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Drivers of Economic Growth in Tanzania

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Abbreviations

BRN	-	Big Results Now
CPI	-	Consumer Price Index
CTI	-	Confederation of Tanzania Industries
DMGP	-	Dar es Salaam Maritime Gateway Project
DRC	-	Democratic Republic of Congo
EAC	-	East African Community
EPZA	-	Economic Processing Zone Authority
FDI	-	Foreign Direct Investment
FYDP	-	Five-Year Development Plan
GDP	-	Gross Domestic Product
ICT	-	Information Communication Technology
IMF	-	International Monetary Fund
IPC	-	Investment Promotion Center
JKT	-	Jeshi la Kujenga Taifa
KPIs	-	Key Performance Indicators
MNOs	-	Mobile Network Operators
MVNCs	-	Mobile Virtual Network Operators
MW	-	Megawatt
NBS	-	National Bureau of Statistics
NDC	-	National Development Corporation
NICTBB	-	National ICT Broadband Backbone
OFC	-	Optic Fibre Cable
POS	-	Point of Sale
PPF	-	Parastatal Pension Fund
PPP	-	Public Private Partnership
RAHCO	-	Railway Asset Holding Company
SEZs	-	Special Economic Zones
SGH	-	Sichuan Hongda Group
SGR	-	Standard Gauge Railway
SIDO	-	Small Industries Development Organization
TANTRADE	-	Tanzania Trade Development Organization
TAZARA	-	Tanzania Zambia Railway Authority
TCCIA	-	Tanzania Chamber of Industry, Commerce and Agriculture
TCF	-	Trillion Cubic Feet
TCRA	-	Tanzania Communication Regulatory Authority
TFP	-	Total Factor Productivity
TIC	-	Tanzania Investment Centre
TIRDO	-	Tanzania Industrial Research and Development Organization
TNBC	-	Tanzania National Business Council
TPA	-	Tanzania Ports Authority
TPDC	-	Tanzania Petroleum Development Corporation
TRA	-	Tanzania Revenue Authority
TRL	-	Tanzania Railways Limited
TTB	-	Tanzania Tourism Board
TTCL	-	Tanzania Telecommunication Company Limited

TTLB	-	Tanzania Tourism Licensing Board
TZS	-	Tanzania Shillings
URT	-	United Republic of Tanzania
USD	-	United States Dollars
VETA	-	Vocational Education Training Authority
WB	-	World Bank
WLL	-	Wireless Local Loop
ZANTEL	-	Zanzibar Telecom Limited

Executive Summary

The economy of Tanzania grew at an average of 6.7 percent between 2007 and 2016 with the last three years (2014-2016) growing at an annual rate of 7.0 percent. The growth rate of 7.0 percent in 2016 ranked Tanzania the 3rd fastest growing economy in Africa behind Ethiopia (8.0 percent) and Ivory Coast (7.5 percent). The government aspires to raise the real GDP growth to 10.0 percent by 2021, which among others will propel the country towards the middle-income status. Realizing this target is a challenge in relation to the need to transform the economy, as well as risks emanating from structural shocks including weather conditions, and global economic and financial dynamics.

This paper seeks to assess current drivers of economic growth and their associated factors, as well as examine drivers of economic growth going forward. It used descriptive analysis, utilizing secondary data from various official publications including policies, strategic plans and progress reports from selected ministries, departments and agencies (MDAs) relevant to this study. Further discussion was made with key informants in MDAs and selected firms. To complement the descriptive analysis, growth accounting approach was used to assess the contribution of labour, physical capital and total factor productivity in supporting economic growth.

The following are the key study findings, that:

- Economic growth in the period between 1995 and 2016 was strongly influenced by two major activities, namely – services, and industry and construction. In 2007-2016, services activities contributed 50.8 percent to GDP growth, while industry and construction activities contributed 26.9 percent. The contribution of agriculture - the main source of livelihood to 70 percent of country's population, declined from 27.3 percent recorded in 1997-2006 to 14.6 percent in 2007-2016, implying structural change towards services and industry and construction activities.
- Growth of the economy in 2006-2016 period was largely contributed by construction (14.3 percent), wholesale and retail trade; and repair (11.7 percent); public administration (8.7 percent); manufacturing (8.7 percent); information and communication (7.4 percent); transport and storage (7.1 percent), and finance and insurance service (7.0 percent).
- It is likely that services (in particular transport and storage; and information and communication), and industry and construction activities will continue to contribute to growth going forward owing to government's policy efforts and ongoing and scheduled major projects. A number of such projects are at different stages of implementation. They include construction of roads, standard gauge railway (SGR), rehabilitation of central railway line, and expansion and modernization of Dar es Salaam Port. Others include Hoima- Tanga pipeline, Liquefied Natural Gas (LNG), Stigler's Gorge hydropower and Sinoma and Hengya Cement Company Limited. In addition, some industries, particularly in cement industries have expanded production capacity; and new industries are been contrasted – a move expected to increase future growth and contribution of manufacturing activity to GDP.

- It is worth noting that measures to add value to all minerals before export, curbing smuggling and instituting a legal framework for managing mineral resources are expected to enhance contribution of mining activities to economic growth. Currently, the Government is in advanced stage to setting a framework for buying gold through Bank of Tanzania and stockpiling Tanzanite. Relatedly, is the on-going initiative of distributing 10 million crafted cashew nuts seedlings in the country in three years (2016-2019) coupled with issuance of free inputs and extension services to farmers—the move expected to double production and exports of cashew nuts by 2020/21. In the Financial Year 2017/18 the Government has instituted bulky procurement of fertilizer with the objective of reducing cost of inputs to farmers and increase productivity.

Despite the achievements and bright outlook, the study established the following:

- Shortage of resources leading to slow implementation of projects or increasing cost due to change in prices of construction materials overtime. From 2015/16, fund release has improved in a few sectors, particularly in transport and works with fund release of over 60 percent of the budgetary allocations, but still other key priority sectors including water and agriculture are budgetary constrained.
- Long delays in implementation of some mega projects due to long processes involved in accessing external financing. This challenge was vivid in railway and ports projects. Efforts by Tanzania Ports Authority (TPA), for instance, to solicit funding for port rehabilitation took about six years – the period considered too long – leading to loss of the potential revenue and efficiency on other sectors dependent on the port.
- Most of the newly established factories in Coast region are sparsely located, typically in areas not earmarked for industrial activities, a situation likely to increase cost of production, and reduce competitiveness. Few factories, particularly cement factories were located in areas where they could easily access raw materials, while others' locations were influenced by easy access to land.
- Inadequate skills development, especially in highly demanded vocational training coupled with little efforts to prepare local communities to take advantage of the planned projects at the construction stage. Institutions like TIRDO in liaison with VETA is working to enhance capacity of welders to be certified internationally but resources to do so are limited. By the time of the field visits, only 20 welders were trained, implying limited capacity of the country to adequately reap job opportunities created by the ongoing mega construction projects—Hoima – Tanga pipeline and SGR.
- In supporting establishment of SEZs, Government has already paid compensation to some of the identified areas including Kurasini Trade and Logistics Centre. It was however; found that bureaucracy, conflicts arising from alternative land use at reginal levels and inadequate resources by EPZA have delayed development of the identified

areas to take advantage of investments re-locating from East Asia and other emerging economies.

- Considered highly regulated agro-processing industries leading to high cost of production due to duplication of regulatory functions and fees. The sector has 22 laws (compared to 12 in Kenya) and 15 regulations resulting into high cost of production due to duplication of regulatory functions and fees.
- Weak coordination among key stakeholders: There is lack of effective coordinating and accountability framework especially for big projects resulting into duplication of efforts, misuse of resources and delays or non-completion of projects.
- Few developed industrial or producers clusters to facilitate specific interventions and quality support for enhanced quality output for domestic and export markets.

For economic growth to be sustained going forward, the following are recommended:

Projects Funding: To ensure planned projects are completed in time and on budget, there is a need to have a clear strategy for raising and utilizing national budgetary resources as well as engaging in Public Private Partnerships to fund key projects and speed up their implementation going forward.

Prioritization of Projects: Given the scarcity of resources, prioritization of projects cannot be avoided. Priority should be given to foreign currency generating projects that have the potential to spur growth of other economic activities. These include railway and ports projects; oil pipeline (Hoima – Tanga pipeline), revival of ATC and power generation projects.

Implementation of interdependence of Projects: Some of the key transportation projects are interdependent in realizing their full economic potential. Dar es Salaam port expansion is highly dependent on completion of rehabilitation of the central railway line and the construction the SGR. Similarly, the Hoima–Tanga Oil Pipeline project is highly dependent on the completion of the new port at Mwambani Bay. Synchronization in the implementation of such projects is therefore critical. **Enhance coordination among key stakeholders**: For this to happen, there is a need to have a body to coordinate all inter-related major projects and put in place Key Performance Indicators (KPIs) to guide them towards timely completion. There is also a need to have a comprehensive long-term national economic agenda that is binding to guide the development process of the country going forward. Because of its binding nature, such an agenda will ensure continuity of major projects over a longer horizon and sustained contribution to economic growth.

Agricultural transformation: Agriculture employs a majority of Tanzanians. To attain a broad economic growth, transforming the agricultural sector is critical as it touches the majority of the population. For this transformation to happen, investment in training farmers in modern agricultural skills such as farming methods, budgeting, bookkeeping, and use and repair of agricultural machinery are critical. This can be achieved through the use of extension officers, introducing special agricultural training programs for youth after completing primary school education, and in collaboration with the private sector.

Set competitive price of intermediate products: Output of some plants are input to others. Prices of these intermediate products – which are inputs to other products needs to be relatively competitive for the final product to be price competitive. Such inputs include utilities [electricity, water, communication and fuel (petroleum products, coal and natural gas]. High taxes downstream for these inputs will have an impact on cost of production upstream as well as on transport costs, and may affect price competitiveness of the finished products for export, which will in turn be a constraint to economic growth. Freight costs need to be competitive regionally in order to attract more business and trade from the neighbouring landlocked countries.

Preparing the local Community to fully benefit from Projects: To be able to take full advantage of the construction projects, there is a need for deliberate initiatives to be in place at every level to prepare the local communities to take advantage of the construction projects in terms of being able to supply the needed materials at the required standards. It also entails building local skills in various tasks that would be carried out. More financial resources are therefore required for local institutions like TIRDO and VETA in order to train a sufficient number of welders and other technical skills that may be required.

Improvement of local Business Environment: To be able to sustain growth going forward, there is also a need to sustain efforts in setting conducive business environment. Tanzania is lagging behind in most of the key indicators of easy of doing business in comparison with countries within the EAC region. More efforts should be put in place to reduce the cost of doing business, which will help to attract foreign direct investment and promote dynamics in private sector. Such efforts should extend beyond tax incentives to good governance, timely and easy access to utilities, and access to credit and trading cross border.

Production clusters establishment: Establish SMEs and agricultural clusters for value addition to exports in order to facilitate easy provision of extension and business development services.

In a nutshell, the current economic drivers have the potential to continue supporting future growth given the projects and initiatives that are in place. Sustainability of these drivers is however, dependent on policy consistency, timely implementation of the identified projects and initiatives, coordination among stakeholders, deliberate skills development initiatives and establishing connectivity between production platforms and market gateways. This will also include availability of inputs at competitive prices, particularly power and other utilities. Favourable external environment is equally important as some of the projects partly or wholly rely on international markets as sources of finance and demand for goods and services.

1.0 Introduction

The economy of Tanzania grew at an average of 6.7 percent over the past 10 years (2007 – 2016) with the last three years (2014-2016) growing at an annual rate of 7.0 percent. This growth rate made the Tanzanian economy one of the fastest growing economies in Africa behind Ethiopia and Ivory Coast, which recorded growth rates of 8.0 and 7.5 percent, respectively in 2016[1]. The contributing factors to the Tanzania's outstanding growth record include sound economic reforms, initiatives and policies undertaken by the government particularly since the mid-1980s, which in turn supported various economic activities. While some of the reforms and policies aimed at maintaining fiscal consolidation in order to increase efficiency and effectiveness in utilization of resources, others focused at building strong and stable financial sector necessary for facilitating implementation of monetary policy and efficient provision of financial services. These reforms and polices have not only produced positive economic payoffs, but also created favourable conditions for sustained higher episodes of economic growth.

The government aspires to raise the real GDP growth to 10.0 percent by 2021 (FYDP II, 2016), which among others will propel the country towards the middle-income status. Realizing this target is a daunting encounter particularly in relation to the need to transform the economy, as well as downside risks emanating from structural shocks including weather conditions, and global economic and financial dynamics. This paper therefore, seeks to assess current drivers of economic growth in Tanzania, their potential, and recommend policy interventions in view of sustaining the growth momentum going forward.

The objectives of this paper are two-fold: evaluate drivers of economic growth and the associated factors; and examine drivers of economic growth going forward. To achieve these objectives, the following research questions are addressed:

- What are the current drivers of economic growth in Tanzania?
- How have the drivers changed overtime?
- What factors (if any) explain changes in economic growth overtime?
- Will the identified economic growth drivers hold going forward?

The study uses descriptive analysis based on desk-review of different policy documents to trace dynamics of activities driving economic growth in the country and their associated factors. The analysis was complemented by interviews conducted through checklist questions administered to key institutions including Ministries, Department and Agencies (MDA) responsible for facilitation and/or implementation of key initiatives and projects geared towards economic growth. A few big public and private ongoing and planned projects in Dar es Salaam and Coast regions; those with high impact to the economy, for example, in terms of employment generation and contribution to tax revenue were also visited. The

[1] According to IMF World Economic Outlook Database April 2017.

checklist questions used and list of institutions and projects visited are presented in **Appendix 1 and Appendix 2**. The study further complemented the analysis by employing growth accounting approach in which contribution of classical inputs (labour and capital), and total factor productivity were calculated and analysed.

