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THE UNITED REPUBLIC OF TANZANIA
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STUDY ON THE IDENTIFICATION OF POTENTIAL GROWTH DRIVERS FOR TANZANIA BASED ON AN ANALYSIS OF TANZANIANS COMPETITIVE AND COMPARATIVE ADVANTAGES

GROWTH SECTORS AND GROWTH DRIVERS: A SITUATIONAL ANALYSIS REPORT

Submitted by:

Economic and Social Research Foundation
51 Uporoto Street (Off. Ali Hassan Mwinyi Rd.) Ursino Estate
P.O.Box 31226 Da es Salaam
Tel +255 22 2760260, Fax +255 22 2760062
Web: http//www.esrftz.org

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EXECUTIVE SUMMARY

OVERVIEW

The Government of Tanzania commissioned this Study to facilitate identification of priority growth sectors and respective growth drivers in the context of designing a comprehensive and focused development strategy for the country. At this stage, the Draft Study Report presents a situation analysis for all sectors in the economy, and the results thereon of the growth sectors and drivers proposed.

The following information has emerged:

A. **Growth Sectors:** (i) Agriculture; (ii) Manufacturing industry, including notably SMEs, and (iii) Tourism.
B. **Growth Drivers: (**i) Transport infrastructure, (ii) ICT, (iii) Water infrastructure, (iv) Energy infrastructure, (v) Mining, (vi) Finance and (vii) Business environment.

The following criteria were used to select the growth sectors and drivers:

(a) Sectors that contribute more to the growth of the economy, while having strong forward and backward linkages with the other sectors;
(b) Share of the sector's contribution to the economy (size);
(c) Contribution to employment and impact on poverty reduction;
(d) Leadership in growth (in pace setting or pushing growth); and
(e) Generation of forex earnings and government revenue.

The economy of Tanzania has typically interdependent sectors, though some are more dependent than others. For instance, the productive sectors are supported by other "non-productive" sectors as well as non-sector facilitators, which in this Report have been presented as growth drivers.

GROWTH SECTORS

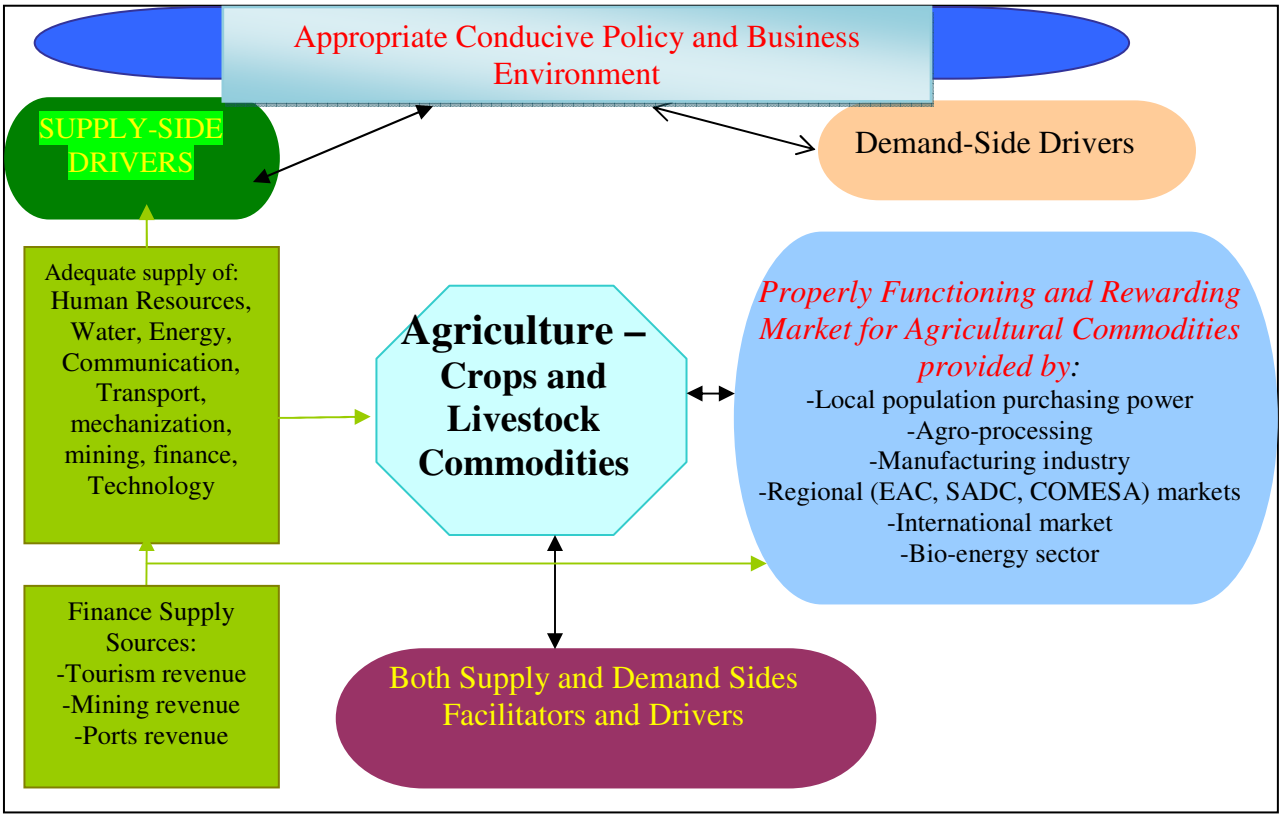
2.0 Agricultural Sector

2.1 *Agriculture as a Growth Sector and its Comparative Advantage*

Tanzania's economy is basically agrarian. The economy depends on agriculture (…% of GDP) that is predominantly smallholder and subsistence in nature. In this context, the country is endowed with about 44 million hectares of land suitable for agriculture, but only 23 percent is utilized. This is a potential for agricultural expansion, including, inter *alia*, livestock production.

The Diagram below is a schematic presentation of the forward and backward linkages. It particularly highlights the growth drivers propelling agricultural sector growth.

Diagram 1- Schematic Presentation of Growth Drivers for the Agricultural Sector



Source: ESRF, 2009

Tanzania's comparative advantage in agriculture is thus based on the availability of land in general , as well as land suitable for irrigation. According to the National Irrigation Master Plan 29.4 million hectares (31 per cent of the total land area) are suitable for irrigation, of which only about 1.0% was under irrigation by end of 2008. The rest is therefore an un-utilized potential.

2.2 *International competitiveness of agricultural sector*

The agricultural sector has traditionally been the major foreign exchange generator. However, in recent years this situation has been dramatically changing with the share of export crops in total foreign exchange earnings substantially declining from 34% in 2000 to slightly below 20% in 2007. On the other hand, in absolute terms, agricultural export earnings have been increasing Though not significantly.

The sector of agriculture in Tanzania has been dominated by small-scale farmers who use rudimentary technology. As a result, their productivity is very low, thus the majority of rural households are vulnerable to food insecurity. On the other hand, in recent years, the sector has demonstrated that previously neglected crops and new niches, such as spices and oilseeds, have good prospects to generate the much needed foreign exchange earnings. This contrasts on balance with traditional export crops such as coffee, tea, cotton tobacco and sisal. In fact, some of the new crops are expanding at a substantial pace. While there shouldn't be any intention to ignore or suppress the traditional crops in favour of the emerging ones, a careful analysis of the comparative and competitive advantage of the crops produced in the country is necessary in order to have the correct priority in public policy and resource investment application.

A common sense analysis suggests that one of the goals of having an efficiently working agricultural sector is to produce adequate food for the population. This will have the immediate effect of pulling down inflation and cost of living, thus making industrial products less costly (food prices account for 50% of the cost of living for the majority of Tanzanians) as demand for increased wages is checked. The accompanying consideration is to maintain steady employment generation in agriculture so as to enhance rural incomes and alleviate the poverty afflicting rural households.

Agriculture's prominence as an engine of growth is underscored by the fact that it has substantial multiplier effects on different segments within the agricultural sector and on other sectors, as well as large spin-off effects on non-farm sectors, mainly through linkages to agro processing and consumption (World Bank 2001).

2.3 *Livestock potentials*

The livestock sub-sector is one of the important contributors to GDP. It contributed an annual average of 5% between 1998 and 2007. Tanzania is one of the largest livestock

keepers in Africa with a total of 19.1mn herds of cattle, 13.6mn goats and 3.6mn sheep. The number of chicken is estimated to be around 30 mn. In the absence of processing plants in the country, export of meat is rare but there is a very high demand of beef and other livestock products in the country. Per capita consumption of meat was an average of 11.4 kg in 2007, less than the global average of 38kg (or Kenya 10kg, China 39kg and 124kg in USA). Hides (collection 17 million p.a.) are mostly exported in raw form.

