are in the informal sector. Interestingly, about 54.3 percent of these MSMEs are led by women (MFP 2021). The Dar es Salaam Informal Sector Survey of 2019 indicates that there were 1,023,520 informal sector operators in the region in 2019, out of which females accounted for 57.4 percent. The survey also found that the four main reasons why operators are involved in informal activities are: inability to find other work; need for additional income; activity does not require much capital; and they can combine activities with other household or family responsibilities (MFP 2020). The second feature of Tanzania's enterprise structure that has constrained private sector development is the dominance of small and medium enterprises (SMEs). Available data indicate that in 2016, SMEs accounted for 88.3 percent of the number of establishments in the country (Kweka and Sooi 2020). Furthermore, SMEs in Tanzania tend to have very low survival rates, with some studies indicating that the average lifespan of small enterprises is about 4.1 years (MFP 2021). A key consequence of the low survival rates of SMEs is that most new enterprises exit the market and never grow into large enterprises. A third feature of Tanzania's enterprise structure is the lack of strong linkages between small and large firms, which would have permitted SMEs to learn, enhance productivity, and grow through interactions with large firms (Kweka and Sooi 2020).

Another limitation of Tanzania's enterprise structure is that domestic firms have low levels of competitiveness, which is not surprising given the fact that their small size makes it challenging to derive benefits from

economies of scale in production. It is also a consequence of the fact that SMEs have weak technological capabilities as well as low access to technology. As a result, they tend to use obsolete machines and equipment and also employ systems that are not automated (Wangwe et al 2014). Weak organizational capabilities at the firm level have also led to inefficiencies in organizing production and distribution, thereby reducing firm competitiveness. Furthermore, even where domestic firms have the technical knowledge to produce things, they often lack the skills necessary to effectively manage production, namely: ensuring regular and uninterrupted supply of inputs, managing workers on the production line, maintaining quality standards, and ensuring timely and uninterrupted delivery of goods to clients.

The weak access of the domestic private sector to credit has also contributed to the low levels of competitiveness of firms in Tanzania. The finance challenge manifests itself in two forms: lack of access to adequate amounts of credit for working capital; and the high cost of credit. Regarding the quantity issue, one of the reasons why domestic firms lack access to credit is that commercial banks prefer lending to non-production rather than production activities. For example, in the period 2015-19, 29.3 percent of commercial banks domestic lending went to "personal and other services" and 19.5 percent went to "trade." Production activities such as "manufacturing" accounted for 10.9 percent while "agriculture, hunting and forest" accounted for 7.5 percent (Figure 16). The non-preference for production activities in the allocation of bank credit may reflect high risk aversion on the part of commercial banks. However, this form of credit allocation is certainly not supportive of the transformation agenda of the government and needs to change.

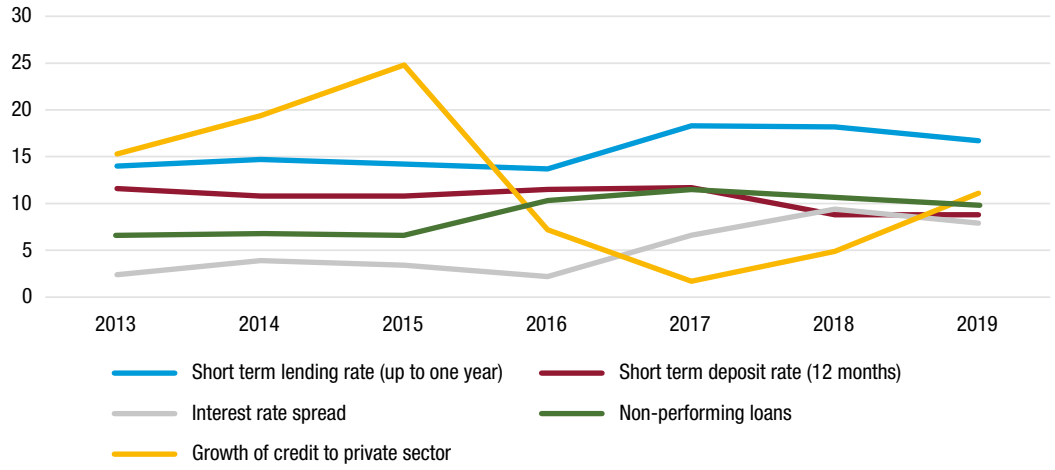
Figure 16: Commercial banks domestic lending by sector, annual average share (2015-2019)



Source: compiled using data in BOT (2021).

The second aspect of the financing challenge facing the domestic private sector is the high cost of credit, which constrains domestic investment and production. The short-term lending rate in Tanzania rose from 14 percent in 2013 to 18.3 percent in 2017 before declining to 16.7 in 2019. Furthermore, the interest rate spread rose from 2.4 percent in 2013 to 7.9 percent in 2019, reflecting in part the increase in the percentage of non-performing loans from 6.6 percent in 2013 to 9.8 percent in 2019. Interestingly, the increase in the cost of credit and non-performing loans went hand in hand with a decrease in the growth of credit with the private sector from 15.3 percent in 2013 to 11.1 percent in 2019 (Figure 17).

Figure 17: Statistics on interest rates and bank credit (%)



Source: compiled using data in MFP (2020).

Structural change challenges

The low level of structural change in Tanzania, as reflected in the lack of diversification into manufacturing and other high value-added activities, is an obstacle to the sustained development of productive capacities. Structural change is one of the key processes or drivers of sustained productive capacity development. It results from the movement of resources from low to high productivity activities both within and across sectors. Economies that are unable to induce structural change tend to have less productivity and less learning possibilities, thereby affecting competitiveness of domestic firms. Fostering structural change also ensures that productive capacities are developed in sectors and activities that are high value added and where opportunities for export market expansion are high.

Commodity dependence is one of the challenges facing Tanzania in inducing structural change. In 2020, minerals accounted for about 56 percent of merchandise exports while manufactured goods accounted for only 15 percent. The heavy dependence on minerals creates an incentive for the government to pay more attention to extractive activities relative to manufacturing even though economic transformation is at the core of its development strategies. Another challenge to structural change, related to the issue of commodity dependence, is the fact that FDI into the country mostly goes to the extractive sector rather than to manufacturing and agro-processing activities. Given the low level of technological innovation in the country, attracting FDI into the manufacturing sector will play a crucial role in boosting the technological capabilities of domestic firms thereby enhancing their competitiveness and prospects for better participation in manufacturing and high value-added activities.

Natural capital challenges

Natural capital is the component of productive capacities index where Tanzania seems to have done relatively well compared to the benchmark countries, which reflects the fact that it is endowed with significant reserves of diverse natural resources. Its mineral wealth falls under five broad categories: metallic minerals (such as gold, iron, nickel, copper, cobalt and silver); gemstones (such as tanzanite, diamond, ruby, and garnets); industrial minerals (such as limestone, iron, soda-ash, gypsum, and phosphate); energy-generating minerals (such as coal and uranium); and construction minerals (such as dimension stone, gravel, and slate).

In principle, the existence of natural resources can hinder or foster the development of productive capacities in a country depending on how the resource rent is managed. If resource wealth is spent mostly on non-traded goods, it will appreciate the real exchange rate and make manufacturing development challenging.

On the other hand, if the resources are channeled into the production and export of agricultural and manufactured goods, it is likely to contribute to the development of productive capacities.