This paper is organized in six Sections. Section 1, the introduction has covered background information, objectives and methodology used in the analysis. Section 2 of this paper presents stylized facts on economic growth, while Section 3 dwells on assessment of macroeconomic performance and drivers of economic growth from 1995 – to date. Section 4 provides results from the growth accounting approach followed by a synthesis of economic drivers going forward in Section 5. Finally, Section 6 concludes the study and recommends on areas of intervention to boost or sustain the current economic growth going forward.

2.0 Stylized facts on economic growth

There are varied stylized facts explaining economic growth of a developing country like Tanzania. They include a considerable diversity in the growth rates of per capital income, a positive correlation between savings rate and the level of per capital income, and a positive correlation between the growth rate and the level of per capital income (Steger, 2001).

High economic growth is related to export diversification (Agosin, 2007). Diversification of exports leads to less export volatility, which in turn results in lowered output volatility. This entails full utilization of factors of production, stable inflow of foreign currency, which in turns supports the building of foreign reserves. It also facilitates transformation of low productive sectors to become more productive. High economic growth in China, for instance, was driven by high investment and rapid labour productivity. For this to happen however, market oriented reforms are required. According to (Zoega, 2013) rapid economic growth of China resulted from introduction of market-oriented policies in the late 1970s, which aimed at enhancing the role of markets, increase competition and importation of foreign technologies. The scope of the public sector was reduced and laws and regulations changed so as to make it easier for entrepreneurs to set up new firms. Incentive systems were introduced in the public sector and special economic zones were established to create a competitive environment for the export industries (Zoega, 2013).

Likewise, in other Asian countries rapid economic growth resulted from structural reforms highlighting the importance of total factor productivity. Utilization of labor and new technologies also explain the myth of Asian miracle. The continued accumulation of human capital, market-friendly institutional setups and strong financial sector, all play an important role in productivity growth (Kuroda, 2015).

Generally, most of the Sub-Saharan African (SSA) countries have recorded high average growth, resulting from economic reforms of mid-1980s – early 1990s, restructuring of public institutions – especially central banks and liberalization of exchange rates. This is witnessed in sustained macroeconomic stability and ample accumulation of international reserves (IMF, 2013). However, growth rates in these countries vary substantially on account of idiosyncratic factors – cultural factors, ethnic frictions, and political instability, among others (IMF, 2013).

Performance and interlinkages between productive sectors depend on 'aggregate strategy' of developing efficient transport network linking various components of the value chain, clear strategy for utilizing national resources, improvement of business environment and unlocking additional sources of financing infrastructure projects, amongst others (Ndulu and Mwase*,* 2017). Weak linkage between sectors not only results into slow structural transformation and change, but also weak linkage to regional and global economies.

Various studies have shown that for a low-income country, raising factor supplies – labour and capital is critical for economic growth. Kalio, *et al*., (2012), for instance, revealed that much as Total Factor Productivity (TFP) was important in explaining growth in Kenya, accumulation of capital and labour were more important with contributions of 71.4 percent and 25 percent, respectively compared to total factor productivity at 3.6 percent. This outcome is well supported by several other studies including Dao (2014) and Barro (2003). In other economies, like Tanzania, fall of investment in key sectors, including agriculture, have largely resulted into slow growth of TFP. The Tanzania's TFP growth was negative 1.6 percent in 1981-85 and the highest growth of 27 percent was between 1985-2005 (IMF, 2016 and Ndulu and Mwase, 2017). Another study by Bunini (2017) showed that Tanzanian GDP growth for the period between 1960 and 2011 was mostly explained by TFP (38 percent), followed by capital (34 percent), suggesting that period choice influence factors contribution to GDP.

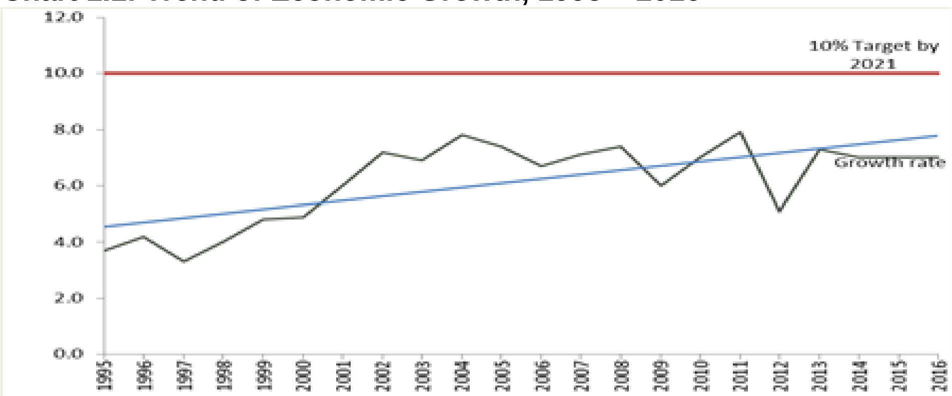
TFP growth is a derivative of several factors including good quality institutions; human capital development; favorable macroeconomic policy environment which include lower levels of external debt, government consumption and higher levels of international reserves; diversification of the economic base; technology, openness and terms of trade (Bosworth and Collins, 2003; Senhadji, 2000).

Ndulu and Mwase, (2017) note that besides stability of institutional and policy framework, sustained growth entails investment in physical and human capital and resilience to economic shocks. Also contributing to this is socio-political stability emanating from social cohesion founded on a common national language and tolerance (Ndulu and Mbowe, 2013). Other studies have used other variables to explain economic growth, including fertility rate, rule of law, inflation, investment ratio to GDP, share of government consumption to GDP, population with sanitation services, rural population with water access, adult literacy rate and bank liquid reserves to bank total assets. Results have always been mixed with some studies like Barro (2003), establishing negative correlation of growth to fertility, share of government consumption in GDP and human capital. This suggests that the choice of variables for growth analysis largely depends on the level of economic development and the extent to which development policies and strategies impact on growth.

3.0 Assessment of economic performance (1995-2016)

During the last 30 years, Tanzania has been pre-occupied with economic reforms aimed at increasing and sustaining economic growth, and reduction of poverty. Major reforms were made in the mid-1990s when a thorough review of policies, legal and regulatory frameworks was made to key sectors of the economy. Following these reforms, recovery of most economic sectors began in the early 2000s, reflecting a lag effect of the policies. The country's gross domestic product (GDP) growth increased from an average of 3.2 percent in 1985 -1996 to an average of 5.9 percent during 1997 – 2006 (**Chart 1.1)**; and further to about 7.0 percent over the last two decades to 2016. This rate is much higher than that of the Sub-Saharan Africa and oil exporting countries whose growth rates stood at 1.4 percent and negative 1.4 percent in 2016, respectively (**Table 1**). GDP per capita also grew by almost three-folds from TZS 334,987 (USD 381.9) in 2001 to TZS 2,136,521 (USD 981.4) in 2016.

Chart 1.1: Trend of Economic Growth, 1995 – 2016



Source: Bank of Tanzania

Table 1: Real GDP Growth for Selected African Countries

Country	2009	2010	2011	2012	2013	2014	2015	2016
Tanzania	5.4	6.4	7.9	5.1	7.3	7.0	7.0	7.0
Kenya	3.3	8.4	6.1	4.6	5.7	5.3	5.6	6.0
Uganda	8.1	7.7	6.8	2.6	4.0	4.9	5.0	4.7
Rwanda	6.3	7.3	7.8	8.8	4.7	7.0	6.9	5.9
Burundi	3.8	5.1	4.0	4.4	4.5	4.7	-4.1	-1.0
Ivory Coast	3.3	2.0	-4.4	10.7	8.7	7.9	8.6	7.5
Ethiopia	10.0	10.6	11.4	8.7	9.9	10.3	10.2	8.0
Sub-Saharan Africa Countries	5.4	6.4	7.9	5.1	7.3	5.1	3.4	1.4
Oil exporting countries	7.0	8.5	4.6	3.8	5.7	5.9	2.6	-1.4

Source: IMF World Economic Outlook Database April 2017

This performance would not have been possible in the absence of macroeconomic stability whose importance is not only for short-run investment and consumption decisions, but also for long-run growth by boosting supply and productivity of some productive sectors. Other factors that contributed to the performance include political stability, good governance, investments in infrastructure-especially roads and ports as well as developments in information technology. In the period between 1996 and 2016, the country has been performing well as shown by good governance indicators. For instance, in the World Bank Governance Indicators, Tanzania scored higher (30 out of 100 in political stability and 35 out of 100 in control of corruption in 2016 compared to 1996) –the scores that were higher compared to that of Kenya and Uganda[2] (**Table 2**).

Table 2: Good Governance Indicators

	Political stability and absence of violence		Government effectivenss		Control of corruption	
	1996	2016	1996	2016	1996	2016
Kenya	24	10	35	41	11	17
Tanzania	24	30	27	34	30	35
Uganda	9	21	27	32	28	13

Source: World Bank Database

Tanzania has experienced relatively low inflation rate over the recent past, at an average of 6.2 percent during 2013-2016, a decline from an average of 23.1 percent in 1990 - 1999. This rate is within the East African Community (EAC) headline inflation convergence criteria target of 8.0 percent. Sustaining this rate below or within this level may be challenging given changes in external environment (e.g. volatility of oil prices in the world market) and domestic structural bottlenecks, in particular poor infrastructure and drought, which affects food supply. Food accounts for 38.5 percent of basket of goods in the Consumer Price Index (CPI). To maintain or lower this level of inflation, there is a need to transform agriculture by improving its productivity through the use of modern technologies, irrigation, extension services and improved transportation.

As the economy continued to expand, poverty has been declining, implying increasing aggregate demand. In the period between 1991 and 2011, poverty incidence in Tanzania mainland declined by 10.4 basis points from 38.6 percent in 1991 to 28.2 percent in 2011, with much of the fall recorded in Dar es Salaam (**Table 3**).

Table 3: Poverty Incidence in Tanzania from 1991-2011

Area	1991	2001	2007	2011
Dar es Salaam	28.1	17.6	16.0	4.2
Other urban	28.7	25.8	24.2	21.7
Rural	40.8	38.6	37.4	33.3
Tanzania Mainland	38.6	35.6	33.4	28.2

Source: National Bureau of Statistics

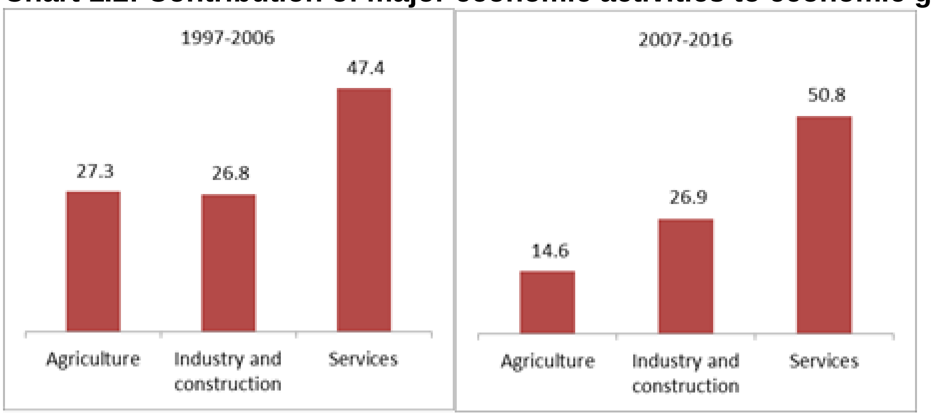
[2] Ranking: 0 denotes lowest and 100 denotes highest.

In short, economic growth recorded to date is still below the 2021 target of 10 percent but the good news is that convergence is been achieved. The growth achievements are on account of evolution of aggregate economic activities (agriculture, industry and construction, and services) and the dynamics of their sub-activities. The following section presents an in-depth analysis of major economic activities which supported economic growth together with possible factors explaining their performance.

3.1 Sectoral Performance

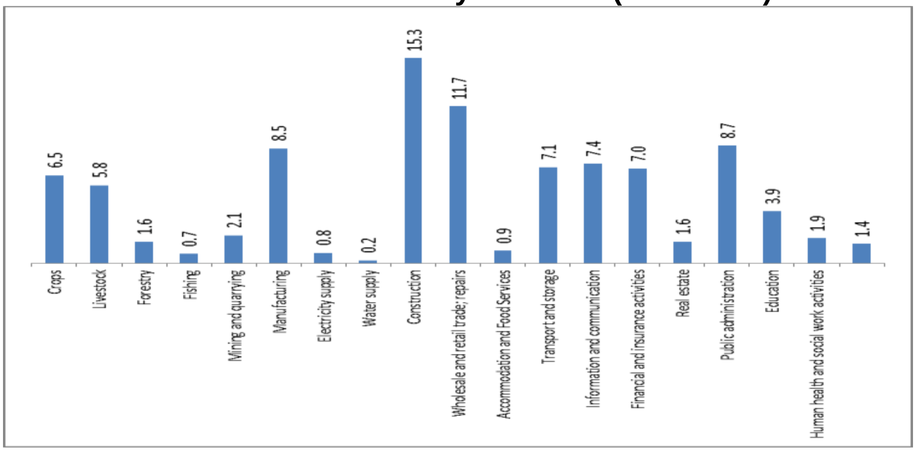
Overall, service activities contributed 50.8 percent to GDP in 2007-2016, followed by industry and construction, 26.9 percent and agriculture, 14.6 percent (**Chart 1.2**). In the services activities most of the contribution came from wholesale and retail trade and repairs (11.7 percent), followed by public administration, 8.7 percent. Much of the contribution in industry and construction came from construction itself, 15.3 percent, while manufacturing contributed 8.5 percent (**Chart 1.3**). Worth noting is that economic growth record in Tanzania is characterized by structural change from agriculture to services and industry and construction activities (**Chart 1.2**). Such structural changes are also reflected in exports where the country has diversified from traditional exports to services [travel, mainly tourism and transport] and manufactured exports (**Chart 1.4a**). Markets have also broadened from the traditional ones (United Kingdom, India, Germany, Japan, Indonesia, Belgium and Italy) to cover Asian countries (China, Singapore, Thailand and Pakistan) and regional markets (EAC and SADC). **Table 4** presents goods exports to some selected countries in EAC and SADC between 2007 and 2016.