The livestock sub-sector is linked to other industries such as the super markets, households, crop agriculture, tourism, and chemical and drugs industries.

2.4 Fisheries and Agro- forestry

The agricultural sector, in its wider sense, also incorporates the fisheries and forestry subsectors. The fisheries sub-sector in Tanzania offers great promise, but is also subject to considerable challenges. A major international recognition of Tanzania fish has been gained thanks to the Nile Perch in Lake Victoria. But together with this recognition is the opportunity for the sector to increasingly contribute to the national economy by expanding fishing activities in the country's large lakes as well as numerous rivers, not forgetting the Indian Ocean. The forestry sub-sector, on the other hand, holds an important synergy with other economic activities, especially the farming sector as well as tourism, energy, bee keeping, wildlife and trade, in addition to the protection of the ecosystem. The forests of Tanzania cover approximately 41% of the land mass (about 38.8 million hectares). Fisheries and forests employ over 1.5 million people.

Important challenges still outstanding in fisheries and forestry include a weak regulatory regime, over exploitation of certain resource locations and inadequate financial allocations.

3.0 Tourism sector

With an average growth rate of 10% p.a., the tourist sector expects to attract over one million tourists by the year 2010 (figure for 2000 was about 500,00 visitors). In the past, the sector has been a strong foreign exchange earner, receiving from US$ 570 million in 1998 to $ 1,037 million in 2007. Like agriculture, tourism sector meets the requirements for the sector to be considered a growth sector. It has high potential for different cross-sector linked activities because it has wide and varied resource bases, and ample links with domestic, regional and international markets for its outputs. It is also a consumer of other sectors' outputs, such as food, wild animals, industrial products, floriculture,

handicrafts, entertainment products. It has high spillover effects such that its growth stimulates growth in other sectors of the economy.

Being relatively labour intensive (providing jobs to over 300,000 people) implies that tourism's growth will benefit more people and in the long-run there will be substantial reduction in poverty countrywide. Tanzania has a comparative and competitive advantage in the sector due to the unspoiled natural endowments (*in the form of unspoiled fauna and flora, beautiful natural sceneries and landscapes, coral reef and marine life, and a nearly pristine coastline)* for attracting travelers, not forgetting a supportive government that recognizes private sector leadership in operating the tourist industry. Yet, the sector could expand more if facilitative infrastructures are considerably improved, such as in roads, air transport, power and water supply. These factors would enable the country to compare favorably with other regional competitors.

4.0 Manufacturing Sector

In the last 10 years, manufacturing activities in Tanzania have taken a steady growth, registering average annual growth of over 4 percent, with a 10% contrition to GDP. Most activities concentrate on manufacture of simple consumer goods such as food, beverages, tobacco, textiles, furniture and wood allied products. After economic liberalisation in the mid-1980s, many erstwhile public enterprises could not withstand free market competition. Some died and others underwent privatisation. These measures helped enhance competitiveness of local industries and readied them for venturing into export markets. On the other hand, the sector is not a big employer (145,000 employees), compared to agriculture for example, but it is the most reliable source of government revenue in form of import, sales, corporate and income taxes, accounting for over half of government annual revenue collection. Manufacturing earns the country a fifth of total foreign exchange earnings, thus ranking third after agriculture and tourism. Most production is however concentrated in the Dar es Salaam region.

Great prospects are pinned on development of a robust SME sector, whose promotion, as government has already realised, still lacks appropriate policy backing. A strong and productive industrial structure can only be achieved where SMEs and large enterprises not only coexist but also function in a symbiotic relationship. In this regard, successful promotion of agro-businesses can be considered in the SME development context.

Among the comparative advantages of Tanzania's manufacturing sector are the availability of a potentially large domestic market and Tanzania's adhesion to the EAC and the SADC organisation, as they are potentially important market destinations. But Kenya is proving to be competing better in the region.

5.0 Mining sector

Tanzania's comparative advantage in the minerals sector relies primarily on the existence of rich deposits of valuable minerals, such as gold, copper, silver, other ferrous minerals and industrial minerals. The country possesses and is also already producing coal and natural gas. In addition, Tanzania has known deposits of cobalt, iron ore, nickel, and titanium. However, despite the large mineral endowment, the sector's contribution to national social-economic development is disappointingly small (only about 3.2% of GDP and 3.0% of the country's total domestic revenue). Thus the blessing in mineral resources wealth has not been translated fully into a dynamic driving force for accelerating the country's development.

Tanzania can gain much from using revenues obtained from minerals to transform its economy (e.g. build roads and other key infrastructure as well as invest in agriculture). Because of this unique potential, and that of enhancing external financial inflows (FDIs and export revenue), the sector has in this Draft Report been classified as a growth driver as well.

GROWTH DRIVERS

Six main drivers have been identified, namely: transport infrastructure, water, energy, ITC, and finance.

6.0 Transport and Communication Infrastructure

Transport and communications sector contribution in the GDP has averaged around 5.3% per annum between 2000 and 2007, with very slight deceleration appearing after 2005.

The transport infrastructure is key to the whole economy for moving people and goods to and from the markets. This is of particular importance more so for a large country like Tanzania (886,040 square kilometers of land mass), surrounded by 8 countries: namely Burundi, Rwanda, Uganda, Kenya, Mozambique, Malawi, Zambia, and Congo (DRC). Except for Kenya and Mozambique, the other neighbouring

countries are land-locked and thus need access through Tanzania to major export/import markets abroad.
The Transport sector provides employment, attracts FDIs, and contributes to the Balance of Payments. The Integrated Labour Force Survey (2000/01) estimated that out of total wage employment of 1,159,498, transport and communication contributed about 8 percent.
Despite the above attributes, Tanzania's transport infrastructure is insufficient to meet the needs of the country's widely dispersed population. For example, the fertile regions in the North-west, the west and south are often cut off from the export outlets due to poor roads during the rainy season.

The country is traversed by roads and two main railway systems. Road transport accounts for over 70% of the total traffic and in recent years the government through TANROADS has made commendable efforts to try to expand the road network. The main roads are classified as trunk roads (about 39%) and the rest being regional roads, both managed by TANROADS. This does not include district and rural roads, for a total of 88,540 kms of the entire road network. Yet Tanzania's roads density of 96 .5 km/person is the lowest in East Africa compared to Kenya (261.9) and Uganda (380.8) . The key railway systems are: (i) Central Railway network, cutting through the central corridor from Dar to Kigoma and Mwanza, and (ii) TAZARA running from Dar to Kapiri Mposhi in Zambia.

Presently the Tanzania coastline (over 800kms) is dotted with 4 large ports of Dar es Salaam, Zanzibar, Tanga and Mtwara as well as about 8 smaller ports. There are 6 lake ports operated also by TRC marine services at Lakes Victoria, Tanganyika and Nyasa. The port of Dar es Salaam as well as the two railways are important for servicing transit trade for the neighboring landlocked countries.

7.0 Information and Communication Technologies (ICTs)

Recent developments in Information and Communications Technology (ICT) have greatly increased the opportunities for people to "connect" virtually without the absolute need for physical contact for social or trading purposes. In particular, mobile phone penetration rates in Tanzania have been spectacular. Knowledge and innovation embedded in ITC tools are becoming increasingly important elements of competitiveness. ICT is a complement as well as an alternative to physical infrastructure, now quickly penetrating rural areas.

In Tanzania mobile phone ownership has increased from just over 2000 subscribers in 1995 to 3.8 million in 2006 (approximately one mobile phone per 10 people) and both mobile and fixed lines reaching 6.4 million people in 2006. In the end, the use of ICTs is reducing transaction cost, time, and space barriers, allowing mass production of customized goods and services and substituting for limited factors of production. Yet in Tanzania, ICT is still at a very nascent stage. It is behind Botswana, Mauritius, South Africa and Malaysia by a huge margin, and even Kenya. On the other hand, Tanzania has more radios per person (406) than most sub-Saharan countries (198) , even S. Africa (336).

8.0 Water supply

Water plays a central role in the social and economic development of any country. It touches all spheres of life including domestic, agriculture, livestock, fisheries, wildlife, industry, power production, health, recreation and other social and economic activities. It is also vital for navigation, and the environment for sustenance of ecosystems.

Overall, Tanzania is blessed with abundant water resources, in the lakes (over 60,000 sq.kms) , rivers (over 10 large rivers) and as direct rainfall, without forgetting the Indian Ocean. Apart from surface and underground sources, there are also numerous permanent and seasonal freshwater swamps and flood plains distributed in almost the country's entire major drainage basins, which account for some 2.7 million hectares.