Although Tanzania has a high level of natural capital, the government has not been able to effectively harness this wealth to foster sustained productive transformation. This can be ascribed to the fact the resource wealth has not been explicitly geared towards lifting the binding constraints inhibiting economic transformation and productive capacity development in the country. It is also a consequence of the lack of strong linkages between the extractive sector and other sectors of the economy. One area where better harnessing the natural resource wealth of Tanzania could produce quick wins in terms of productive transformation is in enhancing capacity utilization rates in light manufacturing (textiles, leather and related products, etc) where difficulties in obtaining raw materials and inputs as well as their high cost have been identified in surveys as important reasons for capacity underutilization.

Domestic consumer preference challenges

Tanzania has the potential to manufacture and satisfy local demand for several high value-added consumables such as textiles, leather products, rubber and plastics, and pharmaceutical products etc (MFP 2021). However, as in many African countries, local consumers tend to prefer imported goods over locally manufactured ones, which makes it challenging for domestic producers to survive (Wangwe 2014). Part of this preference for imported over domestically produced goods, emanates from the perception that domestically produced goods are of inferior quality. While there are often quality issues associated with some locally produced goods, there is no evidence that all locally produced goods are inferior to imported goods. In this context, there is the need for consumers to change their mindset regarding locally produced goods to enable domestic entrepreneurs to invest in manufacturing activities and support the transformation agenda. Domestic firms, on their part, also must make an effort to improve the quality of their products as well as customer service. The government also needs an awareness campaign to address this.

Policy incoherence challenges

One of the areas where there is a policy incoherence issue regarding support to the private sector in building productive capacities is in the regulatory framework and its implementation. Enterprises in Tanzania deal with multiple regulatory bodies that were established to protect consumers and ensure effective functioning of markets. Some of the regulatory bodies operating in the country include: Tanzania Revenue Authority (TRA); Tanzania Bureau of Standards (TBS); Business Registration and Licensing Authority (BRELA); Occupational Safety and Health Agency (OSHA); Tanzania Medicines and Medical Devices Authority (TMDA) (formerly called Tanzania Food and Drugs Authority); Weights and Measures Agency (WMA); The National Environment Management Council (NEMC); The Government Chemist Laboratory Authority (GCLA); and Tanzania Atomic Energy Commission (TAEC). These regulatory bodies impose fees and levies which businesses are expected to pay and, in some cases, have overlapping responsibilities. In addition to the fees and levies imposed by regulatory bodies at the federal level, enterprises are also subjected to certain levies by local governments. Complying with these regulations impose enormous burden on firms and has a negative impact on their competitiveness. Consequently, the Confederation of Tanzania Industries (CTI) has called for the harmonization and rationalization of these charges imposed by regulatory bodies to create a more conducive environment for business.

There are also coherence issues associated with the design and implementation of economic policies. For example, the government has identified building productive capacities and transforming the economy as a priority, yet macroeconomic policies implemented in the country are such that banks charge prohibitive interest rates that make it challenging for businesses to have affordable access to credit. In addition, the industrial policies pursued by the government often give undue advantage to imported goods at the expense of domestic production. In the case of sugar and rice, it has been argued that the support provided to traders promotes imports of these goods and puts domestic producers at a disadvantage

(Bourguignon and Wangwe 2018). There are also coherence issues in fiscal policy: under the valued added tax (VAT) Act of 2014, a VAT rate of 18 percent on goods was introduced to replace the existing sales tax. However, the VAT is applicable to all goods that have been transformed, which is surprising given the emphasis of the government on industrialization and transformation. In this context, there is the need for the government to rethink its economic policies to ensure that they are better geared towards achieving the goal of productive transformation.

Tanzania is a member of several African regional economic groups and initiatives: the East African Community (EAC), the Southern African Development Community (SADC), and the African Continental Free Trade Area (AfCFTA). It is also a member of the Tripartite Free Trade Area involving the EAC, the Common Market for Eastern and Southern Africa (COMESA), and SADC. Multiple memberships of regional economic groups are constraining and make the use of trade policy instruments to achieve national development priorities on productive transformation challenging. For example, as a member of the EAC, it is bound by the Common External Tariff (CET) and so cannot unilaterally change its tariff structure to satisfy national development goals.[3] A current issue that illustrates the challenge of regional cooperation is the Motor Vehicle Assembly Framework being discussed at the ECA. The EAC is considering the adoption of a proposal to impose tax on imports of assembly kits (radiators, exhaust pipes, seat frames and upholstery etc) that are currently being manufactured somewhere within the EAC. There are concerns by assemblers and vehicle manufacturers in Tanzania that the adoption and implementation of the proposal will put them at a disadvantage compared to firms in Kenya where these kits are already manufactured locally. While regional cooperation is important to achieving Tanzania's national development vision and goals, efforts should be made by the government to ensure that it does not put domestic entrepreneurs at a disadvantage thereby jeopardizing productive transformation.

Another coherence issue that is of concern to entrepreneurs in Tanzania is policy unpredictability. This is important to firms because it makes planning challenging and can have a negative impact on investment decisions. For example, the Confederation of Tanzanian Industries has expressed concerns about the unpredictable increases in excise duty on non-petroleum products (such as beer, water, cigarettes etc) which make planning at the firm level challenging and has a negative impact on the demand for their products. To address this challenge the government promised to index excise duties to the rate of inflation. The policy on shrink wrap and plastics in general is another area where firms have expressed concerns about policy unpredictability. Manufacturers have been asked to stop the use of shrink wrap and to replace them with packages that are environmentally friendly. Beverage manufacturers are facing challenges in implementing this policy because the government gave them a short period to comply, and it requires investments in new packaging systems which manufacturers had not budgeted for.

There is also policy incoherence resulting from the lack of effective coordination of key economic and social policies that affect productive capacities development. One example of this is in education and employment policies, where there is no effective coordination between policies on education and training (supply side) and national employment policies (demand side), resulting in skills shortages as well as horizontal and vertical skills mismatch in the labour market. Horizontal skills mismatch exists when workers are engaged in jobs that are not related to their main field of study while vertical skills mismatch refers to a situation where an employee either has more skills than is required for their current job (over-skilling) or has less skills than is required (under-skilling). A major reason for the existence of these coherence issues is that, until recently, the government did not have a national skills development strategy linking both the supply and demand side policies that are crucial for advancing the productive transformation agenda. In addition, there is lack of effective cooperation between the private and the public sectors in the formulation, delivery, and governance of training programs (NACTE 2020).

[3] The CET of the EAC has four bands: 0 percent for raw materials and capital goods; 10 percent for transformed inputs and intermediate goods; 25 percent for finished products; and more than 25 percent for sensitive products.

6

STRATEGIC MEASURES AND ACTION-PLAN TO ENHANCE PRODUCTIVE CAPACITIES

This section of the report focuses on strategic measures or policies which the government should consider adopting to effectively build and sustain productive capacities in Tanzania. It also provides an action-plan to lift identified constraints and challenges with a view to fostering productive transformation. The strategic measures discussed below revolves around six pillars: setting realistic goals and targets; lifting core binding constraints to productive capacities development; addressing policy incoherence; harnessing gender potential for productive transformation; developing, promoting and diversifying exports; and making regionalism work for productive transformation in Tanzania (Figure 18).

Figure 18: Elements of a strategy to enhance productive capacities of Tanzania

Source: Author.