Chart 1.2: Contribution of major economic activities to economic growth



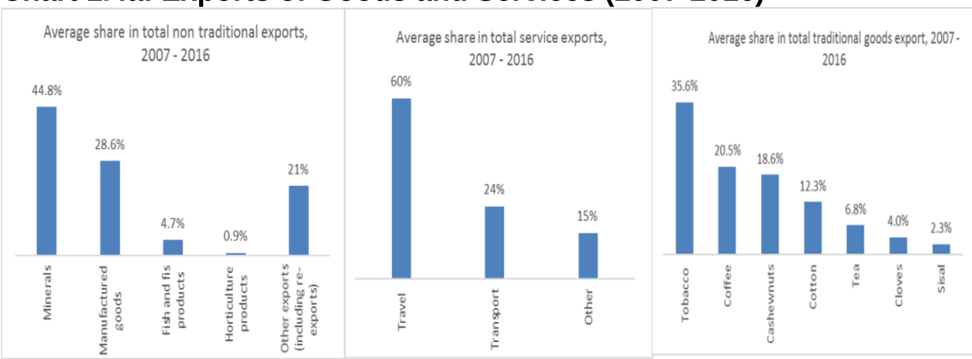
Source: Bank of Tanzania

Chart 1.3: Growth contribution by activities (2006-2016)



Source: Bank of Tanzania

Chart 1.4a: Exports of Goods and Services (2007-2016)



Source: Bank of Tanzania

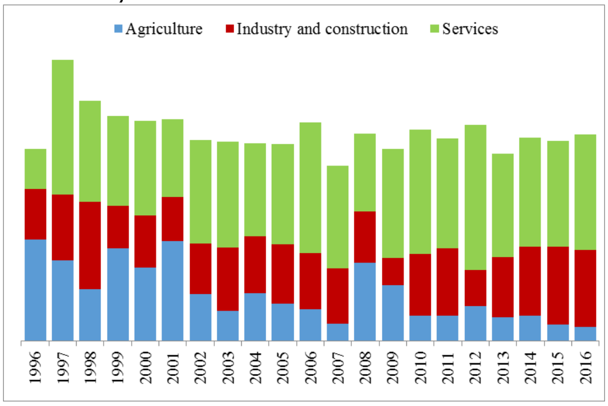
Table 4: Exports in the regional markets

	2007	2008	2009	2010	2011	2012	2013	2014	2015
Kenya	125.8	277.8	234.1	425.8	333.6	520.1	363.0	737.1	1,452.0
DRC	69.4	150.6	105.4	196.4	188.8	285.4	377.5	465.3	392.4
Zambia	27.9	43.2	58.5	76.6	74.5	112.3	144.9	223.7	12.4
Uganda	24.0	47.9	63.0	67.0	70.4	103.4	105.6	121.2	99.9
Mozambique	23.8	37.1	26.8	25.4	97.8	83.5	106.1	112.6	37.0
Burundi	51.6	23.0	31.2	73.0	48.6	72.0	71.9	71.1	77.7
SADC	-	-	-	-	1,185.9	1,430.2	1,243.5	1,233.9	1,028.1
EAC	215.3	373.1	348.2	595.3	556.6	810.9	670.0	988.7	1,711.3

Source: Bank of Tanzania

Sustained high contribution of services is attributed to public administration; accommodation and food services; finance and insurance; information and communication as well as to transport and storage. **Public administration**, grew at 8.7 percent in 2006-2016, mainly on account of reforms implemented in 1990-1995 that re-organised public enterprises, parastatals and others statutory bodies in an attempt to increase private sector participation in the economy and reforming public services (Ndulu and Mwase, 2017). It is out of these reforms that government spending was trimmed down through retrenchment of public servants and formation of agencies to perform some of the government roles.

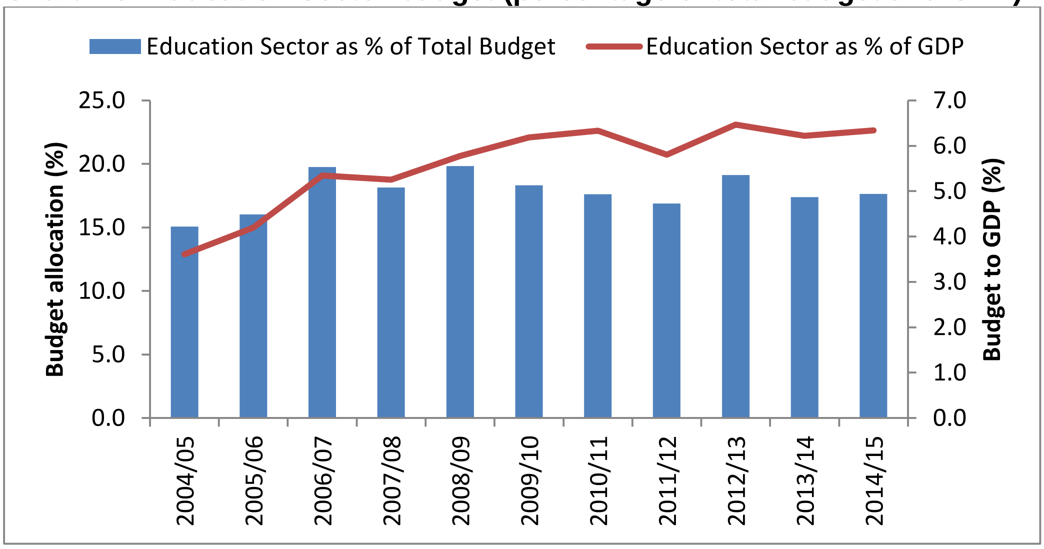
Chart 1.4b: Growth contribution trends by activities, 1996-2016



Source: National Bureau of Statistics

Connected to improved public administration, is increased investment in human capital, especially in health and education. In education, for instance, the government through Primary Education Development Programmes (PEDP), which started in 2001 and Secondary Education Development Programme (SEDP), which started in 2004 have increased education sector budget as well as primary and secondary school enrolments from 2000s (**Chart 1.5 and Chart 1.6**). The government's decision to extend primary education to form four from standard seven and ensure that financial resources are directly channelled to respective schools are likely to boost further the growth of the education sub-sector.

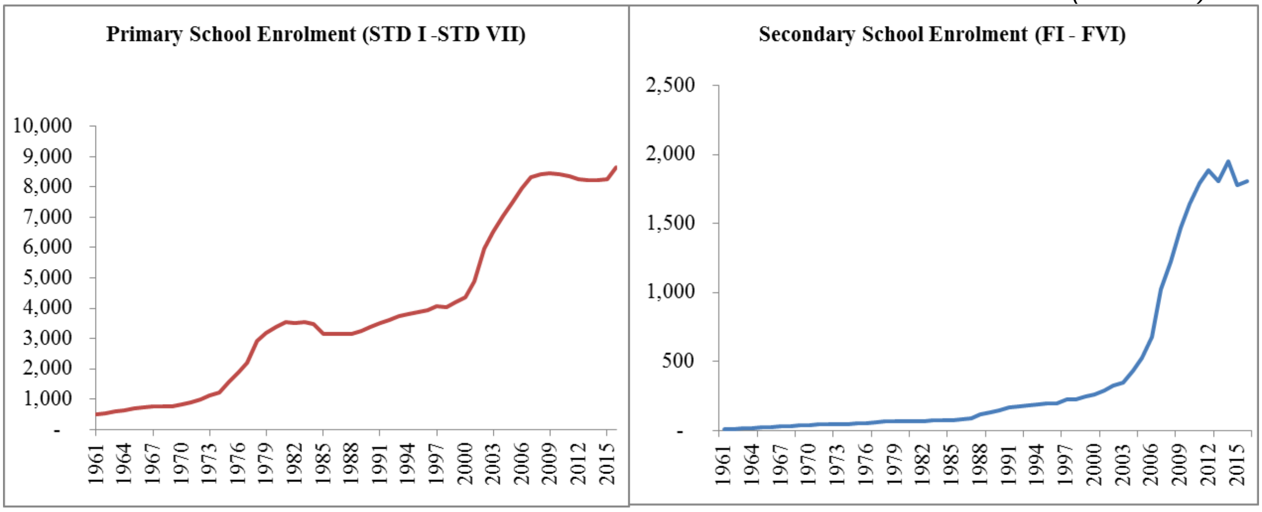
Chart 1.5: Education Sector budget (percentage of total budget and GDP)



Source: Ministry of Education

Chart 1.6: Primary and Secondary School Enrolment

(Thousands)



Source: Ministry of Education

Although **accommodation and food services** activity contributed less to economic growth (0.9 percent), it grew by an average of 3.4 percent between 2006 and 2016 largely supported by liberalization of tourism sector which resulted into increased investment and participation of private enterprise in delivery of tourism services. Most of the tourist facilities including hotels were privatised. The move was in tandem with the establishment of Tanzania Tourism Board (TTB) in 1992 and Tanzania Tourism Licensing Board (TTLB) in 2008. While TTB took over roles and functions of the disbanded Tanzania Tourist Corporation, TTLB was introduced to licence and monitor tourism facilities and services in the country[3]. These developments resulted into an increase of the stock of FDI in accommodation and food services activity by 56 percent to USD 663.8 million in 2013 from USD 424.6 million in 2009, making the activity the fifth recipient of FDI after mining, manufacturing, finance and insurance, and electricity and gas. Improvement of facilities, increased investment and promotion of tourism is expected to increase the activity's contribution to economic growth, employment and foreign exchange earnings.

The number of international tourist arrivals has been increasing in recent years, getting close to neighbouring competing countries including Kenya. Tourist arrivals in 2016 stood at 1,284,279 (with total receipts of USD 2.13 billion) up from 1,137,182 tourists in 2015 (with total receipts of USD 1.90 billion) compared to Kenya, which received 1,339,700 in 2016 (with total receipts of USD 982.3 million) up from 1,180,500 arrivals (with total receipts of USD 858.1 million) in 2015. Although the activity has been the major foreign exchange earner accounting for 60.5 percent of service receipts, its potentials is yet to be fully realised. Tourist attractions such as beaches, historical buildings, national parks in the southern highlands, Selous, Ruaha are yet to be fully utilized.

[3] TTB roles include advertising and publicizing Tanzania's tourist destinations globally.

In contrast, tourism contributed relatively higher in total exports, employment and total capital investment in Tanzania compared to contribution made in some countries in the region (World Travel and Tourism 2016; **Table 5**). In terms of competitiveness, the country scored 3.35 (ranked 93rd out of 183 countries) in 2016, which was lower compared to Kenya (score 3.58 – 78th position), suggesting that there is room for improvement of business environment, infrastructure and human capital as well as promotion of cultural and natural resources[4].

Table 5: Contribution of Travel and Tourism for selected countries

	Visitor exports Contribution to total exports	Direct contribution to employment	Contribution to total employment	Contribution to total capital investment
Kenya	14.9 (72)	3.5 (93)	9.3 (94)	6.2 (79)
Tanzania	26.1 (46)	3.4 (94)	10.3 (80)	8.9 (55)
Uganda	23.5 (51)	3.1 (103)	7.8 (117)	4.7 (98)
Rwanda	26.3 (45)	2.6 (125)	7.3 (124)	7.9 (64)
Africa	9.0	3.0	7.2	6.3
World	6.1	3.6	9.5	4.3

Source: World Travel and Tourism Council, 2016
Note: The numbers in brackets denote a rank out of 183 countries.

Finance and insurance was among the activities that contributed to economic growth in 2007-2016. Its performance was largely supported by Financial Sector Reforms aimed at liberalizing, restructuring and setting up facilitative conditions for access and delivery of financial services. During 2006-2016, the activity grew at an average of 13.6 percent, with the highest growth of 21.7 percent in 2007 and the lowest at 5.1 percent in 2012. Banking and financial institutions, which account for about 70 percent of the financial services in the country, grew from less than six (6) in the early 1990s to 64 by July 2017, though majority are urban centers[5].