Efficiently and sufficiently supplied water for irrigation and other uses can lead to higher production in agriculture and other sectors of the economy. For example, it will be possible for agro-processing industries to get sufficient raw material throughout the year. Animals also will feed on fresh grass throughout the year and hence be healthier. As a result, more meat and milk will be supplied for consumption and to agro-processing industries. In rural (and urban) areas women and girls will be freer and healthier to undertake other duties for production and education purposes.

9.0 Energy

Energy in the form of electricity and power for machines, vehicles and other equipment is a crucial utility service (demand side) for running operations in many sectors, be it in transportation, water supply, manufacturing , modern agriculture, tourism, mining, education, health services and others.

Tanzania's annual growth in electricity demand is assumed to be roughly 8% up to year 2015 (*source: power system master plan*). But access to electricity in the country is not equitable between the urban and the rural areas, as only 2% of the rural population have electricity in contrast to 37% in urban areas. On average only 10% of the country's population have access to electricity. The level of electrification in Tanzania is abysmally low by both African and World Standards, while it is rising at a rate 10% per annum. Per capita power consumption in Tanzania is estimated at 62 kilowatts, much lower than in comparator countries such as Kenya (120 kilowatts per capita).

Potential power supply from hydro sources alone is huge (about 4.7 – 6.0 GW in total) but only close to 10% is tapped. Gas discoveries have boosted up this potential. Nonetheless, the country's power supply has not been reliable, a factor that is perceived by investors as a severe constraint on enterprise operations and growth. In rural areas people derive their energy mainly from traditional biomass, consisting of fuel wood, charcoal and agricultural waste, which contribute to more than 70 percent of the country's energy supply. With the exception of the capital city, Dar es Salaam, and north-east Tanzania, the rest of the country's access is between 2% and 10%. The low access rate for the rural population is a constraint to development of non-farm activities and to improved quality of life in these areas.

Under the Tanzania Power Sector Master Plan (2006-2031), a total of over 6,000 MW is expected to be generated from installations using diversified power sources. The Plan as well as the National Energy Policy (2003) envisage, among other objectives, addressing the rural energy gap by setting up a Rural Electrification Agency (REA) and a Rural Energy Fund (already established by law in 2005).

10.0 Financing the Country's Growth

Long-term sustainable economic growth requires development of a sound financial system that is consistent with coordinated development of different forms of finance, namely: bank finance, budgetary finance and other non-banking financial services such as stocks and securities, micro-finance and insurance. Banks, now numbering over 25, are complemented by numerous SACCO's, about 4,000 countrywide, and several

hundred micro-finance institutions. In this discussion, the role of the government budget, in financing development, should by all means not be underrated.

Apart from the issue of population access to banking services generally, in which only 10% of the population has access, in contrast with the level of over 20% in other comparable countries, the issue of pertinent interest in Tanzania is agricultural financing. If the agricultural sector is to become a veritable priority growth sector, the need for a successful rural financial system will be a very critical element. In this context, in Tanzania, only 6% of the people have access to financial loans from banks, while the agricultural sector only accounts for 1% of the total loans. Not surprisingly, borrowing in the agricultural sector is a very challenging phenomenon, partly because of the inability of farmers to secure collateral.

In order to finance agriculture without hurting the health of financing institutions, there will be need to hasten efforts to reform the land law to address the issue of collateral, and to ensure that the government provides targeted incentives such as improved infrastructure, formalizes the operations of hire purchase and leasing system and establishes an Agricultural Sector-dedicated bank for development financing.

11.0 The Policy Framework

After identifying the economic sectors and drivers necessary for sustainable economic growth, it has been necessary to emphasize that they would require a supportive environment under which to operate effectively. Such support components will be found in the following measures:

- A sound macroeconomic regime: involving fiscal issues, budget planning and management, monetary instruments, credit, and the like;
- An effective policy design and implementation mechanism: functioning through participatory processes, relating to poverty reduction, and aiming at equitable distribution of natural and financial resource benefits;
- A conducive investment and business climate: entailing such elements as appropriate fiscal incentives, effective law enforcement and legal arbitration, regulatory regimes, regional integration and promotion of skills and innovation capacity, etc, all geared to reduction of business transaction costs;
- Good governance: pertaining to social peace and physical security, inclusive government and effective local governance, and solid accountability instruments;

- Appropriate institutional arrangement: important for promoting effective processes of work and encouraging HR performance.

12.0 Concluding Remark and Preliminary Recommendations

One of the objectives of the current Study has been to identify a set of potential 'growth drivers' and 'growth sectors' that merit priority in the allocation of public resources over the medium-term. This requirement resulted in concentrating the analysis on a few sectors of the economy, an approach that might overshadow the importance of certain sectors that at present receive budgetary resources under the standard budgetary arrangements. Such a strategic approach in identifying growth drivers and sectors does not therefore mean that the sectors not highlighted in the Strategy will be left out in the budgets. It only means that priority in allocating incremental resources in the country will target the indentified growth sectors and drivers, so that the anticipated growth targets can be achieved. The approach is also aimed at promoting a coherent direction of both public and private sector efforts.

Preliminary Recommendations:

Details of these appear in each sector section of this Report. What follows below is only a list of few recommendations that seem to be most outstanding. [*The more detailed recommendations for the Strategy with their justifications will be developed in the next phase of this Study*].

Agriculture:

- Maximize the synergies between agriculture and the other sectors, in cognizance of agriculture's many forward and backward linkage features;
- In using public resources and issuing policy guides, prioritize the promotion of new crops without ignoring the traditional crops, as well as food security and agro-processing ;

- Invest more resources in the revival of a strong cooperative movement using experiences from the past as well as the spirit unleashed by the SACCOS movement;
- Invest more resources in irrigation, particularly the stallholder type;.
- Enhance capacity for surveillance and enforcement of rules and regulations pertaining to fishing and forestry activities;

Manufacturing

- De-concentrate industrial development away from Dar es Salaam city through application of relevant policy and fiscal measures, EPZs, better spread of good infrastructures (roads, power, water, ICT, finance services,) and other incentives;
- Promote more robust SMEs and their links among themselves and with large firms.

Tourism

- Establish more training opportunities in this area;
- Expand the practice of Community-based tourism (CBT);
- Prioritize the tourist areas in the development of physical infrastructures;
- Continue strengthening the protection of wildlife.

Mining:

- Complete the review of the revenue benefits derived by the country from the mining operations
- Mobilize resources to pursue exploitation of discovered mineral reserves.

Transport

- Ensure that all parts of the country are accessible throughout the year;
- Emphasize good maintenance of existing structures;
- Highlight need for multi-mode planning of transportation to maximize synergy among different modes (roads, railway and marine and to a certain extent air transport).

ICT:

- Enhance capacity building, particularly training;
- Further strengthen the regulatory framework.

Water:

- Improve water access, giving more priorities to regions experiencing acute shortages of water;
- Strengthen the infrastructure for harvesting and storing water;
- Seriously address the issue of maintenance of existing facilities.

Energy:

- Mobilise more funds to expand power generation from known hydro sources;
- Enhance interconnectity with neighbouring countries;
- Continue with diversification of electricity power sources.

Finance:

- Enhance further public private partnership to increase the response of the private sector in taking up more daring opportunities;
- Tighten government spending through more sharpening of focus of performance objectives and entrench a culture of economy and value for money in spending.

Environment Favorable for the Growth Strategy

- Continue the vigorous efforts started to fight corruption;
- Enhance transparency and scrutiny of public policy and actions;
- Promote more forcefully transit trade.

1.0 INTRODUCTION

1.1 General Overview

Tanzania requires a strategic approach to accelerate sustained economic growth above the current trend of an average growth rate of 6.8 percent per annum since 2000. The current 2007 PHDR emphasizes need for Tanzania to accelerate its economic growth by developing a comprehensive growth strategy that embodies a strategic approach through prioritized growth drivers. Thus the strategic approach implies that Tanzania should select an active and strategic promotion of a set of potential "growth drivers" identified on the basis of Tanzania's comparative and competitive advantages. Once the growth drivers and growth sectors are identified in this study, a growth strategy would be formulated with the objective of shifting Tanzania towards a more dynamic growth path over the medium to long-term.

In order to achieve the targets set by the Tanzania Development Vision 2025 and the Millennium Development Goals (MDG's), real GDP growth needs to be boosted and sustained at an average of 8 -10 percent per annum. The President's Office, Planning Commission (PO-PC) has set aside funds through the Government of Tanzania to facilitate a study on *The Identification of Potential Growth Drivers for Tanzania Based on an Analysis of Tanzania's Comparative and Competitive Advantages.*

This study will look into these aspects of growth along with those more specific to sectors in order to identify the potential growth drivers/growth sectors of the economy based on their competitive and comparative advantages.