Set realistic goals and targets

Since independence, successive governments of Tanzania have established programmes to industrialize and transform the production and export structures of the economy. The Basic Industry Strategy, the Sustainable Industrial Development Policy, the Integrated Industrial Development Strategy, coupled with the development plans and the Tanzanian Development Vision (2025), are some examples of initiatives that have been adopted to transform the economy and foster sustained growth. Notwithstanding these initiatives, it is evident that Tanzania is still at a very low level of industrial development. The existence of multiple initiatives indicate that Tanzania does not lack ideas or policies on how to build and promote the development of productive capacities. What is missing is effective implementation of existing initiatives to achieve desired outcomes. Governments tend to set very ambitious goals and targets without taking full account of the implementation capacity, resource availability, and the feasibility of goals given the political and social environments in which policies will be implemented. Consequently, a substantial part of the programmes is either partially implemented or not implemented at all, thereby making it almost impossible to achieve desired

outcomes. The Integrated Industrial Development Strategy provides an illustration of the challenge associated with setting unrealistic targets. Under the strategy, the target set by the government is that the manufacturing sector will grow at an annual average rate of 15 percent and that the share of manufacturing in GDP will reach 23 percent by 2025 (MIT 2011). It is now about 10 years since this document was produced and the share of manufacturing in GDP fell from 10.3 percent in 2011 to 9.2 percent in 2019.

A review of the implementation of the first national five-year development plan concluded that about 60 percent of the planned targets were achieved. Similarly, a review of the implementation of the second national five-year development plan showed mixed results due to technical, financial, and institutional challenges that slowed implementation of projects (MFP 2021). In this context, there is the need for the government to set goals and targets that are achievable within specified timeframes, given current and expected constraints. There is also the need for the government to incorporate the political feasibility of proposed actions into policy design and implementation.

Lift core binding constraints

An important step for achieving high and sustained progress in enhancing productive capacities in Tanzania is for the government to strengthen efforts to effectively lift the core binding constraints to the building and utilization of productive capacities in the country. These constraints have been identified and discussed in section V, so the focus in this sub-section is on what needs to be done to overcome the identified barriers. At this stage, it is important to stress that the barriers have to be addressed simultaneously rather than in a piece-meal fashion because of the interlinkages between constraints and markets. For example, efforts to enhance access of domestic firms to credit will not work in the medium to long term without addressing the problems of unreliable power supply because banks will be hesitant to extend loans for manufacturing activities when access to power supply is limited (Osakwe 2019).

On infrastructure, admittedly, over the past decade, the government has taken important steps to improve infrastructure provision in the country. It constructed 3,537 km of paved roads from 2015-2020, revamped the national carrier (Air Tanzania), embarked on the modernization of its ports, and is in the process of completing the construction of a $7.6 billion Standard Gauge Railway along the central corridor (MFP 2021). Significant improvements have also been made to ICT infrastructure, resulting in an increase in population and geographical coverage. Furthermore, the government has taken useful measures to improve power supply through, for example, increasing electricity generation from 5,449.6 GWh in 2012 to 7,804.9 (GWh) in 2019 and reducing transmission losses from about 19 percent to 15 percent over the same period (Table 10). Despite these positive developments in the infrastructure sector, additional measures by the government are required to boost the provision of electricity, transport and ICT services and enhance competitiveness of enterprises (Table 11).

Table 10: Statistics on power generation, transmission losses and sales, 2012-2019

	Total electricity generated (GWh)	Transmission losses (% of electricity generated)	Electricity sales (GWh)
2012	5,449.6	19.24	4,401.4
2013	5,946.2	19.17	4,806.7
2014	6,186.8	18.35	5,051.5
2015	6,416.9	17.45	5,297.1
2016	7,092.2	17.21	5,871.5
2017	7,115.3	16.29	5,956.2
2018	7,354.8	14.47	6,290.7
2019	7,804.9	14.89	6,642.8

Source: compiled using data in MFP (2020).

To address the problem of lack of access to reliable power supply, there is the need for the government to strengthen efforts to encourage and incentivize the private sector to make more investments in energy generation. The government, through the Tanzania Electric Supply Company Limited (TANESCO) is the main actor in the generation, transmission, and distribution of electricity in the country. And the responsibility for regulation rests with the Energy and Water Utilities Regulatory Authority (EWURA). There are also a few independent power producers and small power producers, but they account for a relatively small percentage of total electricity generation. In 2020, TANESCO accounted for 79.87 percent of total electricity generation and imports, the independent power producer (Songas) accounted for 17.78 percent, cross border imports accounted for 1.4 percent, and small power producers accounted for 0.91 percent (EWURA 2020). Encouraging and supporting more private investment in the electricity sector is necessary to boost electricity generation in support of the governments transformation agenda. Diversifying the energy generation mix, to include renewable sources such as solar and wind, would be necessary to reduce reliance on gas and hydropower and enhance energy security. There is also the need to strengthen efforts to reduce electricity transmission losses and for the regulatory authority to set electricity tariff rates that are comparable to those in competitor countries in the EAC.

Regarding transport, there is the need to reduce the high cost of transport which is putting domestic entrepreneurs at a disadvantage in export markets. It is estimated that the transport costs between major markets in Tanzania is $15 per ton per 100 km compared with $5.78 for the United States (Adam et al 2012). One consequence of high transport costs, for example, is that farmers prefer to sell their produce at the farm gate rather than take them to a nearby market, thereby limiting their participation in markets and inhibiting trade and productive transformation. Addressing the problem of high transport costs will require creating more transport linkages between the rural areas and markets through, for example, increasing the number as well as the proportion of paved roads in total road network. It will also require continued investment in railway and other transport infrastructure. Furthermore, there is the need for the government to expedite action on the completion of its flagship transport infrastructure projects included in the FYDP III, including: the construction of a new central railway line to standard gauge, reviving the national air carrier, and the construction of large bridges and flyovers aimed at improving traffic flow, further opening up the country to trade with neighbours, and providing people access to opportunities for socio-economic activities.

The government of Tanzania also needs to address the constraints to productive capacity development posed by weak access to ICT services, low utilization of new technologies, and poor ICT infrastructure. Tanzania has a high industrialization agenda and ICT will play an important role in achieving the goals of the government in this area of development. Some of the key policy actions the government should consider adopting to better harness the potential of ICT for productive transformation includes increasing the internet penetration rate; creating awareness about importance of ICT among the population; extending ICT services to underserved communities in both rural and urban areas; building human capacity on ICT; and providing supportive ICT infrastructure (MCIT 2021).

Table 11: Action-plan on infrastructure

Constraint	Proposed Action	Timeframe	Responsibility
Lack of access to reliable power supply	1. Increase electricity generation capacity through enhancing private sector participation in generation	Medium term	TANESCO (Leader) and EWURA
	2. Diversify the energy generation mix through exploiting renewable energy sources	Medium term	
	3. Reduce electricity transmission losses to below 10 percent	Short term	
	4. Make electricity tariff rates comparable to those in competitor countries in the EAC	Short term	
High transport cost	1. Increase the proportion of paved roads in total road network to 10 percent (from 8.9 in 2019)	Short term	Ministry of Works, Transport and Communication (MWTC)
	2. Improve railway infrastructure	Medium term	
Low access to reliable and affordable ICT infrastructure	1. Increase percentage of internet users from 43 percent in 2019 to 50 percent by 2024	Short term	MWTC
	2. Expand national broadband infrastructure and services	Medium term	
	3. Create ICT awareness among the population to enhance its use by households and firms	Short term	

Source: Author.

The development of human capital, particularly skills, will play a vital role in enhancing the productive transformation agenda in Tanzania. The government has made significant progress in provision of formal education, which as discussed earlier has improved enrolment ratios. Now, more effort is needed to create educational opportunities for women in areas that are essential to building productive capacities, especially science, technology, engineering and mathematics (STEM). In 2016, only 9.6 percent of female university students graduated from STEM programmes compared with 24.7 percent for male students (Ngoo and Kooijman 2020). There is the need to address this imbalance in access to educational opportunities and outcomes in Tanzania. The government should also strengthen efforts to address the skills gap and mismatch inhibiting firm competitiveness and innovation, with dire consequences for building and utilizing productive capacities in the country. Addressing the skills challenge requires the government finding a good balance between the provision of professional skills (by formal educational institutions) and technical skills provided by technical and vocational education and training (TVET). In this context, there is the need to increase the number of TVET institutes in the country (Table 12). There is also the need to change the mindset of the population about TVET so that they see it as an important vehicle for skills enhancement rather than a last option for people who cannot compete in the formal education system. In addition, the private sector should be fully involved in developing the curriculum for TVET and in its implementation to ensure that it reflects the needs of industries.