The growth of the activity is not only explained by the increase in banking services, but also reforms in telecommunication, which has led to entrants of new players in the financial market, in particular mobile network operators (MNOs). From the late 2000s, MNOs, through test and learning, have been able to introduce new financial delivery systems including mobile money, which has facilitated money transfer, payment, savings and insurance services. These, coupled with other financial delivery systems, including agent banking and Point of Sales (POS) have increased access to financial services and reduced operational and transactions costs on financial service providers and customers, respectively. As of July 2017, the number of agent banking and POS across the country stood at 7,717 and 8,474, respectively, from none in the 2000s. The value and volume of mobile money transactions have also increased partly on account of increased public awareness and adoption of digital technology. In 2016, mobile money transactions averaged TZS 4.8 trillion, representing 5.0 percent of nominal GDP. The

[4] The index is defined by a number of variables, which include business environment, safety and security, health and hygiene, human resource and labour market, price competitiveness, transport and infrastructure, and cultural and natural resources.
[5] Of these, 40 are fully-fledged commercial banks, 3 development financial institutions, 11 community banks, 5 microfinance banks, 2 credit reference bureaus and 3 financial leasing companies.

new Payment Act, 2015 and its subsequent regulations and new Microfinance Policy, 2016 are expected to further boost contribution of the financial sector to economic growth.

Information and communication has undergone a number of reforms over the last 25 years following restructuring of Tanzania Postal and Telecommunication Corporation in 1994. The restructuring resulted in formation of Tanzania Telecommunication Company Ltd (TTCL), Tanzania Postal Corporation and partial liberalization of telecommunication activities that brought in mobile network operators and data communication services. The market for telecommunication was fully liberalized in 2005 after the end of partial monopoly of TTCL (TCRA, 2009). The restructuring coupled with reforms guided by sector related policies (National Telecommunication Policy of 1997; National ICT Policy of 2003 – revised in 2016; National Postal Policy of 2003 and National Information and Broadcasting Policy of 2003) resulted into increased number of players, and adoption of ICT related technologies[6]. By the end of 2016, the number of cellular subscribers reached 40.0 million compared to 110,515 in 2000. Other than policy changes, the outcome also resulted from increased investment by public and private entities in tower infrastructure, wireless local loop (WLL), and National fibre backbone, as well as competition in the market. The number of licensed radios also increased from 4 in 2000 to 123 in 2016, while that of TV stations (including free on air and cable TVs) increased to 46 from none in 1993 (TCRA, 2016).

Further development included completion of construction of the Optic Fibre Cable (OFC) Backbone (Phase I and II) of 7,560 kilometres, covering 24 regions and several districts of Tanzania Mainland, and connecting to neighbouring countries namely Kenya, Uganda, Rwanda, Malawi, Burundi and Zambia (URT, 2014). The Cable is also linked to four operators; TTCL, ZANTEL, SimbaNet, and ZAIN (Celtel Tanzania Ltd), and two undersea cables: SEACOM and EASSy. Phase I was completed in 2010 and Phase II in 2012. The project was funded by a soft loan of USD 170 million from Exim Bank of China and TZS 17.72 million contribution from Government of Tanzania. Phase III- sub-Phase I of the project, which involved construction of a full-mesh IP layer network, construction of National Internet Data Centre in Dar es salaam for hosting IT services and Connecting Zanzibar and Pemba to the National ICT Broadband Backbone [(NICTBB) -through Dar-Zanzibar and Tanga – Pemba] was completed in June 2016 at a cost of USD 93.8 million, also a soft loan from Exim Bank. These developments largely contributed to the 10.5 percent growth of information and communication during 2009-2012 compared to 3.8 during 2006 – 2008.

Although the contribution of **transport and storage** was relatively higher at 7.1 percent in 2006-2016, its potential is much higher given the geographical advantage the country enjoys. Tanzania has the longest Railway Network in the EAC Region with 2,707km under Tanzania Railway Limited (TRL) and 975km under Tanzania Zambia Railway Authority (TAZARA). The network has a total capacity to

[6] By December 2016, there were six mobile network operators, namely TTCL Mobile, Vodacom Tanzania, Bharti Airtel (formally Zain, celtel), Tigo, Zanzibar Telecommunication (Zantel), Halotel (Vietlet Tanzania) and Mobile Virtual Network Operators (MVNCS).

transport 10 million tonnes a year. However, average capacity utilization over the past 7 years is 4.1 percent, implying that most of the cargo is transported by roads. Freight cargo, through TAZARA, for instance, declined to 128,105 tonnes in 2014/2015 from the peak of 1.3 million metric tonnes in 1986/1987. **Table 6 and Table 7** illustrate the volume of transit cargo through Dar es Salaam Port to landlocked countries and the volume of cargo via TRL and TAZARA over time.

Table 6: Performance of transit cargo to landlocked countries

Tonnes

Country	2011/12	2012/13	2013/14	2014/15	2015/16
Zambia	1,627,537	1,858,718	1,818,141.0	1,737,650	1,801,932
DRC	965,639	965,377	1,352,449.0	1,677,527	1,465,218
Burundi	336,410	308,180	346,149.0	332,149	351,471
Rwanda	436,029	636,998	670,634.0	724,683	851,233
Malawi	92,869	93,411	141,536.0	94,276	107,449
Uganda	74,670	190,876	122,318.0	127,737	156,276
Others	0	109,717	452,194.0	319,273	101,686
Total	3,533,154	4,163,277	4,903,421	5,013,295	4,835,265

Source: Economic Survey 2016

Table 7: Cargo shipped by TRL and TAZARA

Tonnes

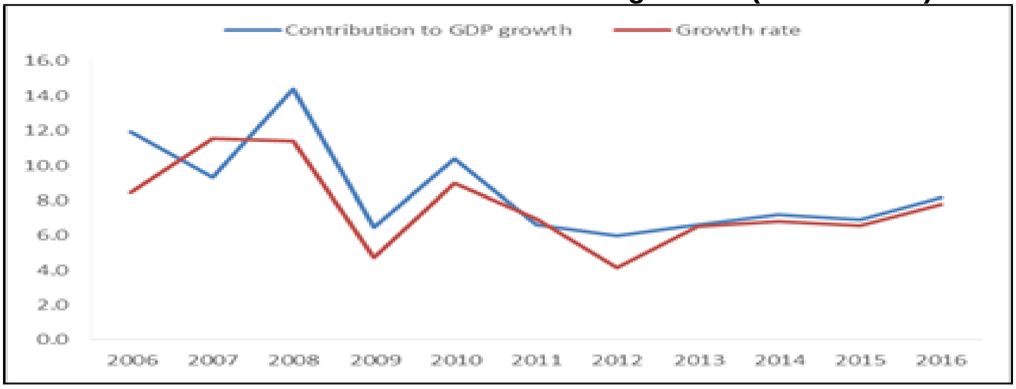
Railway line	2010	2011	2012	2013	2014	2015	2016
TAZARA	540,000	248,000	259,000	245,000	33,000	87,860	128,105
TRL	265,000	138,000	154,000	185,000	127,000	283,000	209,203
Total	805,000	386,000	413,000	430,000	160,000	370,860	337,308

Source: Economic Survey, 2016

Manufacturing whose growth is considered the main driver of structural transformation, has been growing at an average of 7.5 percent during 2007-2016, with highest growth of 11.5 percent in 2007 and lowest growth of 4.1 percent in 2012 (**Chart 1.7)**. The trend however, shows positive signs of growth from 2012 on account of improvement of electricity supply following new investments in power production by the government and private entities[7]. The performance is also explained by the flow of FDI whose stock in 2013 amounted to USD 2,409.9 million, of which 64.0 percent was made between 2009 and 2013.

[7] Kihansi, Ubungo I, Ubungo II, Tegeta, Mtwara, Somanga, Songas, and Nyakato power stations. Over the recent, Rural Energy Agency (REA) Power distribution projects have also increased access to electricity from 49.4 percent in 2007 to 67.5 percent, the progress expected to boost off-farm activities and productivity in rural areas. The standalone power projects promoted by REA include: Mwega Hydro (Mufindi: 4MW); Andoya Hydro (Mbinga: 500kw); Tulila (Songea: 7.5MW) Ngomeni Bio Mass (Mafia: 1.2MW);

Chart 1.7: Growth and Share of Manufacturing sector (2006 – 2016)



Source: Bank of Tanzania

Recent investments in cement industries, and expanding demand for raw materials for manufacturing and consumer goods partly explain the increase of production of some items. For instance, lime production, a raw material for cement production rose by 23.8 percent to 103,704 metric tonnes in 2016 from 88,617 metric tonnes in 2015 largely associated with increase in cement production[8]. Entrance of Dangote Industries Limited in 2016 and expansion of Tanga, Twiga, Athi-River Mining (Rhino cement) and Mbeya Cement Factories has increased production of cement in the country by 38.9 percent to 4,355,000 tonnes in 2016, up from 3,134,900 tonnes in 2015, making the country self-sufficient in cement[9]. In a span of the last two years, there has also been an increase in investments in manufacturing, particularly in the Coast region, some of which have commenced production and others are in the construction stage. By June 2017, Coast Region had 26 big industries (classified in terms of capital and number of employment which is 100 or more), mainly in Bagamoyo, Kibaha and Mkuranga Districts (**Appendix 3**). The factories include:

1. Biotech Product Limited Tanzania factory in Kibaha; inaugurated in July 2015, fully owned by the Government (NDC) and producing two types of biolrvicides (bactivec and griselesf) for the domestic market and export. The factory has an installed capacity of 6,000,000 liters of biolrvicides per annum with current capacity utilization of 1,200,000 liters per annum and employment of 112 people.
2. Goodwill Ceramics Limited based in Mkuranga - commenced operation in March 2017, producing ceramics and selling in EAC and Democratic Republic of Congo (DRC). The plant has an installed production capacity of 20 million cubic metres of tiles per year and is expected to employ 4,500 workers. However, the current capacity utilization is 2.4 million cubic metres with employment of 700 workers by June 2017. Low capacity utilization is partly explained by low domestic demand and high transport costs to regional markets.

8 As at June 2017, there were 11 cement-manufacturing plants with installed capacity of 10.8 million metric tonnes from 7.2 million metric tonnes.

9 By Dangote Industries Limited Tanzania with estimated investment capital of USD 500 mil, commenced production in March 2016, and has installed capacity of 3.0 million metric tonnes per annual. Annual capacity utilization is close to 40 percent. Low utilization capacity of the factory results from competition, shortage of raw materials, especially gypsum which is sourced from Kilwa, and inadequate power supply – now addressed by constructing a gas-powered plant.

3. Bakhresa Food Products, located in Mkuranga, producing soft drinks including carbonated mineral water. The factory has expanded its production capacity from 37,500 tonnes per year to 75,000 tonnes per year and employs 417 people.

Construction also performed well during 2006 – 2016, growing at an average of 12.1 percent compared to 9.4 percent recorded in the seven-year ending 2005. The performance is attributed to completion of various public and private projects including residential and commercial buildings, roads, bridges and airports. Completed housing projects were under the National Housing Corporation, Civil Servants Housing Scheme, Parastatal Pension Fund (PPF) and National Social Security Fund (NSSF). Some of the projects completed include:

- Roads connecting Tanzania to neighboring countries such as Arusha – Namanga (105 Km); Simiyu – Mara: connecting to Sirari (85.5km); roads connecting regions [Tunduma – Sumbawanga (223.2 km), Mbeya – Wanjiro- Chunya (72 km); Iringa – Dodoma (259.8 km); and Manyoni – Itigi – Chaya (89.35km); Singida-Babati (150 km)];
- Roads to de-congest cities and towns including Dar es Salaam Bus-Rapid Transit System (Phase I: 20.9 km).
- Bridges such as Mwl. Nyerere (Kigamboni) Bridge; Malagarasi (Kikwete) bridge, Umoja Bridge and Mkapa Bridge;
- Airports that have either been rehabilitated or constructed include Kigoma, Mwanza, Mafia, Bukoba and Songwe.
- Pipeline projects encompass Kilwa-Songo Songo - Dar es Salaam and Mnazibay- Dar Salaam pipeline.

The performance of **mining and quarrying** is traced back to the late 1990s when the Government formulated the National Mining Policy (1997); followed by enactment of the Mining Act of 1998. The Mineral Policy of 1997 with its revision in 2009, and the Mining Act of 1998 with its revision of 2010 aimed at attracting investment in exploration and mining activities in the country. It also aimed at maximizing benefits from mining and gas extraction activities, improving economic and legal environment for investment, strengthening capacity for administration of the sector, and re-defining roles and responsibilities of players in the mining industry. Reforms in the sector have so far resulted into increased foreign direct investments (especially in gold which saw the stock of FDI growing about five-fold from USD 1,283.7 million in 1999 to USD 6,825.2 million in 2013. The biggest mining projects in the country between 1998 and 2009 included Golden Pride, Geita Gold Mine, North Mara, Tulawaka, Bulyanhulu, Buzwagi and Buhemba, whose investment made Tanzania the 3rd largest producer of gold in Africa (Now fourth after big discoveries in Mali). Other mining projects include Tanzanite One and Tancoal Energy (Ngaka Coal Project)[10]. In spite of the potential and increased mining activities in the country, mining and quarrying has so far recorded dismal growth, averaging 2.1 percent during 2006-

[10] Other minerals include Metallic mineral include, iron, silver, copper, platinum, nickel and tin in metallic minerals category; diamonds, tanzanite, ruby, garnet, emerald, alexandrite and sapphire in gemstone category; and industrial minerals include kaolin, phosphate, lime, gypsum, diatomite, bentonite, uranium, graphite, vermiculite, salt and beach sand.

2016, and contributed an average of 3.9 percent to GDP growth during the period. The performance is largely explained by low value addition and smuggling (Mbowe *et. al*. 2016).

The foregoing analysis indicates that the performance of economic growth in Tanzania over the last 10 years was broad based. It resulted from economic, financial and institutional reforms, which enhanced efficiency in the public and private sector. It was also an outcome of increased investments in infrastructure and human capital overtime.