1.2 Objectives of the Study

The major objective of this study is to provide a comprehensive account on growth drivers and growth sectors as a main input into the formulation of a growth strategy for Tanzania. The growth strategy will enable Tanzania to meet the MDG's and realize the goals set out in the Tanzania Development Vision (TDV) 2025.

The specific tasks involved in implementing the study include the following:

- Conduct a comprehensive analysis of Tanzania's comparative and competitive advantages;
- Identify a set of potential 'growth drivers' and 'growth sectors' that merit priority

in the allocation of public resources over the medium-term;

- Identify strategic policy objectives for each growth driver for the medium-term period 2010/11-2014/15;
- Design an implementation plan for achieving these objectives; the implementation plan must clearly specify:
    - a) resource requirements (financial and human),
    - b) how these will be met,
    - c) requisite policies and institutional arrangements, and
    - d) Monitoring and evaluation schemes.
- Analyze potential risks and difficulties that may be faced in attaining the strategic policy objectives and identify measures to mitigate these risks.

The implementation of this study is to be done in three phases having three distinctive outputs ash shown in the table below

Table 1.1 Implementation flow of the study

SN	PHASE	DESCRIPTION	OUTPUT
1.	Inception phase	describing the methodology estimated costs and work-plan for the study	Inception report
2.	Situational Analyses Phase	an in-depth analysis of the growth drivers and growth sectors	situational Analysis Report
3.	Strategy Report Phase	a framework from which the next MKUKUTA will be developed	Growth strategy Framework

The following report is the second phase of the study that presents situational analysis of the Growth Sectors and growth drivers in Tanzania.

This report is organized in eight chapters, the first section introducing the concept of the study and its background justifying the relevance of the investigation. The second chapter gives an overview of Tanzania's profile in terms of its comparative advantage. It delves into the natural resource endowments, its strategic geographical location, the utilization of resources both natural and environmental. It also opens up Tanzania's economic situation focusing on its growth dynamics, incomes and human development and Labour force and employment situation. The proceeding chapter defines growth sectors and growth drivers. It clarifies the features of each component and brings forth the criteria for selection of the growth sectors and growth divers hereby explained in

detail in chapter four and five. A matrix to show the relationships of the growth sectors and drivers is also presented in this chapter. Based on this relationships and criteria, chapter four delves deeper into the key sectors in the economy that will give quick returns in the short and the long run in terms of employment, productivity and multiplier effects tp the economy, these include, Agriculture, manufacturing and small and medium size Enterprises. The growth drivers that will accelerate the development of these sectors have been discussed in chapter five and include water, infrastructure both hard (transport networks) and soft (ICT's), energy and the business environment. financing is a major issue for the acceleration of economic development an thus some sectors like bakning and mining have been proposed to be avenues of revenue for the identified sectors and drivers as chapter six will show. In order for the sectors and drivers to work seamlessly, there needs to be an enabling environment economically, politically and socially. Issues of macroeconomic environment, business and investment climate, innovation efficiency, good governance and a conducive political environment including policy design and management have been put forth in chapter seven as issues to consider creating a good environment for good performance of the sectors and drivers proposed in the situational analysis. Chapter eight wraps up the situational analysis with conclusions of the proposed growth drivers and sectors

2.0 A PROFILE OF TANZANIA

2.1 Geography, Resource Endowment and Utilization

This section provides a background for the understanding of Tanzania's resource endowment, including its geographical location, and comparative advantage, both of which are crucial for analysis of growth sectors and growth drivers.

Tanzania has a total area of 945,000 sq. km. of which 883,000 sq. km is land made up of 881,000 sq. km. in the Mainland and 2,000 sq. km. in Zanzibar. Inland waters occupy 62,000 sq. km; there are three big lakes, namely lakes Tanganyika, Victoria and Nyasa, all important for fishing and water transport. The country has a number of big rivers like Rufiji, Ruvuma, Wami, Malagarasi, Pangani and Mara.

Tanzania is endowed with a rich natural resource base and easy access for regional and international trade. Tanzania is surrounded by eight countries, six of which are land locked (see table below). With a population of slightly more than 192 million, the neighbouring countries provide a potential market for Tanzanian goods and services, and a potential expansion of transit trade with the land locked countries

Table 2.1: Countries bordering Tanzania (Area and Population size)

S/No.	Country	AREA sq km	Population size	
1	Kenya	580,370	38,600,000	
2	D.R.C	2,344,858	68,692,542	Land locked
3	Burundi	27,830	8,988,091	Land locked
4	Rwanda	26,338	8,000,000	Land locked
5	Malawi	118,484	14,268,711	Land locked
6	Mozambique	799,380	21,669,278	
7	Zambia	752,618	11,862,740	Land locked
8	Uganda	24,1 040	30,000,000	Land locked
Total			192, 072362	

Source: various reports

The country has a rich potential for agriculture. There is a large hydropower potential and wide range of mineral deposits including gold, diamonds, Tanzanite, tin, iron ore, uranium, phosphates, coal, gemstones, nickel, and natural gas deposits. The terrain of the country varies and so does the climate and agro-ecological zones. The terrain is market by plains along the coast, plateau in the central area, and highlands in the north and south. The vast majority of the population lives inland far away from the coastline. The climate varies from tropical along the coast to temperate in the highlands. On average the country gets an annual rainfall of 1000 millimeters. The wide diversity in the agro-climatic zones minimizes the countrywide risk of weather-related crop failures.

Good land and climate notwithstanding, the country has managed, to put only 10 percent of its land area under cultivation. This low utilization rate however masks the fact that there is a wide geographical variation in population densities and hence pressure on land. Moreover, deforestation and overgrazing threaten desertification of a sizeable proportion of woodland in the country.

The climate is predominantly tropical with a bimodal and unmoral rain patterns. Bimodal pattern includes short and long rains in areas around Lake Victoria basin, northeastern highlands and northern coast and highland areas. Short rains occur during the months of September to December and long rains begin in March and continue until May.

The country has a total population of about 39 million people of whom 38 million live in the Mainland and about 1 million live in Zanzibar. The population growth rate is 3.2 percent. The age structure of the population is characterized as young. Due to the youthful structure of Tanzania's population, its labor force is growing rapidly and outstrips growth in employment opportunities. Due to the overwhelming numbers of youth in the population, the labor force is young, with 50 percent of labor force below 30 years.

The population of Tanzania is predominantly rural, accounting for 76 percent of the total. The share of the urban population in total, however, has been rising rapidly as a result of a combination of high population growth and migration from rural to urban areas. Although there is on average no population pressure on land, delayed demographic transition holds back development. Moreover, deforestation and

overgrazing threaten desertification of a sizeable proportion of woodland in the country.

More than 80% of the employed working-age population is engaged in agriculture. Most of them work on smallholdings as self-employed or unpaid family workers. Those working primarily as paid-employees are few, but involvement in occasional wage work is common especially for youths, women, and members of the lower income household.

Infrastructure remains a key constraint to exploiting Tanzania's potential. To achieve high growth, a closer attention needs to be paid to Tanzania's infrastructure network to enable improved accessibility to productive locations. The transport network is geared toward serving an economy dependent on the outside world for output markets and imported inputs, leaving gaps for a cohesive network that would help develop the domestic market. The vastness of the country and wide geographical distribution of economic activities, partly following the location of natural endowments, have posed enormous pressures on the rather undeveloped communication and transport systems.

2.2 Environmental/Natural Resources

The estimated area of Tanzania's forests and woodlands is 38.8 million ha, out of which 15 million ha are reserves that could directly benefit from better and sustainable management as provided under the Forestry Act (2002). However, only approximately 600,000 ha are owned and managed by local governments and only 1% of the total forest reserve area is currently under community based or joint management arrangements**.**

The terrain of the country varies and so does the climate and agro-ecological zones. The terrain is marked by plains along the coast, plateau in the central area, and highlands in the north and south. The vast majority of the population lives inland far away from the coastline

2.3 The Economic Situation

2.3.1 Growth Dynamic

Agriculture and Industry are the main stay of the economy. Tanzania's economy is basically agrarian. The economy depends on agriculture and is predominantly smallholder and

subsistence in nature, marked by backward technology and low utilization of modern technology, and with significant linkages to other domestic sectors.

Minerals and Tourism are the new pacemakers for growth. Given the natural and mineral endowments of Tanzania, tourism and mining are envisaged to offer a new source of big push toward economic growth.

Over the past 15 years, Tanzania has stayed firm in reform course, with a clear and sustained commitment to macro-economic stability through sound fiscal and monetary policies as a foundation for economic growth. Tanzania's economy grew at an average rate of about 5.8% between 2000 and 2006, and generally, growth exhibited a consistent upward trend, reaching 6.7% in 2004. Inflation has been contained at reasonably low levels, averaging about 4.8% between 2000 and 2004; with consistent downward trend over the entire period, and hitting the record low of 4.2% in 2004; however due to drought and higher fuel prices during 2006/2007 inflation has gone up to 9 per cent.