While increasing the number of TVET institutes is necessary, efforts should also be made to improve the quality of education provided by the institutes. In Tanzania, the responsibility for quality assurance and control in technical education and training rests with the National Council for Technical Education (NACTE) while for vocational education and training the responsibility lies with the Vocational Education and Training Authority (VETA). There is the need to strengthen these agencies and ensure that they have the resources they need to effectively carry out their functions.

Another action the government could take to address the skills challenges is to prioritize the development of soft skills and incorporate it into the national skills development strategy. Often employees have the professional and technical skills required by industries but lack soft skills needed to effectively work in a team environment. These soft skills include: attitude towards work, ability to work in a team, punctuality, communication skills, management skills, leadership skills, client orientation, creativity, and ability to apply knowledge in a practical setting. The private sector can also play a role here through mentoring employees and providing inhouse training to support the development of soft skills. Private sector employers can be incentivized to provide this training through fiscal policy. For example, the government can allay the fears of employers about losing trained staff through offering to share the staff turnover cost when a trained employee leaves a firm within five years of receiving training.

Building partnerships across relevant stakeholders is also necessary to address the skills challenges in the medium to long term. For example, universities and other tertiary institutions should be encouraged to enter into partnerships with industry so that they get a better sense of changing needs and demands of the labour market and reflect this in their curriculum. The private sector should also be incentivized to conduct collaborative research with universities so that they exploit synergies and foster innovation.

To ensure that the policy actions discussed above will have a sustained positive impact on productive transformation, there is the need for the government to adopt a holistic view of human capital development that enhances capabilities at the individual, firm and national level. At the individual level the focus is on skills development, at the firm it is on building organizational capabilities, and at the national level the focus is on enhancing innovation capabilities.

Table 12: Action-plan on human capital and skills

Constraint	Proposed Action	Timeframe	Responsibility
Skills gap and mismatch	1. Provide more educational opportunities for women in STEM	Short term	Ministry of Education, Science and Technology (MEST) (Leader); Ministry of Finance and Planning (MFP)
	2. Increase the number of TVET institutes	Medium term	
	3. Enhance supervision of TVET institutes to improve quality of education	Short term	
	4. Prioritize the development of soft skills and enhance implementation of the national skills development programme	Short term	
	5. Foster partnerships between universities and industry	Short term	
	6. Incentivise the private sector to provide relevant and adequate training to employees	Medium term	

Source: Author.

Regarding the institutional challenges discussed in section V, there are several actions the government should consider taking to address them (Table 13). First, there is the need for the government to strengthen efforts to build the capacity of the public sector to design and implement policies, rules and regulations. There is also the need for better remuneration of civil servants to reduce the incentives for rent seeking and also empower civil servants to discharge their duties effectively. Second, is the need for more transparency and accountability in government. This will build trust between the government and the citizenry and make the government stronger when dealing with powerful interest groups, such as big businesses. Third, increasing the frequency and effectiveness of monitoring and evaluation systems in the public service sector is needed to enhance performance of civil servants. One instrument that has been proven to be effective in enhancing public sector performance is the adoption of results-based management principles. Other actions that could contribute to addressing the institutional weaknesses in Tanzania include simplifying rules so that they are easier to understand and implement and the use of competitive market mechanisms in public service delivery to reduce the monopoly power of some operators and enhance delivery of public services.

Table 13: Action-plan on institutions

Constraint	Proposed Action	Timeframe	Responsibility
Institutional weaknesses	1. Build public sector capacity	Medium term	MFP (Leader); MEST
	2. Provide adequate compensation package for civil servants	Short term	
	3. Increase transparency and accountability in government	Short term	
	4. Adopt results-based management principles in civil service	Short term	
	5. Make more use of competitive market mechanisms in service delivery.	Medium term	

Source: Author.

Addressing the challenges of the private sector will unleash the potential and dynamism of entrepreneurs and foster productive transformation in Tanzania. In this context, there is the urgent need for the government to foster changes in the domestic enterprise structure through providing support for informal firms to formalize their operations and creating linkages between small and large firms as well as between domestic and foreign firms (Table 14). Fiscal incentives and local content requirements are useful instruments that the government could adopt to foster linkages between firms. The challenge that firms face in accessing credit also needs to be addressed by the government through, for example, establishing and strengthening credit bureaus to reduce information asymmetry between lenders and borrowers, reduce risks for lenders, and encourage lenders to provide credit to firms for production activities. Credit Info Tanzania Limited and Dun & Bradstreet Credit Bureau Tanzania are currently the two private credit bureaus in operation in Tanzania (MFP 2021). These institutions should be strengthened, and banks incentivized to provide credit information on clients to them.

The setting up of development banks could also play a critical role in ensuring that credit goes to strategic sectors of the economy, particularly manufacturing. In addition to enhancing access to credit, there is also the need for the government to ensure that the cost of credit is not prohibitive, thereby discouraging investment. Since 2016, the interest rate spread has been on an increasing trend even though the percentage of non-performing loans has not changed significantly. In this regard, there is the need for the government to ensure that lending rates charged by banks appropriately reflect the cost of credit and lending risks. Another policy the government should consider adopting is building trust

between the public and private sector. When there is mutual trust between the public and private sector, the latter is more likely to be interested in providing accurate and useful information to the government to aid policy formulation and implementation. Building trust requires that the government actively seeks private sector inputs in policy formulation and implementation, takes its views seriously, and acts on them. But it also requires that the private sector desists from pursuing solely vested interests and fulfil its social responsibilities.

The government can also foster private sector development by facilitating the use, adoption, and adaptation of technology to improve firm competitiveness. There are three crucial sources of technology access or know-how available to Tanzania and other African countries: FDI; migration of skilled labour or professionals; and harnessing the skills and knowledge of the diaspora. In general, FDI has been the focus of African governments while the potentials of migration and the diaspora for technology and productive transformation have not been better exploited. In this context, the government should make it easier for employers to access skilled labour from other African countries, through a more flexible migration policy. It should also incentivize the diaspora to return home and contribute to the economic and social development of the country.

Table 14: Action-plan on the private sector

Constraint	Proposed Action	Timeframe	Responsibility
Weak domestic private sector	1. Provide support to informal firms to formalize their operations	Short term	Ministry of Industry and Trade (MIT) (Leader); MFP; BOT
	2. Strengthen inter-firm linkages	Medium term	
	3. Reduce lending risks through establishing and strengthening credit bureaus to reduce information asymmetry between lenders and borrowers	Medium term	
	4. Make it easier for employers to hire skilled labourers from other African countries	Short term	
	5. Incentive the diaspora to support the transformation agenda	Short term	
	6. Build trust between the private and public sectors.	Medium term	

Source: Author.

Regarding the challenge of inducing structural change, there are several policy actions that the government should consider adopting. The first is to actively prioritize the development of manufacturing activities and gear economic policies towards the achievement of this goal. Successive governments have expressed their commitment to manufacturing development. However, so far, the extractive sector seems to be the focus of government policies because of the huge revenue derived from the sector. There is the need for manufacturing to be given the attention it deserves given its expected role in enhancing productivity, creating decent jobs, and fostering sustained growth (Table 15).