To complement analysis in this section, growth accounting approach was used to assess contribution of labour, physical capital and total factor productivity in supporting economic growth. The analysis is as provided in section 4.0.

4.0 Growth Accounting Analysis

The paper employs the neo-classical growth model – Solow Model, which presents a simplified picture of the economy as a whole and helps to get an insight into causes of the economic growth and the reasons for the income differences between countries (Acemoglu, 2008). The Model portrays the fact that capital and labour accumulation do not fully explain output growth as there are other factors such as technology, institutional and human capital development, which ought not to be neglected if sustained long run growth is to be realized in the economy. Such factors are captured by residual in the model and termed as total factor productivity (TFP). Assuming constant returns to scale (CRS), the paper employs the Cobb-Douglas production function to derive contribution of different components to the country's growth. The function is of the form:

$$Y_t = A_t K_t^{\propto} L_t^{1-\propto} \qquad (1.0)$$

where Y_t denotes real gross domestic product (GDP), A_t is TFP, K_t is total capital accumulation, L_t is total number of labour used in the production process and the parameters *α* and *(1-α)* are input shares/elasticities ($0 < \alpha < 1$). Deriving proportional changes on equation (1.0) yields:

$$\frac{\Delta Y_t}{Y_t} = \propto \frac{\Delta K_t}{K_t} + (1-\propto)\frac{\Delta L_t}{L_t} + \frac{\Delta A_t}{A_t} \qquad (2.0)$$

Equation (2.0) is the key equation in growth accounting and it says that the percentage change in output is the sum of a fraction (α) of a percentage change in capital, a fraction (1-α) of a percentage change in labour and a percentage change in TFP. Specifically, the parameter *α* in (2.0) is obtained as:

$$\propto = \left(\Delta Y_t / \Delta K_t\right)\left(K_t / Y_t\right) \quad (3.0)$$

In the model, K_t and L_t are observable variables while TFP is not, hence computed as a residual using the following functional form:

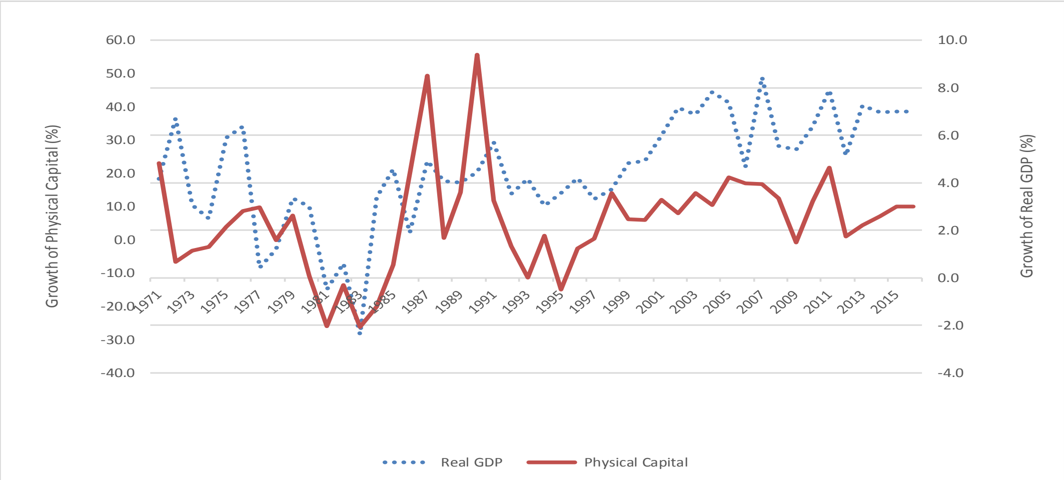
$$\frac{\Delta A_t}{A_t} = \frac{\Delta Y_t}{Y_t} - \alpha\frac{\Delta K_t}{K_t} - (1-\alpha)\frac{\Delta L_t}{L_t} \quad (4.0)$$

To compute for contribution of labour, capital and total factor productivity to growth, excel spreadsheet which is the commonly used software was used[11].

The analysis used real GDP data at constant 2011 prices and real gross fixed capital formation at constant 2011 prices – a proxy for physical capital accumulation. Labour was defined as the number of working population aged 15 to 64 years. The use of the working age population was considered a good proxy for labour since not every individual in the country do contribute to production. The data were obtained from Penn World Tables 7.0.

Before presenting results of the growth accounting analysis, the correlation coefficient analysis was carried out between the real GDP growth and TFP, capital and labour. The results indicated a positive correlation of 0.19 between TFP and GDP growth in 1971-2016, 0.56 percent between GDP growth and capital stood, and negative correlation coefficient of 0.13.between labour and GDP. As indicated in **Chart 1.8,** GDP growth was oscillating in the same direction with the growth of physical capital. It can be noted between 1981 and 1984 when the physical capital was at its worst, about negative 26.1 percent, Tanzanian economy experienced the lowest GDP growth of about 0.3 percent on average.

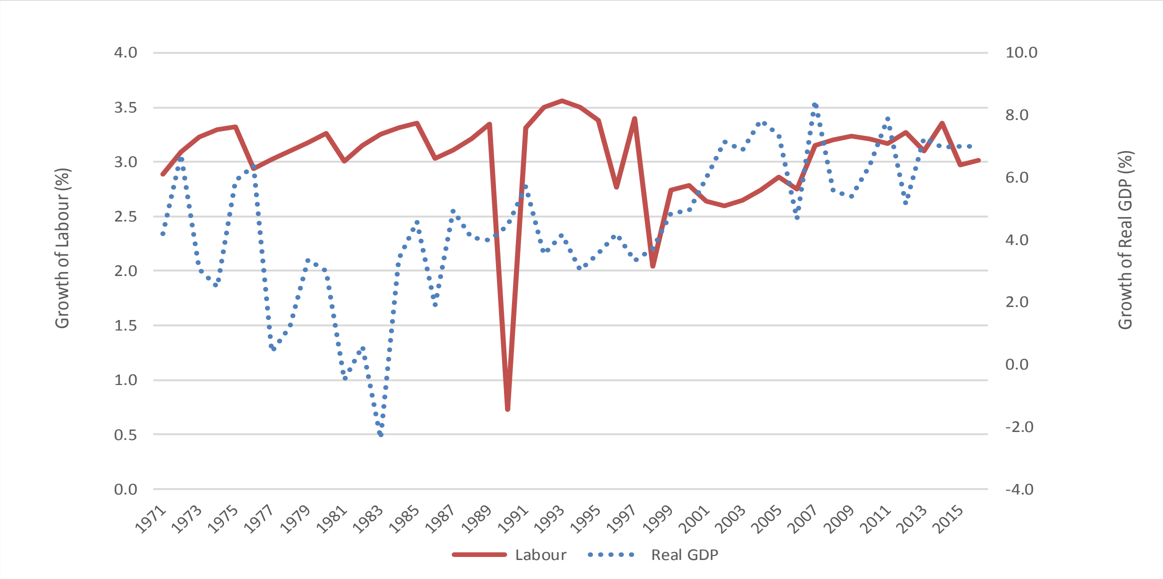
Chart 1.8: Real GDP and Physical Capital, growth trend, 1971-2016



[11] Computations involved three steps: First, developing series of ΔY_t, ΔK_t, ΔL_t and α_t using original data on Y_t, K_t, and L_t. Second computing annual average of ΔY_t, ΔK_t, ΔL_t which are consequently used to determine the contribution of each factor to output (growth accounting). The third step is to compute for $\Delta A_t/A_t$ (TFP) using equation (4.0).

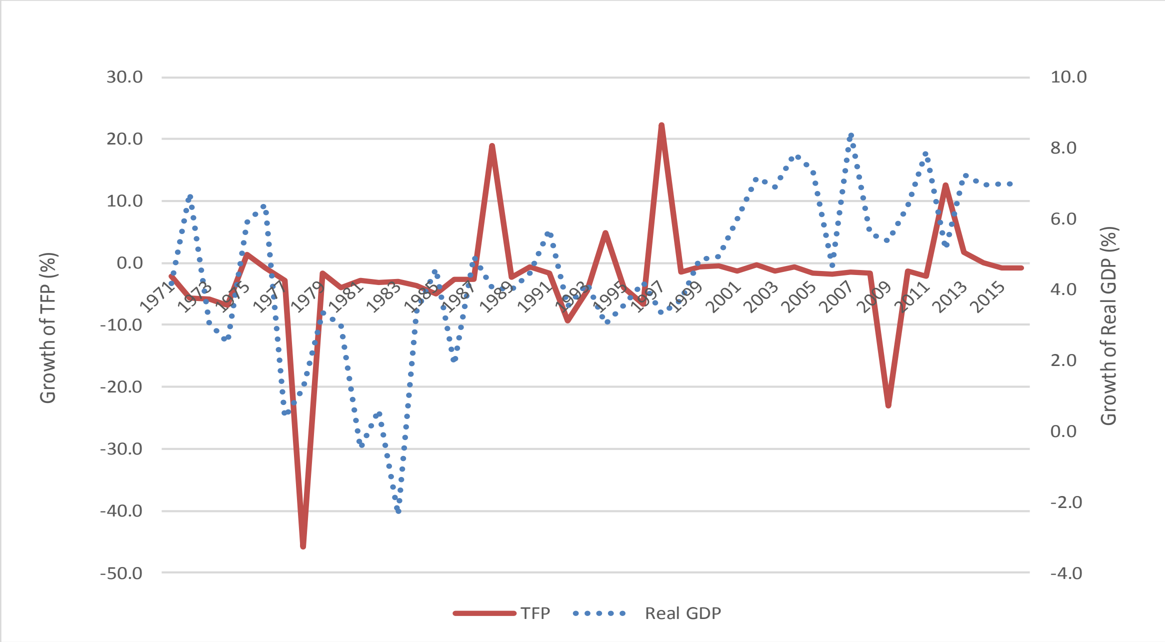
As for labour, correlation results indicated that GDP growth was less associated with labour growth, especially in the period between 1972 and 1999 (**Chart 1.9).** For instance, when the growth of GDP was trending downwards between 1972 and 1983 (2.5 percent), labour was growing at about 3.2 percent. In contrast, growth rate of GDP was 4.1 percent during 1984 and 1991, while labour was growing at about 2.9 percent.

Chart 1.9: Real GDP and Labour, growth trend, **1971-2016**



As indicated in **Chart 1.10**, GDP growth was oscillating in the same direction with TFP although the relationship was weak. While in 1970s to early 1980s TFP growth averaged negative 6.1 percent, GDP growth averaged 2.8 percent, largely attributed to inflexible economic system characterized heavily regulated production structures and state-interventionist policies. During 1988 to 1998 TFP growth improved to an average of 1.4 percent whereas GDP grew by 4.0 percent. This could be the outcome of structural reforms on the supply side of the economy (privatization and liberalization of current account transaction and banking services) as well as the impact of higher foreign direct and public investment on technology.

Chart 1.10: Real GDP and Total Factor Productivity, growth trend, 1971-2016



Growth Accounting Analysis show that during the period 1990 to 2016 the country's economy was largely driven by capital accumulation, which accounted for 71.0 percent of real GDP growth, followed by labour, 19.2 percent (**Table 4.1**). The magnitude of capital stock to GDP is a reflection of both public and private investments in the economy including infrastructure in particular roads and bridges; mining and quarrying; real estate, telecommunication and manufacturing.

Analysis on different periods (1991 – 2000; 2001-2005 and 2006-2016) reveal mixed results (**Table 4.2**). During 1991-2000, GDP growth was largely explained by TFP contributing 121.1 percent. The outturn was partly the outcome of civil service and institutional reforms, which brought efficiency in delivery of public services. In 2001-2005 and 2006-2016 capital stock contributed significantly to economic growth, accounting for 201.3 percent and 61.4 percent respectively. These periods witnessed huge investments in infrastructure by the government where most of the regional headquarters were connected by tarmac roads and national electricity grid system; national fibre optic. There was also an increase of various economic activities led by local and foreign investors. Total factor productivity explains about 10.7 percent of GDP in 2006-2016 with the performance emanating from improved technological advancement and increased efficiency following ongoing investments in public goods and services and reforms in public service.

Conclusively, the results reveal that factor accumulation (capital and labour) together with TFP play an important role in determining output growth for Tanzania consistent findings by Bunini (2017). In spite these results, there is a need to continue with efforts to encourage investments in education especially skills development, health services, finance, communication and ICT, among others, in order to stimulate further TFP growth.