An overall assessment for cluster I of the NSGRP, which focuses on achieving *Broad-based and equitable growth,* shows that some progress has been made, but the rate of growth needs to be accelerated, with particular attention to strategies which will generate broad-based growth, especially related to agriculture. Public spending on an enabling environment for growth – as in investment in infrastructure, health and education – is necessary, but a specifically articulated strategy for growth would help focus areas of investment – private as well as public – and help with the prioritisation of public spending.

2.3.2 Incomes and Human Development

In spite of the country's rich natural resource potential, incomes and human development remain low even by African standards. Despite its potential and rich resource endowment Tanzania is among the least developed countries in the world. Almost four and a half decades since it became independent, the country has sufficiently not exploited its potential resources for the benefit of developing the standard of living of its citizens. Real growth has been low for many years and poverty has remained pervasive and deep. Respectively. About half of its citizens are poor. Average life expectancy at 49 years is also low and below the sub-Saharan Africa.

2.3.3 Labor Force and Employment

Due to the youthful structure of Tanzania's population, its labor force is growing rapidly and outstrips growth in employment opportunities. Due to the overwhelming numbers of youth in the population, the labor force is young, with 50 percent of labor force below 30 years. The Urban labor force is 16.8% of the total, and the rural areas host 76% of the total force. The proportion of women in the labor force is close to their share in total population (close to 51%). The labor force growth rate is 3%. The number of new entrants into the labor market has been increasing more rapidly than the population growth rate.

3.0 GROWTH DRIVERS AND GROWTH SECTORS

3.1 Introduction

3.1.1 Definitions and Concepts

Comparative advantage: is a concept in international trade to reflect the ability of a country to produce and deliver goods and services at a relatively lower cost for a given market (PHDR 2007)

Competitive advantage: these are comparative advantages that are not built on the availability of natural resources, but on other aspects such as productivity, quality, and diversity, which require accumulation of a new and more sophisticated set of resources, including new technology (PHDR 2007)

Growth drivers: These are basically factors that promote growth of sectors; in a more technical meaning, they are catalysts. Examples of growth drivers are Infrastructure (roads, railway, ICT, energy, water), policies and strategies, capacity/skills, technology, good governance, and natural resources, Globalization, regional economic blocks, and to some extent FDI's.

Growth sectors: Are those sectors with direct impact on the overall growth or indirectly via other sectors through multiplier effects like Agriculture and agro forestry, fisheries, manufacturing, SME's, tourism; trade, particularly exports and transit trade, minerals,

3.1.2 Tanzania's Comparative versus Competitive Advantages

The comparative and competitive advantages of Tanzania make sense when it is evident that Tanzania will prosper by exporting more of its products, provided they are produced and can reach the markets relatively more efficiently. Initially, Tanzania's advantage would rest on its natural resources (as its labor is arguably not cheap). With that base, its products should be compared to those of other producers in other countries, in which case Tanzania's competitive performance will rely more on other

elements of competitiveness such as productivity, quality, diversity and innovation of its products. In this context, Tanzania would be a valid production centre, but likewise its economy (and thus domestic market) would be open to outside imports.

In view of the above, comparative advantages in a country like Tanzania will largely determine the initial choices of Tanzania's growth drivers. In the course of time, the competitive advantages will structurally change, depending on the evolvement of technical and managerial capabilities occurring often unevenly in different sectors.

If the above view is valid (drawn largely from the PHDR 2007), the representation of resources advantages and markets for Tanzania would appear as follows:

Table 3.1: Resource Advantages and Markets for Tanzania

Resource Advantage	Potential Market	Resource Advantage	Potential Market
Agricultural land	Domestic market	Tourism resources	Overseas
Specific ecological conditions	Overseas	Geography & laid out transport infrastructure	Regional market
Geological resources			

A note should be made about agricultural land as a resource advantage. It is that the comparative advantage of agriculture is too broad a phenomenon. Therefore, the discussion should if possible be narrowed to specific products that would require specific land types and climatic conditions and then the competitiveness aspect might refer to specific market segments where the product quality feature can be relevant.

Once the areas of comparative and competitive advantages have been identified, a selection of growth sectors and their drivers can then be made, based on certain criteria.

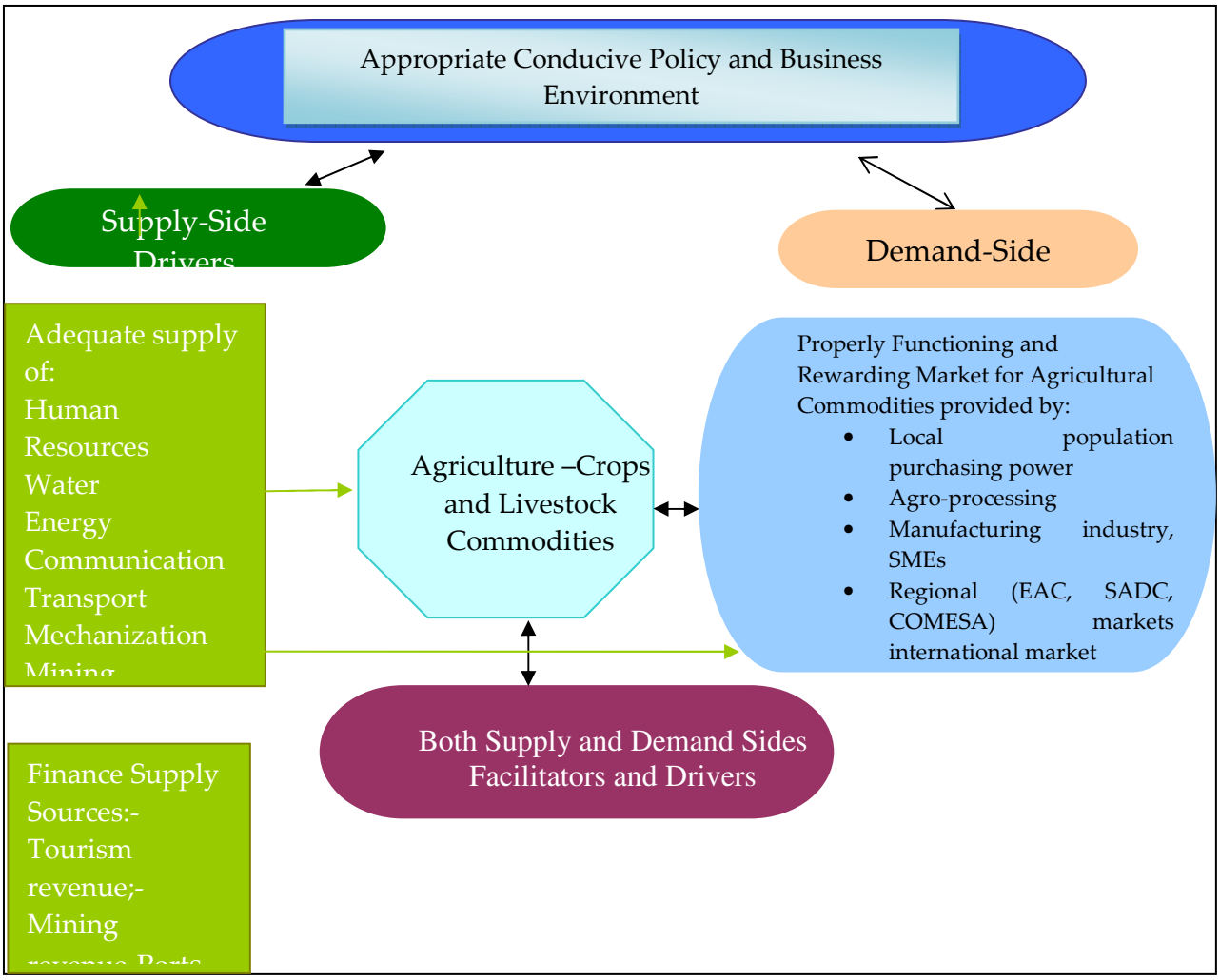
3.1.3 Criteria for Selection of Growth Sectors and Growth Drivers

Here in this section the Report presents the criteria used to selecting growth sectors and drivers in broad terms. More specific sector/driver criteria will be included in the relevant sectors.

The first criterion **for selection is per the natural resource endowment factor** as it enables Tanzania the opportunity to gain additional growth from more intensive exploitation of its resource base. Hence this criterion is linked to ability of a sector to expand and includes those sectors that contribute more to the growth of the economy. Another one of the most important criteria is the **degree of interdependence** among classic sectors like agriculture, manufacturing, transport, power, water, tourism, mining, etc. The degree of dependency of a particular sector on other sectors is correlated with the level of the strategic importance of that sector in the economy of Tanzania.