Special economic zones and export processing zones (EPZ) are policy instruments being used by the government to spur industrialization and promote exports. In 2018, fourteen SEZ and business industrial parks were registered in Tanzania under the EPZ act of 2002 and the SEZ act of 2006. The actual implementation of the SEZ program began in 2011, when there was a revision of the EPZ and SEZ laws to make the SEZ part of the EPZ program. Available data from the Export Processing Zone Authority (EPZA) indicate that total capital investment in the EPZs rose from $88 million in 2007 to $2226 million in 2018 and the value of exports rose from $28 million to $ 2194 million over the same period. Despite these positive developments, it is clear that the government is facing challenges in effectively harnessing

the potential of these zones for productive transformation. For example, of the fourteen registered SEZ and EPZ only four (Benjamin William Mkapa SEZ, Hifadhi EPZ, Kisongo EPZ, and Kamal Industrial Estate) are operational and the rest are under development (WTO 2019). Dube et al (2020) argue that SEZs in Tanzania have not realized their full potential for productive transformation because they often start operation before the requisite infrastructure is in place, are being implemented without a clearly defined strategy, were not established based on local comparative advantage, and regulators were also saddled with the responsibility of developing and operating zones. Other issues that have been identified based on a recent assessment of the use of SEZs as an industrial policy instrument in Tanzania include the lack of effective oversight and management of the zones by the regulator (EPZA), the low level of interaction between firms within the zones and the local community, difficulties in hiring wage labour, lack of state capacity in the organization and management of SEZs (Kinyondo et al (2016). There are several actions the government could take to enhance the effectiveness and efficiency of the special economic zones (SEZ) created in the country so that they catalyse and better support the development of manufacturing activities. For example, it should ensure that zones do not begin operation until the requisite infrastructure is in place. It should also ensure that the regulatory bodies are different from the developers and operators of the zones.

Another action the government should take to foster structural change is to make more strategic use of FDI as an instrument for boosting capabilities of domestic firms through measures to increase the percentage of FDI that goes into the manufacturing sector. The government should also ensure that structural transformation is done in an inclusive manner. Experience has shown that how productive capacities are developed matters for inclusive development. For example, the choice of activities and techniques of production have gender implications. Therefore, in promoting structural change, governments need to adopt a gender-sensitive approach, to ensure that activities that are promoted are ones in which women have opportunities to participate in.

Table 15: Action-plan on structural change

Constraint	Proposed Action	Timeframe	Responsibility
Lack of structural change	1. Prioritize the goal of manufacturing development	Short term	MIT (Leader); MFP; Ministry of Health, Community Development, Gender, Elderly and Children (MHCGEC).
	2. Ensure that SEZs do not begin operation until the requisite infrastructure is in place	Short term	
	3. Regulatory bodies of SEZs should be different from the developers and operators	Short term	
	4. Use FDI more strategically by increasing the percentage of FDI going to manufacturing sector.	Medium term	
	5. Adopt a gender-sensitive approach to structural change.	Short term	

Source: Author.

Making better use of Tanzania's abundant natural resources and wealth to foster productive transformation is a challenge that policymakers have been grappling with for decades. Addressing this challenge requires gearing more natural resource rents towards supporting the goal of manufacturing development, for example, through building key infrastructure that reduce trade and transport costs for firms. It will also require concerted efforts to forge good linkages between the extractive sectors and other sectors of the economy. The government should also strengthen efforts to make it easier for investors to have access to land for manufacturing development (Table 16).

Table 16: Action-plan on natural capital

Constraint	Proposed Action	Timeframe	Responsibility
Inability to use natural resource wealth to induce structural change	1. Gear more natural resource rent towards promoting manufacturing development	Short term	MFP (Leader); Ministry of Land; Ministry of Agriculture
	2. Facilitate access to land for industrial use	Short term	
	3. Exploit linkages between natural resource sector and other sectors of the economy.	Medium term	

Source: Author.

Another binding constraint to the development of productive capacities that ought to be lifted is the preference of domestic consumers for imported goods, which militates against the development of domestic manufacturing activities. Domestic consumers must be educated on the fact that they have to play a part in transforming their economies and that the state and the private sector cannot do it alone. Addressing this challenge requires changing the mindset of Tanzanians so that they value domestically produced goods, especially when they have the same quality as imported goods (Table 17). The government can play an important role in achieving this goal through, for example, awareness campaigns. It can also strengthen and enforce regulations on product quality standards to incentive domestic firms to improve product quality. State provision of essential public goods needed by the private sector (electricity, transport, water) will also reduce transactions cost for firms and enable them to produce goods that are of similar quality as those of their competitors. On their part, firms should also develop the habit of producing goods that are of high quality and provide warranties for their products so that if consumers are not satisfied with the quality of products, they can return the goods as is done in most advanced countries.

Table 17: Action-plan on domestic consumer preferences

Constraint	Proposed Action	Timeframe	Responsibility
Consumer preference for imported goods	1. Change mindset of consumers through product awareness campaigns	Medium term	MFP (Leader); MIT
	2. Enforcing regulations on product quality standards	Short term	
	3. Ensuring firms provide warranties for their products.	Medium term	

Source: Author.

Address policy incoherence

Tanzania has very comprehensive strategies and plans on how to develop productive capacities and transform the structure of its economy. However, these initiatives are often not fully implemented, and their effectiveness is hampered by lack of policy coherence in some aspects of economic and social policies. This report has identified the regulatory framework, the design and implementation of macroeconomic policies, regional economic integration, unpredictability of policies, and lack of effective coordination across government departments dealing with issues that affect the development of productive capacities. Against this backdrop, the following policy actions should be taken by the government to enhance policy coherence and increase the effectiveness of government efforts to develop productive capacities (Table 18). First, the government should harmonize existing regulatory policies and agencies dealing with the private sector so as to reduce the transactions costs burden on businesses and enhance their competitiveness. The government has acknowledged the need to reduce the burden on businesses associated with their having to deal with multiple legislations and institutions and is taking steps to address the problem. For

example, it has adjusted the responsibilities of the TBS and TMDA to reduce overlap of responsibilities. It has also established One Stop Border Posts (MFP 2021). The second policy action the government should adopt is to align all economic policies with the goal of productive transformation. For example, the stance of monetary policy must be such that it does not incentivize banks to charge prohibitive lending rates. The government should also reduce the unpredictability of policies through, for example, avoiding policy reversals which create uncertainty and have a negative impact on investment. There is also the need to make regional integration more supportive of the transformation goal of the government by ensuring that regional policies do not put Tanzanian producers at a disadvantage compared to their competitors in the region. The Tripartite Free Trade Area and the AfCFTA are important initiatives that could help address the coherence issue associated with overlapping membership of regional trade groups and should be supported by the government. The government can also enhance policy coherence by strengthening existing coordination mechanisms across departments and also monitoring and assessing their effectiveness.

Table 18: Action-plan on policy incoherence

Constraint	Proposed Action	Timeframe	Responsibility
Policy incoherence	1. Harmonize existing regulatory policies and reduce overlap of responsibilities across regulatory bodies	Short term	MFP (Leader); MIT
	2. Align economic policies to the goal of productive transformation	Medium term	
	3. Reduce unpredictability of government policies by avoiding policy reversals	Short term	
	4. Ensure that regional policies are consistent with the goal of productive transformation	Medium term	
	5. Assess the effectiveness of existing mechanisms for coordination across Ministries and for consultation with the private sector.	Short term	

Source: Author.