Table 4.1: Growth Accounting for Tanzania: 1990-2016

Source of growth (Input)	Input shares (Average)	Input/output Growth (Average)	Components	Contribution to output growth	Contribution to output (%)
Total capital Stock K_t	$\propto_1 = 0.654$	$\Delta K/K = 0.054$	$\propto_1 (\Delta K/K)$	=0.038(0.654X0.054)	71.0
Total Labour force, L_t	$\propto_1 = (1 - \propto_2) = 0.346$	$\Delta L/L = 0.029$	$\propto_2 (\Delta L/L)$	=0.010(0.346X0.029)	19.2
TFP			$\Delta Y/Y - \propto_1 (\Delta K/K)$- $\propto_2 (\Delta L/L)$	=0.005(0.053-0.038-0.010)	9.8
		$\Delta Y/Y = 0.053$			

Table 4.2: Growth accounting for different periods

Periods	Source of growth (Input)	Input shares (Average)	Input Growth (Average)	Average output growth	Components	Contribution to output growth	Contribution to output (%)	TFP contribution to GDP (%)
1991-2000	Total capital Stock K_t Total Labour force, L_t	$\propto_1 = 0.931$ $\propto_2 = 0.069$	$\Delta K/K = -0.011$ $\Delta L/L = 0.030$	$\Delta Y/Y = 0.038$	$\propto_1 (\Delta K/K)$ $\propto_2 (\Delta L/L$	-0.010(0.931X-0.011) 0.002(0.069X0.030)	-26.6 5.5	121.1
2001-2005	Total capital Stock K_t Total Labour force, L_t	$\propto_1 = 0.578$ $\propto_2 = 0.422$	$\Delta K/K = 0.237$ $\Delta L/L = 0.136$	$\Delta Y/Y = 0.068$	$\propto_1 (\Delta K/K)$ $\propto_2 (\Delta L/L)$	0.137(0.578X0.237) 0.057(0.422X0.136)	201.3 84.4	-185.63
2006-2016	Total capital Stock K_t Total Labour force, L_t	$\propto_1 = 0.450$ $\propto_2 = 0.550$	$\Delta K/K = 0.083$ $\Delta L/L = 0.031$	$\Delta Y/Y = 0.061$	$\propto_1 (\Delta K/K)$ $\propto_2 (\Delta K/K)$	0.037(0.450X0.083) 0.017(0.550X0.031)	61.4 27.9	10.7

5.0 Possible Economic Growth Drivers Going Forward

On the basis of the analysis done in sections 3 and 4, most the economic activities are likely to continue to contribute to economic growth going forward. These include construction, transport and storage, information and communication, and manufacturing. Others include accommodation and food services, finance and insurance; wholesale and retail trade, and repairs as well as electricity and gas. Specifically, *transport and storage* activity will benefit from modernization and expansion of Dar es Salaam port, construction of SGR and on-going construction and upgrading of roads, bridges and central railway line. SGR is estimated to reduce transport cost per tonne per kilometer from USD 0.11 per tonne per kilometer using trucks to USD 0.075 per tonne per kilometer, albeit being slightly higher than USD 0.04 per tonne per kilometer currently charged by Tanzania Railways Limited (**Table 5.1**). Improvement of ports, railway and roads infrastructure, are expected to increase efficiency, reduce congestion at the ports and increase the ports competitiveness in serving neighbouring countries of Malawi, Zambia, Rwanda, Burundi, DRC and Uganda. Transit cargo accounted for 34.1 percent of total cargo handled at the Dar es Salaam port in 2016/17 (**Table 5.2**).

Table 5.1: Transport Tariffs

USD/Tonne/Kilometer

<table>
<tr><th>Item</th><th>TRL</th><th>SGR</th><th>Trucks</th></tr>
<tr><td>Cement</td><td>0.040</td><td>0.090</td><td rowspan="9">Between 0.1 and 0.12</td></tr>
<tr><td>General cargo</td><td>0.030</td><td rowspan="2">0.070</td></tr>
<tr><td>Containers</td><td>0.050</td></tr>
<tr><td>Minerals</td><td>0.110</td><td>0.050</td></tr>
<tr><td>Bulk traffic (average)</td><td>0.040</td><td>0.070</td></tr>
<tr><td>Sugar</td><td>0.050</td><td rowspan="4">Between 0.03 and 0.075</td></tr>
<tr><td>Coffee</td><td>0.030</td></tr>
<tr><td>Maize (up direction)</td><td>0.040</td></tr>
<tr><td>Maize (down direction)</td><td>0.030</td></tr>
<tr><td>Average</td><td>0.042</td><td>0.075</td><td>0.110</td></tr>
</table>

Source: SGR Project Appraisal Document

Table 5.2: Cargo Handled at Dar es Salaam Port

Country	2012/13	2013/14	2014/15	2015/16	2016/17	Percentage change	Percentage contribution
Tanzania	7,969,669	9,432,400	9,900,258	9,405,719	8,561,582	-9.0	65.1
Zambia	1,858,718	1,818,141	1,737,650	1,801,932	1,756,825	-2.5	13.4
DRC	965,377	1,352,449	1,677,527	1,465,218	1,022,411	-30.2	7.8
Burundi	308,180	346,149	332,149	351,471	245,765	-30.1	1.9
Rwanda	636,998	670,634	724,683	851,233	859,805	1.0	6.5
Malawi	93,411	141,536	94,276	107,449	308,571	187.2	2.3
Uganda	190,876	122,318	127,737	156,276	288,028	84.3	2.2
Others	109,717	452,194	319,273	101,686	99,943	-1.7	0.8
Total	12,132,946	14,335,821	14,913,553	14,240,984	13,142,930	-7.7	100.0

Source: Tanzania Port Authority

Manufacturing has a huge potential to grow following the on-going government initiatives to promote and support the industrialization process. The ongoing huge investment in this activity including Mkulazi sugar and cement plants such as Sinoma and Hengya Cement Tanzania Limited, and Motsun Company are expected to increase contribution of manufacturing activities to GDP (**Annex 1**). These investments are in advanced completion stage. Completion of these projects are expected to bring additional production capacity of 8 million tonnes of cement into current capacity of 10.8 million and 200,000 tonnes of sugar into the current potential of 400,000 tonnes.

Transformation of *agriculture* in Tanzania has a high potential to increase the standard of living of the majority of the rural population and have a higher contribution to economic growth. Initiatives to propel transformation of agriculture include distribution of improved cashew nuts seedlings amounting to 10 million between 2016 and 2019; issuance of free inputs especially pesticides, bulky procurement of fertilizers in which for 2017/18, 20,000 of di-ammonium phosphate (DAP) and 30,000 tonnes of urea was procured. Other ongoing initiatives are construction of tractor assembly plant in Coast Region and construction of silos and warehouses, and improved marketing through warehousing receipts. These initiatives are expected to increase productivity through mechanization of agriculture, reduced production cost, and increased farm-gate prices.

Power production and distribution is also an important ingredient of economic growth. Sustainable generation, transmission and distribution of affordable power have been a challenge in the past 30 years, reducing efficiency in power dependent activities, especially manufacturing. Efforts to address this challenge are several, engaging both private and public sector. There are a number of on-going and planned projects to increase power supply both in short-medium term (1-3 years) and long-term (4 years and beyond). In the short – medium term, power generation is expected to increase by 752.5 MW[12] and in the long term by 3,335MW[13]. Increase in power supply has a potential to contribute towards transforming the rural economy, stimulate production especially in manufacturing activity.

Other activities that can complement future economic growth include *mining and quarrying*. The recent government initiative to review and enforce new mining acts (Written Laws (Miscellaneous) Act of 2017) is expected improve value addition, management and revenue collection from the activity. Some of the initiatives include construction of a wall in Mererani Tanzanite mining site, tanzanite auction, joint key stakeholder's pre-evaluation of diamond to be exported and safekeeping of tanzanite prior to auctioning.

[12] Kinyerezi I extension, Kinyerezi II, Somanga Fungu, Rusumo and ORIO.
13 Stiegler's Gorge, Malagarasi, Kakonko, Mbeya geothermal, Shinyanga solar power and Singida wind power.

Matrix 1 illustrates in detail the impact of some of the initiatives on major economic activites, while **Annex 1** provides details of other planned projects.

In nutshell therefore, drivers of economic growth are expected to continue being on-going reforms on improving business environment for more private sector participation in the economy, good governance, policies and initiatives to sustaining growth in agriculture, industry and construction, and service activities. It also involves sustaining macroeconomic stability and increase investment in human capital, especially skills development for industrialization.

Matrix 1: On-going/planned projects, initiatives and expected impact

Activity	Growth 2016 (%)	Contribution 2016 (%)	Expected growth and contribution (Medium and long term)	Driving sub activities	Associated projects/initiatives	Expected impact	Challenges
Agriculture	2.1	6.6	Slight increase	Crops Sugarcane, Cashew nuts	✓ Mkulazi Sugarcane Plantation and Sugar Factor; ✓ Capacity expansion of sugar factories (Mtibwa, Kagera, Kilombero and TPC); ✓ Cashew nuts growing program-10 million cashew crafted seedlings in the country by end of 2017; ✓ Tractor assembly Plant - Kibaha; ✓ Roads and REA power distribution projects; ✓ Warehousing receipts ✓ Silos construction and bulky procurement of fertilizers.	✓ Higher productivity; ✓ Broadened value chain; ✓ Increased employment, tax revenue and foreign currency from -cashew and sugar exports.	✓ Low investment by private sector (especially in livestock, fishing and forestry); ✓ Low agriculture financing and rein-fed agriculture.
Industry and Construction	10.7	35.5	Increase	Manufacturing, construction, mining, quarrying, and electricity supply.	✓ Expansion and modernization ports; ✓ Construction of Standard Gauge Railway Lines; ✓ Rehabilitation and upgrading of the Central Railway line; ✓ Construction and rehabilitation of roads and bridges; ✓ Construction of Tanga-Hoima crude oil pipeline; ✓ Industrialization drive - expansion of existing industries capacity, rehabilitation of closed plants (including	✓ Reduced congestion and increased efficiency of the Ports; ✓ Increased employment, tax collections, and exports;	✓ Untimely inflow of financing, especially for the projects reliant on foreign financing. ✓ Long delays in implementation of some mega

Activity	Growth 2016 (%)	Contribution 2016 (%)	Expected growth and contribution (Medium and long term)	Driving sub activities	Associated projects/initiatives	Expected impact	Challenges
					General Tyre and Kilimanjaro Machine tools); ✓ REA power distribution project, Power generation projects; ✓ Construction of TAZARA flyover and Ubungo Interchange projects - Dar es Salaam; government offices and housing projects; ✓ Construction of LNG plant; ✓ Construction and rehabilitation of Airports; ✓ Construction and expansion of production capacity of cement factories; ✓ Value addition measures for gemstones and legal frameworks for enhancing contribution of mining activities to growth. ✓ Development of Special Economic Zones (SEZ)	✓ Improved transport logistics; ✓ Technological transfer to future generation; ✓ Increased business activities.	inter-related projects. ✓ Few well established producers' clusters. ✓ Weak coordination between key stakeholders in implementing inter-related projects; ✓ Few developed sites for industrial projects.

Activity	**Growth 2016 (%)**	**Contribution 2016 (%)**	**Expected growth and contribution (Medium and long term)**	**Driving sub activities**	**Associated projects/initiatives**	**Expected impact**	**Challenges**
							✓ Low access to credit. ✓ Tariff and non-tariff barriers that limit expansion of cross boarder trade. ✓ Inadequate skills development especially in highly demanded skills coupled with little efforts to prepare local communities to take advantage

Activity	Growth 2016 (%)	Contribution 2016 (%)	Expected growth and contribution (Medium and long term)	Driving sub activities	Associated projects/initiatives	Expected impact	Challenges
							of ongoing and planned projects.
Services	7.6	52.9	Increase	Accommodation and food services (especially, tourism), transport and storage, finance and insurance information and communication,	✓ Efficiency brought by SGR, rehabilitation of central railway line, roads, Dar port rehabilitation; ✓ Phase III of the NICTBB - expanding to district level and metro network; ✓ Reviving of ATCL; ✓ Uptake of insurance services, especially National Health Insurance Fund (NHIF) and Community Health Fund (CHF) National Identification Card.	✓ Increased employment, foreign currency receipts, tax revenue ✓ Improved trade between Tanzania and neighboring landlocked countries. ✓ Increase of foreign exchange earnings	✓ Limited financial resources, ✓ Low promotion of non-traditional tourist sites especially the southern circuit (Mikumi and Ruaha National Parks).

Activity	Growth 2016 (%)	Contribution 2016 (%)	Expected growth and contribution (Medium and long term)	Driving sub activities	Associated projects/initiatives	Expected impact	Challenges
				wholesale and retail trade and repairs.		form logistic services and tourism activities.	

Despite the significance of some of the on-going initiatives, the study identified a number of challenges that ought to be resolved for better outcome. Some of the challenges include:

(i) *Untimely and unmet supply of resources to development projects*: The interviewed stakeholders revealed shortage of resources leading to slow implementation of projects or increasing cost due to change in prices of construction materials overtime. Though there has been improvement in fund release of more than 60 percent of the budgetary allocations from FY 2015/16 in some projects, particularly those in transport and works, still other key priority sectors were budgetary constrained.

(ii) *Dependency on external financing for mega projects:* Field findings revealed that there was long delays in implementation of some mega projects due to long processes involved in accessing external financing. This challenge was vivid in railway and ports projects. For instance, efforts to solicit funding for Dar es Salaam port rehabilitation took about six years – the period considered too long – leading to loss of the potential revenue and efficiency on other sectors depending on the port.

(iii) *Few areas earmarked for industrial projects*: Most of the newly established factories in Coast region are sparsely located, mostly in areas not earmarked for industrial activities, the situation considered to increase cost of production resulting from high cost of establishing supporting infrastructure and other services, hence reducing competitiveness.

(iv) *Inadequate preparations of local communities to take advantage of emerging opportunities*: So far, little efforts have been made to prepare local communities to take advantage of opportunities emerging from the ongoing projects including Hoima – Tanga pipeline and railway projects. These projects have big potential in utilizing domestic inputs including metal, ballast, cement and other building materials. Coordination between key ministries is also minimal in this area. Most of the trainings provided by Vocation Training Institutions lack international accreditation and thus not trusted by international contractors. TIRDO has initiated a programme to certify welders and at the time of the visit 20 welders of level I had already been trained but not yet certified as the Organization is yet linked with internationally accredited institutions due to limited financial resources to meet fees and other related costs. TIRDO and VETA are currently working together to address the challenge and they require about USD 775,000 to cover the cost of fees to accredited institution, purchase of equipment for testing trainees, and setting of the testing site. The training cost per person from level I to III is at a range of TZS 2,000,000 to TZS 3,000,000.