Thus we try to gauge the performance of different sectors in generating key national requirements in achieving **national goals**, like those enshrined in long-term development visions and plans **to achieve economic growth and poverty reduction** (i.e. MDGs, Visions 20-25 and MUKUKUTA/MKUZA). Presently **these are income and employment, (**with income including foreign exchange**)**. The degree of inter-sectoral dependence revolving around these requirements can be estimated using the device of input-output analysis. This identifies the degree of the interdependence of a particular sector with other sectors in the production relationships. Thus the key sectors would be accorded strategic importance because they have a relatively larger multiplier effect on the rest of the economy through their demand for inputs in form of backward linkages, or the likelihood of exerting a relatively large demand for their output on the rest of the economy in form of forward linkages as the economy expands. For example an expansion of fruit production in Korogwe or Iringa districts for the local and foreign markets would result in

Diagram 1- Schematic Presentation of the Growth Drivers for the Agricultural Sector



Demand for several things, like: (i) a functional market (purchasing power in domestic market, (ii) agro-processing fruit capacity, (iii) manufacture of associated ancillary items like wrapping and canning materials, boxes, bottles, etc (iv) capacity of transport for the produce to the markets or factories and (iv) accessibility to regional and international markets . On Supply side there will be more need for (i) agro-inputs, (ii) human resources, (iii) water, (iv) energy especially in form of fuel, (v) finance, (vi) transport and communication , etc. In fact there would be infinite rounds of resource demands and uses by different sectors. This type of relationships and chain reaction can be illustrated using the example of the key sector of agriculture in diagram 1

The inter-sector relationships can also be put in a matrix form using coefficient values, for which a rough representation has been shown in Annex I

As seen in ANNEX 1 and in Diagram 1, agriculture has strong forward and backward linkages with other classic sectors such as manufacturing, SMEs, transport, energy, tourism, etc. And spin-off effects with a lot of other non-farm activities..

In recent years, exports of agricultural commodities, increased activity in the mining sector, and expansion of tourism are three areas that have registered relatively high growth rates, but which still have substantial potential for additional growth in the near future. However, mining activities have enclave character with only weak linkages to the rest of the economy, which limits their potential to contribute in a significant way to employment generation and poverty reduction. It is thus may be more strategically imperative to take the re-investment of proceeds from mining into other parts of the economy, particularly roads infrastructure.

The relatively larger share of agriculture in the economy (between 26% and 31% of GDP and employing 77% %) makes the overall growth performance and improvement in the living standards depend greatly on what happens in this sector.(Agriculture PER 2008).

The **third criterion** looks at contribution of a sector/driver to the overall **employment** numbers and consumption linkages; again agriculture features in here but infrastructure and SMEs also qualify. In the case of infrastructure to maximize employment impacts, efforts would have to be made to design labor-intensive approaches for the rehabilitation and maintenance of the rural roads network.

The **fourth criterion** is to assess the extent to which a **sector contributes to poverty reduction** or is likely to have a significant impact on both poverty and productivity growth. Agriculture fits in with this criterion as well. However, this criterion more than others would require three supportive areas:

First is to create an environment that is conducive to scaling up economic expansion from the current growth rate of 4-5 percent to 8-10 percent. The second area for action is ensuring that benefits from higher growth are shared widely; and an opportunity for the poor to gainful employment is expanded. In this particular case higher growth of agriculture, a vibrant informal sector and micro-, small-, and medium-sized enterprises

are particularly pertinent for such broadly based growth. The third area for action is to strengthen human capabilities in support of growth and doing so in away that increases the capacities of the poor to exploit new opportunities from growth. In this regard, better education and better health, and fewer children are among important growth drivers.

The **fifth criterion** is to include those sectors, which are considered as **growth pace makers**. Under this criterion, tourism and mining qualify but the enclave nature of mining weakens its position in terms of linkage with the rest of the economy. Given the natural endowments of Tanzania, tourism in particular is envisaged to offer a new source of big push toward economic growth. But in order to maximize multiplier effects and employment benefits from this sector, appropriate growth strategies would be needed.

The **sixth criterion** is the sector's **contribution to exports**. Given the relatively small size of the Tanzanian economy, growth will only be sustainable if it is firmly rooted in international competitiveness and the aggressive pursuit of export opportunities to obtain foreign exchange earnings because of the premium attached to this resource for its ability to fund investments that propel economic growth .

In selecting growth sectors, a combination of the above criteria has been applied. As a result, **Agriculture, Tourism, Manufacturing and SMEs** are considered to be the critical growth sectors. Each is discussed and further justified below.

4.0 GROWTH SECTORS

4.1 Agricultural Sector

4.1.1 Situation Analysis

A conventional definition of agriculture which is also used in this study considers crops, livestock, hunting and gathering, fisheries and forestry. Using the current 2001 prices, the share of agricultural sector in the overall economy has been fairly stable in the last ten years. The agricultural sector has accounted for between 31 and 26% of GDP. The trend of the agricultural GDP contributions of during 1998-2007 period is exhibited in Table 1.1 and Figure 1.2. Throughout the period under review, crops has been dominating with an average GDP share of 21%, followed by livestock and forestry (and hunting) with GDP share of 4.7 and 2.4% respectively. Fishing has an average GDP share of 1.6%.

Table 4.1: Agricultural Share of GDP (in %)

Economic Activity	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**
Crops	21.6	21.6	21.6	21.4	21.1	20.4	20.2	19.6	18.7	18.6
Livestock	5.3	5.1	5.1	5.1	4.8	4.6	4.5	4.3	4.2	4
Forestry and Hunting	2.6	2.6	2.6	2.6	2.4	2.4	2.3	2.1	2.1	2
Fishing	1.7	1.7	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.5
Total	**31.2**	**31**	**31**	**30.7**	**29.9**	**29**	**28.6**	**27.6**	**26.6**	**26.1**

Source: NBS and Bank of Tanzania

On the other hand, this static state implies that the agricultural sector has been doing quite well in keeping up with the other sectors in the economy. This might be further magnified if the spillover effects of agricultural growth are taken into account. As we shall see later, the spillover effects derive from production forward and backward linkages and consumption multipliers (URT 2006).

In Figure 1.2, the agricultural sector's "contribution with spillover effects" increases by approximately 20%age points to 60% of aggregate GDP. This implies that, as the overall economy was growing at average annual rate 5%, the agricultural sector was accounting for 3.0% (5% x 0.60 = 3.0%) of that growth rate. Given that the agricultural sector plays a central role in the Tanzanian economy, the contribution of the sector in the entire GDP growth is substantial. The growth rate of the agricultural sector has been lower than the overall economy, but considering the spillover effects examined here, the real contribution of the sector has been much greater than the recorded growth rates. The recorded growth rates mask and understate the actual contribution of the agricultural sector to the Tanzanian economy.

Table 4.2: Tanzania Export of Major Cash Crops in Gross Value (TZS Million)

Crop/Year	2000	2001	2002	2003	2004	2005	2006	2007
Coffee	67,063	49,603	34,052	51,707	53,830	83,577	92,794	143,255
Cotton	30,432	29,173	27,797	48,323	80,072	127,178	56,780	49,807
Sisal	4,482	5,865	6,344	7,558	7,883	8,176	9,296	7,438
Tea	26,215	25,275	28,650	25,661	26,836	28,830	41,682	48,258
Tobacco	30,713	32,292	53,757	41,752	62,157	91,361	129,108	116,893
Cashew nut	68,322	50,941	45,450	43,892	72,257	54,234	62,663	33,816
Total Agric Export	227,226	193,150	196,050	218,894	303,035	393,357	392,323	399,467
Total Exports	666,200	820,200	938,600	1,170,800	1,339,100	1,613,900	1,736,000	2,006,700
% of Total Exports	34.11	23.55	20.89	18.7	22.63	24.37	22.6	19.91