Harness gender potential for productive transformation

Women can play a crucial role in the development of productive capacities in Tanzania since they account for about 51 percent of the total population. Yet their potential for productive transformation has not been fully harnessed as evidenced by the fact that they spend a significant proportion of their time in unpaid domestic chores and care work and are mostly employed in either the informal sector or in traditional agricultural activities. Consequently, they have lower participation rates than men in manufacturing activities critical to the development of productive capacities. Some of the reasons for the relatively low representation of women in manufacturing activities include cultural barriers and norms that make it difficult for women to seek employment; lack of employment opportunities for women; financial constraints, lack of ownership of assets, limited access to information and communication technologies, and limited educational opportunities in STEM.

In recognition of the need to address these constraints, the government has taken several steps to promote gender equality, support women and enhance their participation in the economic development process. For example, the government has enhanced access to credit for women, with about 63.49 billion Tanzanian shillings extended as loans to women between 2015 and 2020. Furthermore, entrepreneurship training has been provided to 334 women (MFP 2021). Regarding political representation, some progress has also been made resulting in women accounting for 38 percent of parliamentary seats and holding

19 percent of cabinet positions in 2018. Despite these achievements, more efforts are needed to ensure gender equity and create meaningful opportunities for women so that they can fully participate and benefit from the development process. To this end, the government should consider adopting the following policy actions (Table 19). First, is to eliminate all obstacles or barriers to women's labour force participation. This requires getting rid of cultural norms and practices that prevent women from joining the labour force and making men share the responsibility for childcare and domestic chores. Second, governments should integrate gender issues into the transformation agenda and the impact of policies on women should be considered at both the design and implementation stages. Third, there is the need for government to more support for women's economic empowerment through, for example, increasing investment in their skills development. Some of the critical skills women require to effectively participate in dynamic sectors of the economy include knowledge of ICT, leadership and management skills, market information, and how to prepare bankable projects which would make it easier for them to access credit. Fourth, establishing mentorship and coaching programmes for female entrepreneurs as well as providing support for experience-based learning will also enhance female participation in the economy. Finally, the government should aim to achieve gender equality in political representation, through gender quotas to increase the percentage of women in government and in leadership positions in business.

Table 19: Action-plan on harnessing gender potential

Constraint	Proposed Action	Timeframe	Responsibility
Gender gaps	1. Eliminate obstacles to women's labour force participation	Medium term	MFP (Leader); MEST; MHCGEC
	2. Assess gender impact of policies at the design and implementation stages	Short term	
	3. Support women's economic empowerment through, for example, increasing investment in their skills development	Medium term	
	4. Provide mentorship and coaching programmes for female entrepreneurs	Short term	
	5. Increase the percentage of women in government and in leadership positions in business through, for example, gender quotas.	Medium term	

Source: Author.

Develop, promote, and diversify exports

Exports are important to the productive transformation process, particularly in small open economies like Tanzania that are heavily dependent on imports of intermediate and capital goods for domestic production and so need a steady inflow as well as a reliable source of foreign exchange. Exports are also important to improve competitiveness and overcome the limitations associated with having a small domestic market. Furthermore, they are crucial for sustaining productive capacities in a dynamic and rapidly changing global environment. In this regard, there is the need for government action in the following three areas to ensure that exports are better used for productive transformation in Tanzania: export development, export promotion, and export diversification.

Export development is needed to build international competitiveness and export capabilities of domestic firms and enable them to grow and survive in export markets. A useful policy action that the government can take to enhance export development is to facilitate linkages between local and foreign firms through, for example, supporting activities that integrate SMEs into global supply chains.

These include use of fiscal incentives to foster networking between local and foreign firms, enhancing the technological capacity of local firms through research and development initiatives, and provision of training to local firms on critical skills (such as technical and managerial skills). The government can also support export development through assisting local firms in assessing their capability to export and in developing export plans (Table 20).

As a complement to the export development activities, the government should also engage in export promotion to enhance the likelihood of success of firms that are considering either exporting new products or entering a new export market. Unlike export development activities that are onshore, export promotion activities are largely offshore and on markets and the focus is on making information on exporting and export markets available to local firms. Most SMEs lack the expertise, procedural knowledge, and resources required to overcome the challenges associated with exporting and so are unlikely to get into exporting if unaided (BCG 2004). In this context, there is the need for the Tanzanian government to assist local firms to penetrate export markets through provision of key information on overseas markets (size, available opportunities, emerging trends, regulations etc.)

The diversification of exports, particularly into manufacturing, is another important step that the government must take to enhance and sustain productive transformation. Diversification of exports into high valued added and dynamic products should be prioritized because what a country produces, and exports, matters for development. This important stylized fact has to be integrated into the productive transformation agenda to reduce susceptibility to external shocks and enhance the benefits from trade. Some of the policy actions the government could take to foster export diversification include lowering trade costs, reducing the cost of investing in new economic activities, ensuring that local producers have reliable access to inputs at competitive prices, using industrial policy to support reallocation of resources to manufacturing, and providing assistance in meeting international quality standards.

Table 20: Action-plan on developing, promoting and diversifying exports

Constraint	Proposed Action	Timeframe	Responsibility
Weak export diversification and performance	1. Assist local firms in assessing their capability to export and in developing export plans	Short term	MIT (Leader); MFP; MEST
	2. Support activities, such as provision of technical and management skills, that integrate SMEs into global supply chains	Medium term	
	3. Assist local firms to penetrate export markets through provision of information on overseas markets	Short term	
	4. Reduce the cost of investing in new economic activities	Short term	
	5. Ensure that local producers have reliable access to inputs at competitive prices	Short term	
	6. Use industrial policy tools to support reallocation of resources into manufacturing	Short term	
	7. Provide assistance to local firms in meeting international quality standards.	Medium term	

Source: Author.

Make regionalism work for productive transformation

For small open economies, like Tanzania, regional cooperation provides an opportunity for domestic firms to access large markets and exploit economies of scale. However, the gains from regionalism do not accrue automatically but require conscious efforts by the government to support firms to fully harness opportunities created in markets. In this context, there is the need for the government to better exploit opportunities for industrialization in regional markets. Evidence indicates that the composition of intra-African trade is more skewed towards manufacturing development compared to the composition of Africa's external trade, which consists mostly of commodities (UNCTAD 2013). Given this fact, the government should double efforts to make better use of regional integration to foster manufacturing development (Table 21). This would require supporting growth of domestic firms and enhancing their competitiveness so that they can compete with firms in regional markets. There is also the need for Tanzania to ensure that the regional policies formulated and adopted in the context of regional integration are consistent with the goal of productive transformation in the country. Avoiding multiple or overlapping membership of regional groups can also reduce policy incoherence and make regionalism more supportive of domestic transformation agenda of the government. The AFCFTA is a key initiative that has the potential to address the issue of multiple membership of regional trade groups. Trading under the initiative started on 1 January 2021 but the Tanzanian government ratified the agreement on 9 September 2021. For the AfCFTA to have a transformative impact in Tanzania, there is the need for the government to fully support it through, for example, providing visa-free access to Tanzania for African entrepreneurs. There is also the need for the government to explore the possibility of addressing the labour shortage challenge faced by domestic firms through making it easier for firms to hire skilled workers from other African countries.

Another channel through which Tanzania could better use regional integration to foster productive capacities is through the development of cross-border infrastructure which would reduce transactions and production costs and facilitate regional trade. For example, regional power pools and energy trading can contribute to resolving the challenges presented by inadequate and unreliable power supply. Yet these regional instruments have not been effectively used by African governments. Tanzania is a member of the East African Power Pool (EAPP), which it joined in March 2010. The EAPP currently has 11 members: Burundi, Democratic Republic of Congo (DRC), Djibouti, Egypt, Ethiopia, Kenya, Libya, Rwanda, Sudan, Tanzania, and Uganda. Even though the EAPP membership is endowed with substantial natural resources for electricity generation, which they can pool financial resources to develop and reduce cost, very limited progress has been made to harness this potential. The EAPP developed a Power Pool Master Plan in 2011, which was updated in 2014, but its effective implementation has been affected by the following challenges: lack of interconnections resulting in limited power trading, lack of private sector participation, and weak alignment of national plans with the regional master plan (ICA 2016). There is the need for members of the EAPP to incentivize the private sector to participate in the pool, align national with regional master plans, and to enhance power system interconnections.