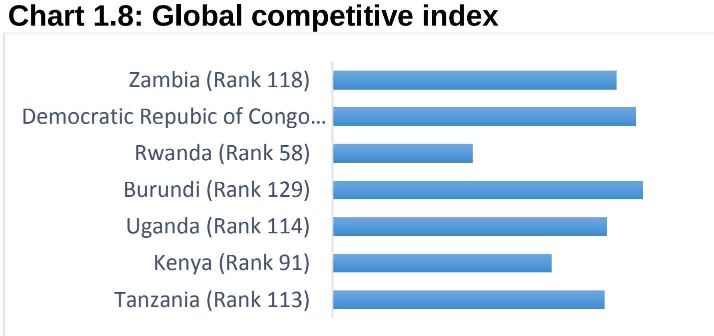
(v) *Slow development of earmarked areas for SEZs*: Study findings showed that areas for establishment SEZs have already been earmarked in the country with compensation already paid in some of the areas including Kurasini Trade and Logistics Centre. It was

however, noted that bureaucracy, completion of alternative land use from regional authorities and inadequate resources by EPZA have delayed development of the identified areas.

(vi) *Few production platforms along railway lines*: Operation of two railway lines in the central corridor will provide a great opportunity for economic activities along the proximity of the rails as well as improve transport logistics for the landlocked countries. However, there are few established production platforms along the railway lines that would make their optimal use including industrial and agricultural production parks.

(vii) *Agro-processing, in particular food processing is considered highly regulated, leading to high cost of production due to duplication of the regulatory functions and fees*. The sector has 22 laws (compared to 12 in Kenya) directed to it and 15 regulations (CTI, 2013). Efforts to improve business environment are ongoing and more time is necessary to perfect it to the desired international standard. According to the Global Competitiveness Report of 2017, the country ranks 113th out of 137 countries on Global Competitive Index, behind Rwanda and Kenya suggesting that more needs to be done to improve business environment in the country (**Chart 1.8**)[14].

Chart 1.8: Global competitive index



Source World Economic Forum, 2017

Similarly, the World Bank Doing Business Report of 2018, which ranked Tanzania 137 of 190 countries on easy of doing business indicated areas that the country is comparatively not performing well. They include starting business, dealing with construction permits, property registration, getting credit, trading cross border and resolving insolvency. The performance is attributed to a numbers of reasons including

14 The index is produced by the World Economic Forum tracking the performance of 140 countries. It captures concepts related to productivity and long-term prosperity. Indicators for the index are grouped in 12 pillars: institutions, infrastructure. macroeconomic environment, health and primary education, higher education and training, goods market efficiency, labour market efficiency, financial market development, technological readiness, market size, business sophistication and innovation.

existence of non-tariff barriers, non-transparency in taxation, and increase in land and property registration fees. Areas that the country is so far doing relatively better include connection to electricity, protecting minority investors and contracts enforcement (**Table 8**).

Table 8: Ranking by easy of doing business (Out of 190)

Indicator	Tanzania		Kenya		Rwanda		Burundi		South Sudan		Uganda		Average EAC	
	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018
Ease of Doing Business Rank	132	137	92	80	56	41	157	164	186	187	115	122	123	122
Starting a Business	135	162	116	117	76	78	18	42	181	181	165	165	115	124
Dealing with Construction Permits	136	156	152	124	158	112	169	168	178	178	151	148	157	148
Getting Electricity	87	82	106	71	117	119	183	182	188	187	161	173	140	136
Registering Property	132	142	121	125	4	2	94	95	181	181	116	124	108	112
Getting Credit	44	55	32	29	2	6	175	177	175	177	44	55	79	83
Protecting Minority Investors	145	129	87	62	102	16	137	132	179	177	106	108	126	104
Paying Taxes	154	154	125	92	59	31	123	138	68	66	75	84	101	94
Trading across Borders	180	182	105	106	87	87	160	164	177	178	136	127	141	141
Enforcing Contracts	59	58	87	90	95	85	149	150	73	81	64	64	88	88
Resolving Insolvency	100	108	92	95	73	78	141	144	169	168	111	113	114	118

Source: World Bank, 2018

Property registration for instance, is mostly associated with difficulties of access to land for large-scale foreign investments (World Bank, 2018). Currently, foreign investors may occupy land for investment purposes through a government-granted right of occupancy ("derivative rights" facilitated by Tanzania Investment Centre, or through sub-leases or partner with Tanzanian leaseholders. In the event foreign investors are interested in village land, the land must first be transferred to general land before being allocated to them. The processes involved in occupying land have resulted into loss of emerging opportunities especially from firms re-locating from emerging economies like China.

Likewise, access to credit by private sector has also been a stumbling block on growth of economic activities, especially in agriculture and in SMEs involved off-farm activities. For instance, domestic credit to private sector as a ratio to GDP averaged 12.9 percent in 2007-2016, much lower compared to other countries in the region, including Kenya whose ratio averaged 29.4 percent in similar period15. Only 10.6 percent of micro, small and medium enterprises in the country access credit from formal financial

15 World Development Indicators (2018).

institutions (URT, 2012), while 23 percent of the total credit goes to MSMEs compared to 47 percent for corporates (IPC, 2018). Small businesses consider procedures for getting credit from banks cumbersome, and the collateral demanded for such loans excessive (URT, 2012).

These challenges are detrimental to the business environment and failure to address them on time are likely to affect negatively the economic drivers and sustained economic growth, hence a need to forge a mechanism to thoroughly address them.

(viii) *Weak coordination amongst projects implementing agencies*: Most of the mega projects implemented in the country are interdependent, but coordination amongst the implementing agencies is weak, leading to either duplication of efforts or time mis-match in their completion. During field visits, only a few institutions were established to have at least a forum to discuss and appraise each other on annual performance of the set targets. Transport sector, for instance, holds annual joint meetings involving all MDAs in the sector including TRL, RAHCO, TPA, TAZARA, TANROADS, PO-RALG and Ministry of Works, Transport and Communication, among others. The forum provides a platform for assessing challenges and propose solutions.

(ix) *Poor developed producers' clusters*. Most of the producers; clusters in Tanzania natural with minimum technical and financial support. They mostly fall under wood and products, metal and tailoring. Experience from other developing countries, including Ethiopia show that clusters ought to strategically be developed to facilitate specific sector interventions and quality support. For example, Ethiopia has managed to developed a cluster in shoe making in Marcato, hence enabling the country to recover from imported Chinese shoes in late 1990s with firms expanding from 500 in 1990 to 1,500 in 2016 (Ali, et. al 2016).

6.0 Conclusion and Recommendations

The current economic activities have the potential to continue supporting future growth given the projects and initiatives that are in place. Sustainability of these activities is however, dependent on timely implementation of the identified projects and initiatives, coordination among stakeholders, deliberate skills development initiatives and establishing connectivity between production platforms and market gateways. This will also include availability of inputs at competitive prices, particularly power and other utilities.

Timely availability of resources is key for any successful plan. Although fund releases have exceeded 60 percent of the budgetary allocations in some sectors, particularly in transport and works, since the financial year 2015/16, a lot needs to be done to improve in this area to ensure planned projects are completed in time and on budget in order to make their full contribution to economic growth. Given huge resources needed to implement, among others, major transport and power projects it is important to have clear strategy for utilizing national resources and cautiously unlock additional sources of finance including PPP and non-concession financial sources.

Transportation will be an important catalyst for growth of economic activities if sufficient financing is made available. However, financial resources are always scarce for a growing economy like Tanzania. The best way to make use of scarce resources is through prioritization. In prioritizing projects, however, consideration should be given to foreign currency generating projects that have a potential to spur growth of other economic activities.

Most of the transportation projects are interdependent hence, synchronization of such projects is critical. For instance, Dar es Salaam port expansion is highly dependent on completion of rehabilitation of the central railway line and the construction the SGR to realize its full potential. Similarly, the Hoima– Tanga Oil Pipeline project, which is planned to be completed in 36 months, is highly dependent on the completion of the new port at Mwambani Bay.

Effective implementation of projects entails coordination among key stakeholders, which will reduce duplication of efforts, misuse of resources and delays or non-completion of projects. For this to happen, there is a need to have a body to coordinate all inter-related major projects and put in place Key Performance Indicators (KPIs) to guide them towards timely completion in order to realize their full potential. There is also a need to have a comprehensive long-term national economic agenda that is binding to guide the development process of the country going forward. Because of its binding nature, such an agenda will ensure continuity of major projects over a longer horizon and sustained contribution to economic growth.

There is a need to put more investment in human capital in general and in skills development for agricultural transformation and industrialization, in particular. For transformation to occur in agriculture, modern agricultural skills such as farming methods, budgeting, bookkeeping, and use and repair of agricultural machinery are important. For industrialization, skills at technician levels are missing. There is therefore a need to facilitate technical skills in collaboration with the private sector. In realizing this, we can exploit the opportunities provided by the government's resolve to extend primary education to form four from standard seven.

Prices of intermediate products, which are inputs in the production process, need to be relatively competitive if Tanzania is to exploit the full potential of its geographic location. Such inputs include utilities (electricity, water, and communication and fuel (petroleum products, coal and natural gas). High taxes downstream for these inputs will have an impact on cost of production upstream, transport costs and may affect price competitiveness of the finished products for export, which will in turn be a constraint to economic growth. Freight costs need to be competitive regionally in order to attract more business and trade from the neighbouring landlocked countries.

To be able to take full advantage of the construction projects, there is a need for deliberate initiatives to be in place at every level to prepare the local communities to take advantage of the construction projects in terms of being able to supply the needed materials at the required standards. It also entails building local skills in various tasks that would be carried out. More financial resources are therefore required for local institutions like TIRDO and VETA in order to train a sufficient number of welders and other technical skills that may be required.

To be able to sustain growth going forward, there is also a need to increased efforts in setting conducive business environment. Tanzania is lagging behind in most of the key indicators of easy of doing business in comparison with countries within the EAC region. More efforts should be put in place to reduce the cost of doing business, which will help to attract foreign direct investment and promote dynamics in private sector. Such efforts should extend beyond tax incentives to good governance, timely and easy access to utilities, access to credit and trading cross border.

In nutshell, the current economic activities have the potential to continue supporting future growth given the projects and initiatives that are in place. Sustainability of these economic activities is however, dependent on policy consistency, timely implementation of the identified projects and initiatives, coordination among stakeholders, deliberate skills development initiatives and establishing connectivity between production platforms and market gateways. This will also include availability of inputs at competitive prices, particularly power and other utilities. Favourable external environment is equally important as some of the projects partly or wholly bank on international markets as sources of finance and demand for goods and services.

Annex I: On-going and planned projects and initiatives

There are a number of on-going and planned projects and initiatives aimed at boosting economic growth. Some of these resulted from the Big Results Now (BRN) initiatives and others from the FYDP II (2016/17-2021/22). Projects covered are mainly those with big impact on the economy in terms of employment generation and contribution to tax revenue. The projects and initiatives include:

Construction of Standard Gauge Railway (SGR) lines

The SGR from Dar es Salaam - Mwanza line (1,219km) will be done in the following five phases: Dar es Salaam – Morogoro (300km); Morogoro – Makutopora (422km); Makutopora-Tabora (294 km); Tabora – Isaka (133km) and Isaka – Mwanza (249km)[16]. Upon its completion, the rail with its branches will link the Indian Ocean port of Dar es Salaam with Mwanza in Lake Victoria, Kigoma in Lake Tanganyika, as well as neighboring landlocked countries of Democratic Republic of Congo, Rwanda and Burundi[17]. The first phase of the project (Dar – Morogoro), which is expected to be completed in 2019 will cost TZS 2.74 trillion (USD 1.215 billion). The construction of the second phase (Morogoro – Makutupora), which will cost TZS 4.0 trillion (USD 1.773 billion) is expected to start soon.

The SGR will be electric powered with a speed of 160 km/hr for passenger's train and 120km/hr for cargo train. The cargo train will have the capacity of transporting 17 million tonnes per annum and 1.2 million passengers per annum. Other SGR projects are: Mtwara – Mbamba Bay line, which link Mtwara Port and the Southern Corridor and also connecting Mtwara Port and Liganga iron ore fields and Mchuchuma coal fields; and Tanga- Arusha – Musoma line (1,108 km) which will link Tanga Port and the Northern Corridor with extension to Engaruka Soda Ash mine and Minjingu Phosphate mines.

Rehabilitation and upgrading Central Railway Line

The Government has secured a USD 300 million loan from the World Bank to rehabilitate/upgrade the existing central railway line from Dar es Salaam Port to Isaka dry port (982km) from the existing 56 and 65 pounds to 80 pounds track rail materials. This upgrade is planned to be completed by 2019. It is expected to increase speed and volume of cargo to a maximum of 5 million tons per annum.

[16] The Tanzania SGR construction will cost USD 5.0 million per kilometer, while that Uganda and Kenya will cost USD 8.4 million and USD 7.7 million per kilometer, respectively.
[17] Its branches are - Tabora to Kigoma (411 km), Isaka to Rusumo (371 km), Keza to Ruvubu (36 km) and Kaliua-Mpanda-Karema (321 km).