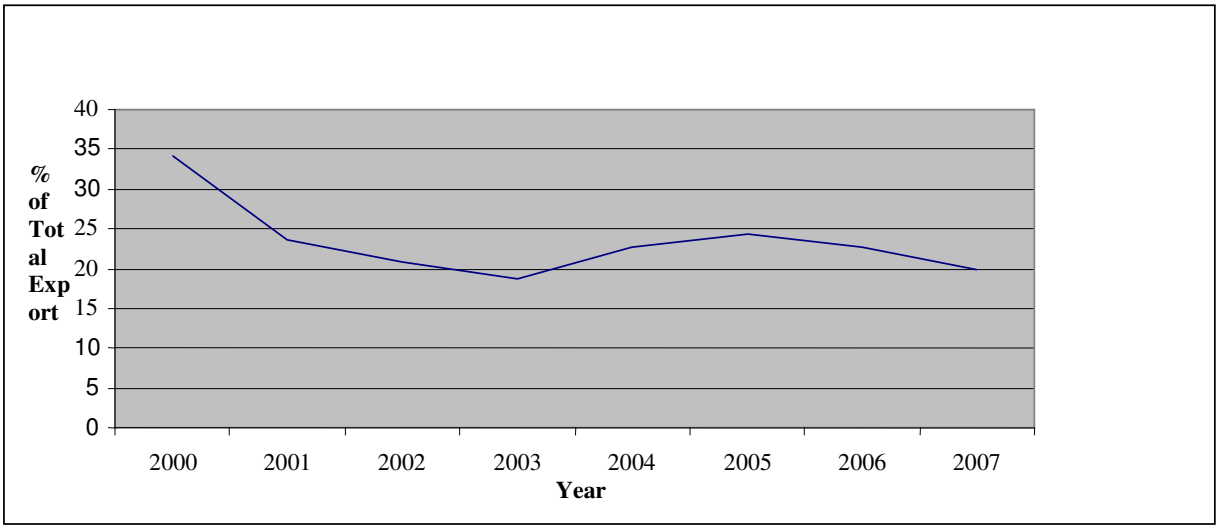
Source: **BoT – Economic Bulletin March 2008**

Agricultural sector has traditionally been designated as the major foreign exchange generator. This sector used to contribute more than half of national foreign exchange earnings. The Agricultural Sector Development Strategy (ASDS) for example, states (with data) that agriculture has been the single largest contributor to GDP and foreign exchange earnings (URT 2001a). Likewise, Agricultural Sector Development Programme (ASDP) describes the sector as accounting for about half of GDP and export (URT 2001b).

However, in recent years this situation has been dramatically changing as depicted in Table 1.2 and Figure 1.2. It is evident that the share of export crops in total foreign exchange earnings has substantially declined from 34% in 2000 to slightly below 20% in 2007. However, in absolute terms, agricultural export earnings have been increasing, though at much smaller average annual rate than the overall average annual export earnings growth rate. Numerically the average annual export growth rate of agriculture was 9.7% during 2000 - 2007 versus the overall average annual export rate of 23.3% over the same period. Agriculture's relative share has declined because other sectors of the economy have expanded rapidly. The export of minerals, for example, has increased almost fivefold in the last five years, form US$ 178.2 million in 2000 to US$ 886.5 million in 2007.

Although the export of the traditional export crops virtually stagnating since 2000, the last three years have seen a slow recovery in export value. The total export value has also been rising as shown in Table 1.2. In 2007, foreign exchange earnings from crops were approximately US$ 399 million. The gains in recent crop export earnings were mainly due to the recovery of international prices of coffee, tea and tobacco. Likewise, in terms of volume, coffee, tea, tobacco and cloves have been increasing in the last two to three years. However, with the ongoing global financial crisis prices of key export commodities are bound to fall further as consumer demand in advanced countries continues to decline. It is reported for example that, some of the major cotton dealers in the world market have cancelled orders of cotton from Tanzania (Ndulu 2009). Until January 22, 2009, 138,011 bales of cotton (quarter of the total output for the 2008/09 season) were piled up in ginneries due to lack of orders.

Figure 4.1: Share of Major Cash Crops in Total Export



In recent years, other non-traditional export crops are emerging. Some of them are expanding at substantial rates. As a result, total agricultural export earnings were approximately US$ 400 million in 2007. The other side of the agricultural export performance is the sector's import performance. The share of agricultural imports has been between 10 and 15% of the total import bill, implying that the sector has been keeping pace with other sectors in its import requirements.

In terms of employment, the agricultural sector is said to posses abundant workforce. According to the 2001/02 Integrated Labour Force Survey (ILFS) approximately 87% (15.5 million persons) are employed. This includes the self employed labour force. About 84% of the employment is engaged in traditional agriculture, 6% is in the informal sector, 4% is in the private formal sector, 3.5% is engaged in domestic work, 2% is with the government and 0.5% is in the parastatal sector. The difference between total labour force (17.8 million persons) and employed labour (15.5 million persons) is 2.3 million people (unemployed people), out of which 1.3 million are women and 1 million are men. This is equivalent to 13% (the current unemployment rate in Tanzania) of the total labour force.

It should also be noted that, under-employment is also high particularly in the agricultural sector as well as the informal sector. The 80% (of total labour force) employed in traditional agriculture, 6% in the informal sector and other sectors are in many cases not productively engaged to full capacity. Many of them are therefore under-employed. Under-employment rate according to the 2001/02 ILFS was 11.2% in

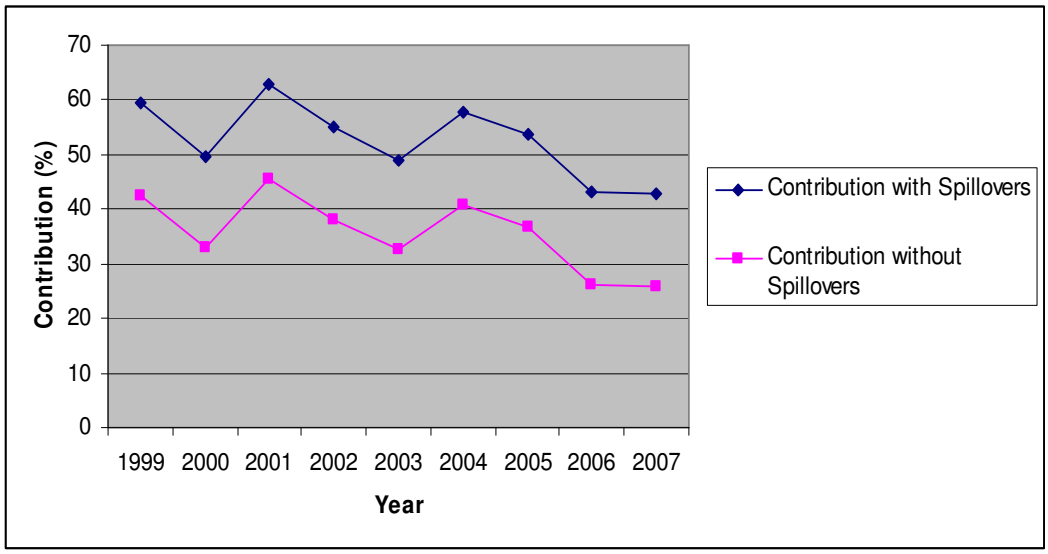
2000/01 up from 4.3% in 1990/91 (Mhone 2005). Under-employment is said to have worsened in the rural areas compared to the urban areas, particularly because the main occupation for most of the rural dwellers is farming and/or rain fed agriculture which is very seasonal. This is the abundant idle labour which is not only underemployed, but in some cases unemployed. It therefore forms an important idle and/or unutilized capacity in the agricultural sector. This is obviously an area which Tanzania could have utilized by adopting appropriate policy interventions aiming at skills development and human resource absorption strategy.

4.1.2 Agricultural Forward and Backward Linkages

(a) Agriculture

Production forward and backward linkages is exemplified by value adding activities along a product chain value, such as agro-processing which would be stimulated by the increase in production of a particular crop. Some of these effects may be captured within agriculture, but many of them would belong to manufacturing or transport sectors. Consumption effects arise in a case where a farmer who gained additional income would spend it on the consumption of locally produced goods/services which, in turn, stimulates the supply of such goods/services. In this case too, the derived economic value would not be captured by the agricultural sector but by other sectors. In either case, such additional economic activities and their associated values are counted under other sectors even though they have been originally induced by the expansion of agricultural production. If, instead, these derived value-added were included in the agricultural sector, the contribution of the sector to GDP would be much higher. Estimation of such extended contribution of the agriculture sector was attempted during the 2006 Agricultural Sector Review using the sector growth rate (See URT 2006).

Figure 4.2: Growth Contribution of the Agricultural Sector



Note that, the agricultural sector has been expanding at an average annual rate of almost 5 % over the last six years. The sector has maintained a rising growth trend since 2000. While the agricultural annual growth rates have been generally lower than the aggregate economic rates, they have been substantially higher than the average annual population growth rate, implying positive income growth amongst agricultural households in the country. A close examination of the actual contribution of the agricultural sector to the economy was therefore warranted. As noted earlier, the Tanzanian economy has been growing at an average annual rate of almost 5 %. What has been agriculture's actual contribution to this rate of growth? This contribution was computed on the basis of the agricultural sector's share in the aggregate GDP and its own growth rate. As demonstrated in Figure 1.2, the sector contributed approximately 40 % of the aggregate GDP growth. Since GDP growth averaged 5 % per annum, the agricultural sector accounted for 2.0 %. The trend of the agricultural sector's contribution to the growth rate since 1999 is illustrated in Figure 1.2 by the line marked as "contribution without spillover effects". This, in turn, implies that the growth of the agricultural sector had substantial effects on the growth of the entire economy.