Regional cooperation can also contribute to productive transformation in Tanzania and other African countries by lifting the constraints on intra-African trade imposed by the lack of convertibility of domestic currencies. For example, regional payments systems can help overcome the issue of lack of convertibility of domestic currencies, reduce transactions cost, and facilitate trade and production. In September 2021, the African Export-Import Bank (Afreximbank) and the AfCFTA Secretariat launched the Pan African Payments and Settlements System (PAPSS), which is a platform to facilitate cross-border payments in local currency between traders across countries. To support the clearing and settlement of transactions, the Afreximbank has committed $500 million, with a promise to increase the guarantee to $3 billion. The PAPSS will make it easier for domestic firms to access regional markets, eliminate the need for correspondent banks in cross-border trade, and save African countries $5 billion each year in transactions costs associated with payments. The Tanzanian government should provide support for this initiative through raising awareness about it among domestic firms and encouraging the Bank of Tanzania to fully participate in it.

Table 21: Action-plan on making regionalism work for productive transformation

Constraint	Proposed Action	Timeframe	Responsibility
Inadequate use of regionalism to support productive transformation	1. Provide visa-free access to Tanzania for African entrepreneurs	Short term	MFP (Leader), Ministry of Home Affairs; BOT; TANESCO
	2. Make it easier for firms to hire skilled workers from other African countries	Short term	
	3. Align national power plans with EAPP master plan	Medium term	
	4. Raise awareness about PAPSS among domestic firms	Short term	
	5. Encourage the Bank of Tanzania to join and fully participate in PAPSS.	Short term	

Source: Author.

7

STRATEGY IMPLEMENTATION ISSUES

This section focuses on two issues that are vital to the effective implementation of the strategic measures and action plan discussed in the previous section. The first is the importance of having an effective resource mobilization and allocation strategy and the second is the need to have a credible system for monitoring and evaluation of implementation of proposed policy actions. As indicated in section VI, one of the challenges facing Tanzania and other African countries in achieving their development goals is the lack of full implementation of policies and initiatives. And one of the reasons domestic policies and initiatives are either partially or not implemented is the challenge of resource mobilization. As an LDC, Tanzania has very high need for development finance but has been unable to fully satisfy this need through domestic resources. In 2018/19 domestic revenue accounted for 14 percent of GDP while total expenditure accounted for about 17 percent of GDP (Table 22). The shortfall or gap between domestic revenue and expenditure is often filled through foreign aid and borrowing. In 2018/9, official grants accounted for 0.7 percent of GDP, which represents a significant decrease from its share of 2 percent in 2012/13. Similarly, foreign borrowing accounted for 0.9 percent of GDP in 2018/19 compared with 2.6 percent in 2012/13.

Table 22: Public finance statistics (% of GDP)

	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
Domestic revenue	12.5	13.1	12.4	13.9	14.7	14.6	14.0
Tax revenue	11.4	11.9	11.2	12.2	12.4	12.3	11.7
Total expenditure (net lending)	18.8	17.9	16.5	17.5	16.6	16.7	16.9
Recurrent expenditure	13.4	12.9	12.3	13.2	10.2	10.5	10.5
Development expenditure	5.4	5.0	4.2	4.3	6.4	6.2	6.5
Official grants	2.0	2.0	1.2	0.5	1.0	0.8	0.7
Deficit	-4.1	-3.2	-3.2	-3.4	-1.4	-1.9	-3.2
Deficit (excluding grants)	-6.2	-5.3	-4.3	-3.9	-2.4	-2.6	-3.9
Foreign borrowing	2.6	2.9	2.3	1.1	1.5	1.4	0.9

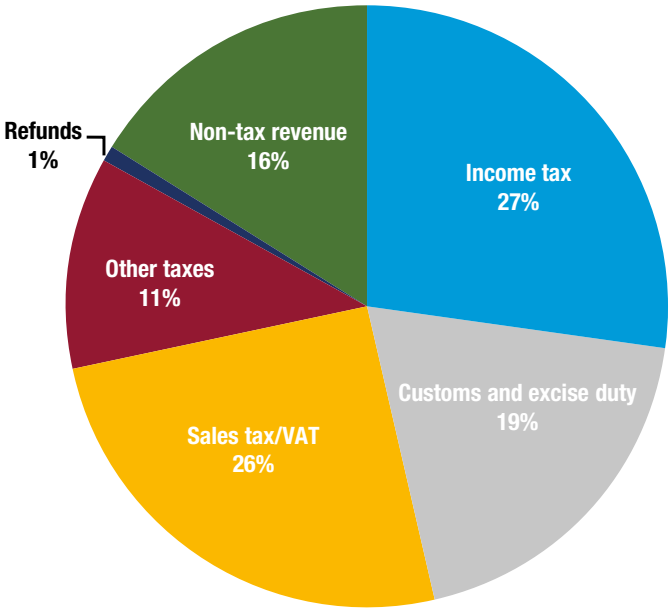
Source: MFP (2020).

While foreign aid is a traditional source of filling the finance gap, it presents several challenges for recipient governments that undermine the achievement of their productive transformation agenda. For example, aid is highly volatile, unpredictable, and makes planning and implementation of development projects challenging. It also creates an asymmetric power relationship between donors and recipients, thereby making domestic ownership of development policies and outcomes impossible. The asymmetric power relationship associated with aid tends to be highly consequential in recipient countries when the interests of recipients diverge from those of donors, resulting in donors, rather than recipients, priorities being the focus of policy implementation. This is problematic for efforts to foster productive transformation in recipient countries because donors tend to focus on short term targets or results rather than long-term factors that catalyze and sustain productive capacities. Against this backdrop, there is the need for Tanzania to continue to reduce its dependence on foreign aid through doubling efforts to enhance domestic resource mobilization. In 2019, 27 percent of government revenue came from income tax, 26 percent from sales tax and VAT, 19 percent from customs and excise duty, 16 percent from non-tax revenue, and 11 percent from other taxes (Figure 19). To improve domestic resource mobilization, there is the need for the government to explore new sources of domestic revenue such as the imposition of

environmental taxes on firms operating in the extractive sector. The government should also broaden the tax base and better harness the potential of digital technology for tax collection and administration. Another step the government could take to enhance resource mobilization is to rethink its policy on the use of tax incentives to promote FDI into the extractive sector. These incentives are a drain on the public purse and there is no evidence that they are needed given that foreign firms have an interest in the sector and will invest even if there are no fiscal incentives.

The domestic private sector should also be encouraged and incentivized to contribute to financing the development of productive capacities through making appropriate investments in priority projects and sectors identified by the government. So far, there has been very limited participation of the private sector in financing priority projects of the government due in part to lack of mutual trust, weak relationship between the public and private sector, and the tendency for the government to pay more attention to the needs of foreign investors compared to those of domestic investors. In this regard, there is the need for the government to double efforts to improve relations with the private sector to encourage domestic investors to play a more active role in financing the development process.

Figure 19: Composition of government revenue in 2019 (% of total revenue)



Source: compiled using data in NBS (2020a).