Expansion and Modernization of Dar es Salaam Port

The government is undertaking a Dar es Salaam Maritime Gateway Project (DMGP) aimed at modernizing the Dar es Salaam Port. The project to be completed in three years will involve construction of new berths, deepening and strengthening the existing berths, widening entrance channel, among others, and will cost USD 421.0 million. The expansion and modernization of the Port will double cargo handling capacity to 28 million tonnes per annum. It will also reduce ships' dwell time from the current 10 days to 5 days and waiting time at berth from an average of 80 hours to 30 hours by 2020. The expansion is in tandem with expansion and modernization of other sea and lake ports including Tanga- Mwambani Bay, Mtwara, Bagamoyo, Mwanza, Bukoba and Musoma in Lake Victoria; Kigoma and Kasanga in Lake Tanganyika and Mbamba bay in Lake Nyasa.

Special Economic Zone and Export Processing Zone

In an attempt to reduce transport and logistics costs, the Government through Export Processing Zones Authority (EPZA) and the government of China represented by the Yiwu Pan-African International Investment Corporation have signed an agreement to construct Kurasini Trade and Logistic Centre, which will be jointly run under a Public Private Partnership (PPP) model. The project to be implemented in two phases will involve construction of a trading hub at Kurasini and construction of industries for value addition at Bagamoyo Special Economic Zone. Close to 25,000 direct and 100,000 indirect jobs are expected to be generated from this undertaking.

Other Special Economic Zones will be established at Ruvuma, Kigoma, Mtwara and Bagamoyo. In Bagamoyo, for instance, a number of projects will be established aimed at fostering rapid economic development through promotion of exports, attracting investments both local and foreign and employment generation. The envisaged SEZ will be in the form of a Satellite Town and will have the essential infrastructural and technological support facilities. Projects envisaged in the SEZs include Development of Industrial Parks, Trade Parks, Technological Parks, Tourism Industry, Real Estates, Logistics Centers, Financial Institutions as well as the construction of an Airport and Port, all to be located within the SEZ/Satellite Town.

Mchuchuma Coal and Liganga Iron Ore Project

Tanzania's National Development Corporation (NDC) has entered into agreement with Sichuan Hongda Group (SHG) Limited of China to extract coal of about 3.0 million tonnes per year at Mchuchuma and also to produce iron of about 1.0 million tonnes per year and construct a plant for producing steel products at Liganga. Iron reserves at Liganga are estimated at between 200 and 1,200 million metric tonnes, while coal reserves at Liganga is estimated at 480 million tonnes. The total costs of the coal mine project are estimated at USD 1.2 billion while that of Iron Ore project is estimated to be USD 1.7 billion, all to be covered by SHG.

The government share through NDC in both projects is 20 percent while the remaining 80 percent is owned by SHG. Some of the coal will be used to produce 600 MW of electricity-250 MW to be used by the Liganga Iron Ores Mine and 350 MW will feed the national grid. The project also aims at constructing electricity transmission line of 220 kV from Mchuchuma to Liganga. The two projects are expected to generate 32,000 jobs and increase government revenues and exports.

Construction of LNG Plant

The government is also planning to construct a liquefied natural gas (LNG) processing plant in Lindi. The plant will be constructed by the Tanzania Petroleum Development Corporation (TPDC), in partnership with international oil and gas companies at an estimated cost of USD 30 billion. The project aims at processing the natural gas by turning it into LNG for domestic consumption and export. With estimated natural gas reserves of 55.8 trillion cubic feet (TCF), the country is expected to benefit from royalty, profit sharing, corporate tax, fees and charges – all estimated to contribute 1.9 percent of GDP by 2040 (Henstridge and Rweyemamu, 2017).

Mkulazi Sugarcane Plantation and Sugar Factory

Mkulazi sugarcane plantation and sugar factory project covering about 63,227 hectares in Morogoro is jointly funded by National Social Security Fund (NSSF) and Parastatal Pension Fund (PPF). The factory is expected to produce 200,000 tonnes of sugar per year and employ about 100,000 workers. Combined with expanded capacity of the existing 5 factories, upon completion the project is expected to enable the country meet projected demand of 755,000 by 2020/2021.

Construction of Crude Oil Pipeline – Hoima to Tanga

Construction of crude oil pipeline from Hoima (Uganda) to Tanga is expected to create between 6,000 and 10,000 jobs during the construction stage, and 10,000 jobs during operation. The 1,445km pipeline to be completed in 2020 is expected to transport between 200,000 and 216,000 barrels of crude oil per day. The cost of the project is estimated at USD 3.5 billion. The project is depended on the new port to be constructed at Mwambani Bay – Chongoleani area.

Construction of National ICT Broadband Backbone

Phase III: sub-phase II of the NICTBB project plans to expand to district level at the cost of USD 309 million. The infrastructure will allow faster access to information and open up opportunities for sustainable socio-economic development including implementation of e-government, e-learning, e-health and e-commerce. The government in partnership with mobile network operators – Zantel, Tigo, Voda and Airtel is now constructing metro data networks.

Construction and Rehabilitation of Roads and Bridges

The government commitment to infrastructure development as a means to open up the country for economic activities is well documented. There are a number of road projects planned for the next five years aimed at either connecting regions that are yet to be connected or creating alternative route between regional headquarters or neighboring countries[18].

Establishment of Tractor Assembly Factory

To increase productivity through mechanization of agriculture, NDC with support from Polish Government of USD 55 million has established a tractor assembly factory at Kibaha. The factory is expected to assemble a total of 2,400 tractors, 2,400 ploughs and 2,400 harrows mainly for the domestic market. Currently, the factory is operating in a temporary building while construction of the assembly plant is ongoing. Tractors assembled so far are of HP 50; 65, 75, and 85 – awaiting approval for sale. By the time a visit was made to the factory, district councils had already ordered 450 tractors.

Construction of New Cement Factories

Besides the existing eleven cement factories in the country, efforts to facilitate establishment of new cement factories are ongoing. Sinoma and Hengya Cement Tanzania Limited and Motsun Company are planned for construction in Tanga and Coast Regions, respectively. Sinoma will have production capacity of 7.0 million tonnes per year and will create 8,000 direct employments. This project, which is expected to cost USD 2.35 billion, will produce cement for domestic market (30 percent) and for export (70 percent). As for Motsun, the factory will have the production capacity of 1 million tonnes per year.

[18] The road projects that are on-going or planned for implementation include Itoni-Mkiu-Ludewa-Manda; Tabora-Ipole-Koga-Mpanda; Mbeya-Makongolosi-Rungwa-Itigi-Mkiwa; Manyoni-Itigi-Tabora; Handeni-Kibereshi-Kibaya-Singida; Kigoma-Kidahwe-Uvinza-Kaliua-Tabora; and Kidatu-Ifakara-Lupilo-Malinyi-Londo-Mumecha/Songea; and Nyanguge-Musoma.

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Appendix 1: Leading Survey Questions

1.1 Ministries/Departments and Agencies

1. What are the key development plans for your organization? How are these aligned with the National development plans? What areas of the national plans will your plans have the biggest impact?
2. Any programs, plans and projects set in line with the FYDP II?
3. What was the estimated cost of the programs/projects and sources of financing?
4. Please, describe milestones achieved with respect to programs/projects to date.
5. Any impact of the programs/projects under your mandate to the nation-wide economic growth (e.g. revenue generation, employment, economic-wide efficiency)?
6. In your view, are there alternatives, other than the existing tax and donor financing, that could be used to finance on-going and new projects?

NB: Please avail any relevant documents including policies, strategies and any other relevant reports.

1.2 Companies/Business Entities

1. When was your company established?
2. Ownership structure? And what proportion is foreign and locally owned?
3. Actual and potential number of employees (permanent and temporary).
4. Which products/services does your entity produce?
5. Amount and source of capital and what proportion of this was foreign sourced?
6. Of the goods you produce, what proportion is sold in the domestic Market; EAC market and Outside EAC Market?
7. Do you think there will be changes in demand of your products/services in the next 5 years? If yes, what do you think would be drivers for changes?
8. What are your plans in the next 5 to 10 years in terms of expansion of your operations/investment?
9. Any linkage of the activities of your company to the domestic economy? -- e.g. any inputs sourced from the domestic market by your company (percent of total)?
10. What is the current capacity utilization of your firm (full capacity)? How do you rate capacity utilization of your firm (machines/equipment)? (i.e. is the current capacity utilization as per plan? If not please explain.)
11. If capacity utilization is below 50% of the planned capacity; what constraints does your entity face to realize the desired capacity utilization level? (mention three major ones)
12. How do you rate facilitative environment provided to you in setting set up your entity (registration, processing and set-up of utilities; payment of utility bills, etc).

13. Are you aware of what is contained in the FYDP I and II? If yes, how does your operation relate to the plans? Is the success of your firm dependent on what is done in the plan e.t.c.
14. Any comments to improve the current investment/business environment?

Appendix 2: Institutions Visited

S/N	INSTITUTION	CONTACTED PERSON	TITLE
1	National Bureau of Statistics	Mr. Daniel Masolwa	Statistician
2		Mr. Muhidin Mtindo	Senior Statistician
3	Ministry of Works, Transport and Communication	Mr. Jamal Brown	Assistant Director, Department of Policy and Planning
4	Ministry of Communication Science and Technology	Mr. Adam Mwaigoga	Assistant Director, Policy and Statistics
5	Tanzania Telecommunication Company Ltd	Mr. N. Mwamukonda,	Technical Coordinator, National ICT Broadband Backbone (NICTBB)
6	Reli Assets Holding Company (RAHCO) Ltd	Eng. Maizo M. Mgedzi	Project Manager
		Ms. Nzeyimana Dyegula	Senior Planning and Investment Manager
7	Tanzania Electric Supply Company (TANESCO)	Eng. Rwabangi Lutenganya	Manager Investment
8	Rural Energy Agency (REA)	Ms. Justina Uisso-Rusali	Project Appraisal and Supervision Manager
9	State Mining Corporation(STAMICO)	Mr. Deusdedith Magala	Director of Human Resource and Administration
		Ms. Zena S. Kongoi	Ag. Director of Mining and Engineering Services
		Ms. Zena Kongoi	Ag. Director -Engineering Services
12	Ministry of Energy and Minerals	Mr. Oscar Kashaigili	Ag. Director of Policy and Planning
13	Tractor Assembly Plant - Kibaha	Mr. Adam Mbura	Manager
14	Coast Region-Commissioners Office	Mr. Sirikwa Suleiman	Regional Trade Officer
15	NBS –Coast Region	Kalisto Lugome	Regional Statistical Manager
16	Good Will (T) LTD	Mr. Msafiri Figa	Human Resource Officer
17	Tanzania Biotech Products LTD	Mr. Samwel Mziray	Director General
18	Export Processing Zone Authority	Mr. Lamau A. Mpolo	Director of Planning and Development
19	Tanzania Investment Centre	Geofrey Mwambe	Executive Director
20	Tanzania Port Authority	S. A. Mlawa	Business Development Manager
21	National Development Corporation	Mr. Godwil Wanga	Director of Research and Policy

22	Small Industries Development Organization	Mr. Titus G. Kyaruzi	Director of Marketing and Investment
23	Vocational Education and Training Authority (VETA)	Mr. John Ndega	Labour Marker Analyst
24	Tanzania Trade Development Authority (TANTRADE)	Mr. Fidelis Mugenyi	Director of Trade Support Services
25	Tanzania Chamber of Commerce and Agriculture	Mr. Gotfrid Muganda	Ag. Executive Director
26	Tanzania Industrial Research and Development Organization (TIRDO)	Dr. Lugano Wilson	Head, energy Technologies Division
27	Confederation of Tanzania Industries	Mr. Leodegar Chilla Tenga	Executive Director

Appendix 3: Large Industries in Pwani Region

District	No	Industry	Products produced
Kibaha	1	Kiluwa Steel Group Co. Ltd	Products of iron & steel
	2	Alave Estate	Sisal ropes & products
	3	Equator Suma JKT	Assembly m/vehicles
	4	TC Industry	Plastic products
Kibaha Mji	5	Hong Yu Steels (T) Co Ltd	Rolled steel
	6	Organic Co. Ltd	Poultry Production and Slaughtering
	7	KEDS Co. Ltd	Soaps and detergents
	8	Global Packaging (T) Ltd	Packaging materials
	9	NDC - Tractor Assembling Plant	Assemble tractors
	10	Tanzania Biotech Product Ltd	Biotech products to kill mosquito larva
Mkuranga	11	Bakhresa Food Products	Soft Drinks
	12	Maweni Limestone Co Ltd (Rhino Cement)	Cement
	13	Knauf Gypsum(T) Ltd	Gypsum and gypsum-related building materials
	14	Unifly Trade Cooperation	Shoes
	15	Blanket and Textile Manufacturing	Threads
	16	Neelkanth salt Co. Ltd	Salt processing
	17	Lodhia Steel Co. Ltd	Iron products
	18	Lodhia Plastic Co. Ltd	Plastic products
	19	Goodwill Ceramics (T)	Ceramic Tiles
Bagamoyo	20	Abana Printers	Paper
	21	Salibaba Pallets	Animal feed
	22	Elven Agri. Co. Ltd	Fruits processing
	23	Vegeta Podravka Ltd	Food flavour
	24	Hill Packaging	Polypropylene woven bags
Chalinze	25	Sayona Fruits Ltd	Fruit juices
	26	TYWFRORD (T) Ceramics Co. Ltd	Tiles

Source: Regional Statistics Office, Coast Region