Another issue that needs to be addressed in the context of financing the implementation of the strategic measures discussed in this paper is the importance of an effective resource allocation strategy. Given that Tanzania has limited financial resources, it is important that the available resources are effectively used to trigger productive transformation through prioritizing the allocation of resources to strategic activities and sectors crucial for building, utilizing, and maintaining productive capacities. These strategic activities include, but are not limited to, agro-business and manufacturing activities that have been proven as important sources of employment, innovation and productivity growth. In this context, there is the need to earmark a significant percentage of government revenue for financing these strategic activities to foster productive transformation. The government should also double efforts to use FDI strategically to support the transformation agenda through, for example, ensuring that it is geared towards agri-business and manufacturing activities that make a direct contribution to the transformation agenda.

The second issue that is crucial for effective implementation of the strategic measures outlined in this report is the need to have a credible system for monitoring and evaluation of policy implementation. A review of the implementation of the second FYDP indicates that the lack of an integrated monitoring and evaluation framework is one of the factors militating against the effective implementation of development policies in the country (MFP 2021). In this context, there is the need for the government to double efforts to establish an integrated monitoring and evaluation system that includes all levels of government and permits timely identification of barriers to effective policy implementation so that appropriate adjustments could be made to policies in real time. The government should also invest in collection of good quality data to facilitate evidence-based policy making and ensure better development outcomes than in the past. In addition, the government should strengthen coordination of reporting on monitoring and evaluation across sectors, departments, and levels of government. It should also build the capacity of relevant civil servants to collate and analyze large datasets from multiple sources and provide policy recommendations.

REFERENCES

Adam, C., Bevan, D., Gollin, D., and B. Mkenda (2012). Transportation Costs, Food Markets, and Structural Transformation: The Case of Tanzania. International Growth Center, Working Paper, C-5010-TZA-1

AfDB (2020). The African Infrastructure Development Index (AIDI) 2020. Brief, AfDB Statistics Department.

BCG (2004). Export Development and Promotion: Lessons from Four Benchmark Countries. Report prepared by The Boston Consulting Group (BCG).

BOT (2021). Economic Bulletin for the Quarter Ending March 2021. Bank of Tanzania, Vol. LIII, No. 1.

Bourguignon, F. and S. Wangwe (2018). An Institutional Diagnostic of Tanzania: Synthesis. Economic Development and Institutions. Manuscript, Oxford Policy Management.

CTI (2020). Analysis of the Impact of the Coronavirus Disease 2019 (COVID-19) Outbreak to Industries. Dar es Salaam: Confederation of Tanzania Industries.

Dube, C., Matsika, W., and G. Chiwunze (2020). Special Economic Zones in Southern Africa: Is Success Influenced by Design Attributes? UNU-WIDER Working Paper 2020/61.

EWURA (2020). Annual Report for the Year Ended 30th June 2020. Energy and Water Utilities Regulatory Authority, Ministry of Water, Tanzania.

GIHUB (2017). Global Infrastructure Outlook: Infrastructure Investment Needs, 50 Countries, 7 Sectors to 2014. Publication of the Global Infrastructure Hub.

ICA (2016). Updated Regional Power Status in Africa Power Pools. Report of the Infrastructure Consortium for Africa (ICA).

Kinyondo, A., Newman, C., and F. Tarp (2016). The Role and Effectiveness of Special Economic Zones in Tanzania. UNU-WIDER Working Paper 2016/122.

Kweka, J. (2018). Monitoring Policies to Support Industrialisation in Tanzania: An Update and Policy Recommendations. Research Paper, ODI, UK.

Kweka, J. and F. Sooi (2020). Can Linkages with Large Firms Spur the Growth of SMEs in Tanzania? UN WIDER Working Paper 2020/102.

Masenya, C., Reweta, W., Magere, D., Temba, L., and D. Macha. (2018). Drivers of Economic Growth in Tanzania. Bank of Tanzania Working Paper WP No 14: May 2018.

MCIT (2021). Digital Tanzania Project: Stakeholders Engagement Plan. Document prepared by the Ministry of Communication and Information Technology, Tanzania.

MFP (2020). The Economic Survey 2019. Dodoma: Ministry of Finance and Planning. The United Republic of Tanzania.

MFP (2021). National Five-Year Development Plan 2021/22 – 2025/26: Realising Competitiveness and Industrialisation for Human Development. Dodoma: Ministry of Finance and Planning. The United Republic of Tanzania.

MIT (1996). Sustainable Industries Development Policy SIDP (1996-2000). Dodoma: Ministry of Industry and Trade. The United Republic of Tanzania.

MIT (2011). Integrated Industrial Development Strategy 2025. Dodoma: Ministry of Industry and Trade. The United Republic of Tanzania.

NACTE (2020). Mapping Skills Gap and Skills Needs for Technician Graduates in the Selected Economic Sectors for Industrial Growth in Tanzania. Report prepared by the National Council for Technical Education, Dar es Salaam.

NBS (2018). Annual Survey of Industrial Production 2016. Dodoma: National Bureau of Statistics, Tanzania.

NBS (2020a). Tanzania in Figures 2019. Dodoma: National Bureau of Statistics. The United Republic of Tanzania, June 2020.

Ngoo, G. and A. Kooijman (2020). Gender and Energy Country Briefs: Tanzania, ENERGIA.

Nord, R., Sobolev, Y., Dunn, D., Hajdenberg, A., Hobdari, N., Maziad, S., and S. Roudet (2009). Tanzania: the Story of an African Transition. Washington Dc: International Monetary Fund.

Osakwe, P. N. (2021). COVID-19 and the Challenge of Developing Productive Capacities in Zambia. UNCTAD Research Paper No. 63. UNCTAD/SER.RP/2021/6.

Osakwe, P. N. (2019). "Unlocking the Potential of the Power Sector for Industrialisation and Poverty Alleviation in Nigeria." In E. Wamboye and P. Nyaronga (eds.) The Service Sector and Economic Development in Africa. London and New York: Routledge.

Pueyo, A. and M. Maestre (2019). Linking Energy Access, Gender and Poverty: A Review of the Literature on Productive Uses of Energy. *Energy Research and Social Science* 53.

Schwab, K. (2019). The Global Competitiveness Report 2019. Geneva: World Economic Forum.

TPSF (2019). Sector Skills Council: Braidging the Skills Gap in Tanzania. Tanzania Private Sector Foundation.

UNCTAD (2013). Economic Development in Africa Report 2013. Intra-African Trade: Unlocking Private Sector Dynamism. Geneva: United Nations.

UNCTAD (2020). UNCTAD Productive Capacities Index: Methodological Approach and Results. Geneva: United Nations.

UNWOMEN (2021). United Republic of Tanzania: Country Fact Sheet.

URT (2020). Poverty Trend from 1991 to 2020. Report by the United Republic of Tanzania (URT).

Wangwe, S., Mmari, D., Aikaeli, J., Rutatina, N., Mboghoina, T., and A. Kinyondo. (2014). The Performance of the Manufacturing sector in Tanania: Challenges and the Way Forward. United Nations University, WIDER Working Paper 2014/085.

WEF (2018). Readiness for the Future of Production Report 2018. Geneva: World Economic Forum.

World Bank (2021a). Raising the Bar: Achieving Tanzania's Development Vision. Tanzania Economic Update, February 2021, Issue 15.

World Bank (2021b). Sub-Saharan Africa: Macro Poverty Outlook, Spring Meetings 2021. Washington, DC: The World Bank.

WTO (2019). Trade Policy Review: East African Community. WTO Secretariat Report. Annex 4: Tanzania.

ISBN 978-92-1-113042-3

Layout and Printing at United Nations, Geneva – 2202613 **(E)** – April 2022 – 520 – **UNCTAD/ALDC/2022/3**