The importance of this is enhanced if the spillover effects of the agricultural sector are taken into account as illustrated by the line marked "contribution with spillover effects". There is an empirical evidence to suggest that the multiplier impact of the

agricultural sector on other sectors can average twice the original impact[1]. This estimate was applied to the Tanzanian original data estimates.

Agriculture's prominence as an engine of growth is further highlighted by the fact that it has large spin-off effects on non-farm sector, mainly through forward linkages to agro processing and consumption (World Bank 2001). On the basis of the Huma Resources Development Survey (HRDS) data, TZS 100 of new household income from export crop proceeds is estimated to generate TZS 2,000 worth of additional local employment in the production of non-tradable goods and services. In addition, simulations of the Social Accounting Matrix (SAM) constructed for Tanzania show that this source generates TZS 1.80 increase in overall GDP, in contrast to TZS 1.20 in response to a similar size stimulus from light manufacturing (Wobst 1999 in World Bank 2001). Not surprisingly, light manufacturing has smaller effects on incomes in rural areas, where the vast majority is residing, than does export cash cropping. This is because light manufacturing is less labor intensive and uses more imported inputs.

Non-traditional export crops, such as cut flowers and other high value crops, may be highly profitable niche activities, but typically cannot provide the overall employment numbers and consumption linkages compared with the traditional exports crops. This is because the non-traditional crops have higher capital requirements, and access to markets for these crops is more difficult.

(b) Fisheries

Fisheries in Tanzania offer some great promise, but are also subject to some challenges. The fisheries sector of Tanzania is now gaining major international recognition thanks to the Nile Perch in Lake Victoria. Together with this recognition is the opportunity for the sector to increasingly contribute to the national economy. In the early years, fishing in the Lake Victoria and Nyasa and other water bodies was done in the traditional subsistence level with a little extra for the local markets. Fishing in Lake Tanganyika and Coastal areas of the Indian Ocean has also been at the subsistence level but with a commercial bias for Sardines in Lake Tanganyika and commercial fisheries by foreign and local vessels in the Indian Ocean waters. With the emergence of the commercial fisheries in the Lake Victoria, the importance of fisheries has been enhanced not only for

[1] IFPRI (1998) (Agricultural Growth Linkages in Sub-Saharan Africa, IFPRI Research Paper No 107 by Delgado C.L. et al.), in URT (2006). They estimated that "… $1.00 initial growth in rural agricultural incomes leads to an additional $1.00 on average of income from production of rural non-tradables. This means that 1 % growth of rural agricultural activities produces another 1 % of growth in non-tradable industries, resulting as a whole to 2 % growth in the agricultural related activities

providing nutritional benefits but also employment creation, government revenue generation and foreign exchange generation. Judging from the statistics provided in table 1.1 above, the contribution of the fisheries sector to the national economy is significant and can be increasing overtime if the necessary requisites are put in place. Fishing activities grew by 4.5% in 2007 compared to 5% in 2006.

This decline was to a larger extent attributed to illegal fishing. Real fisheries value and therefore fisheries sector value have consistently increased overtime. In terms of linkages, this sector is an important one to tourism, industrial sector, and the public at large (households). Investors in this sector draw a variety of fishing gear from industrial sector. These are such as fishing boats, engines, fishing nets, and gasoline. Thus, fishing is heavily integrated with other productive sectors in the economy.

As noted, in many parts of the country fishing is an important livelihood source. An annual fish harvest of 243,000 tons could be realized without endangering the fish biomass. There is still some way to go before this limit is reached, provided, that fishing is discriminate. Dynamite fishing and "catch all" fishing is detrimental to sustainable fish catches. Awareness creation, sensitization and training of artisan fishermen are necessary to control illegal fishing methods and so protect bio diversity and sustainable fishing in Tanzania. Tanzania has not been able to utilize potentials in the fisheries sector. If anything the country has been loosing tons and tons of fish through illegal fishing by big foreign ships. This problem is exacerbated by the fact that Tanzania does not have required capacity for surveillance and enforcement of the sea and marine related rules and regulations.

(c) Livestock

Tanzania has about 15 million stocks of cattle most of which (98%) is the indigenous Zebu and only 2% are commercial stocks. With the absence of processing plants in the country, ranching forms a very small proportion (about 1%) of the total beef industry (TIC 2007). The dairy industry has been gradually growing despite the fact that most of the milk products are imported. Export of live stocks and related products has not been performing well following complex SPS requirements. Opportunities in the livestock sector are many, but the local producers have been suffocated by unfair competition permissible by the adopted trade liberalization in the country. There is a very high demand of beef and other livestock products in the country. The sector is therefore linked to other industries such as the super markets, households, agriculture, tourism,

and chemical and drugs industries. Livestock sub sector is one of the important contributors to GDP. It contributed an annual average of 5% between 1998 and 2007.

(d) Forestry

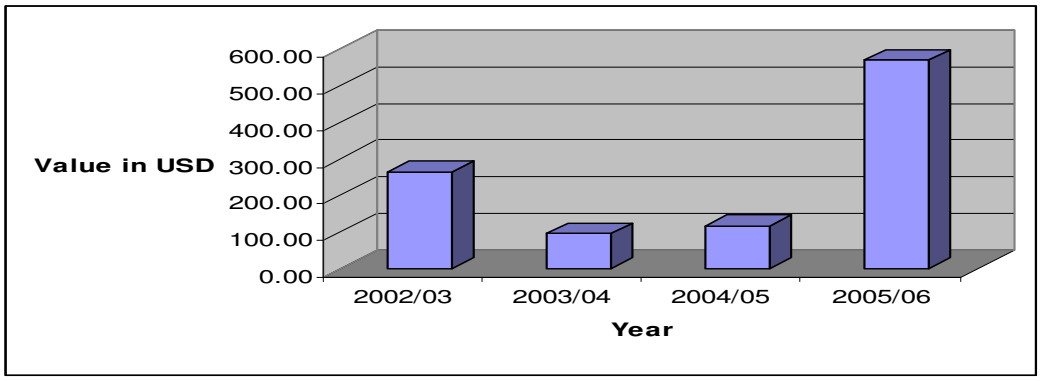
There is an important synergy between forest and other economic activities such as tourism, energy, bee keeping, wildlife and trade. Forests of Tanzania which are reportedly covering approximately 41% (about 38.8 million hectares) are important factor for development of sectors like tourism through block hunting and wild life development, logging, construction, trade, energy, agriculture, bee keeping (honey production) etc. These forests offer food and habitat for wildlife particularly in the designated four World Heritage sites of The Kilimanjaro and Serengeti National Parks, the Ngorongoro Crater and the Selous Game Reserves which are all found in Tanzania. Other important resource synergies in the forests are through bee keeping, hunting, unique natural ecosystems and genetic resources. Forests and woodlands in Tanzania provide 91% of the domestic energy source, several materials for, food and medicine, whereas oil fuel, electricity, and coal provide for 7, 1.6 and 0.4 %s respectively (Mashindano 1998; Kahyarara et al 2001). The World Health Organization (WHO) estimates that over 60% of rural population in LDCs including Tanzania depends on medicinal plants from the forests (Kahyarara et al; Mascarenhas 2004). Forest products also provide construction materials such as timber, building poles, ropes, roofing materials etc.

In terms of employment creation, various estimates indicate that over 1.5 million people are employed in the sector. Employment is provided through forest industries, forest plantations, government forest administration and self-employment in forest related activities. The real contribution is underestimated due to unrecorded labour in the collection of wood fuels and other forest-based products consumed by households.

Trade in forest products has recently been at increase and the sector's contribution to the total trade has more than doubled recently. Export earnings from the forest sector accounts for over 10% of the total export and the products are among the three important foreign exchange sources, and the highest contributors to the non traditional exports (See Table 1.3 and figure 1.3). It should be noted that a huge amount of exports from forest industry has not been recorded thus heavily underestimating the actual contribution made by forestry in the country (See for example Milledge, 2008). The massive losses of revenue due to illegal logging is a huge lost opportunity for economic growth and self-reliance in Tanzania which if properly addressed could see the country

driving smoothly towards attainment of the national priority targets as spelt out in the National Strategy for Growth and Reduction of Poverty (NSGRP) as well as the Millennium Development Goals (MDGs).

Figure 1.3: Export of Forest Products by '000' USD



Unrealized revenues are an evident threat to the sustainability of the forest resource and therefore sustainable development and broad-based growth in Tanzania. Overall poor governance and specifically a complex corruption practices and capacity constraints are major culprits.

Table 4.3: Export of Forest Products by Values (USD)

Sn	Forest Products	Unit	2002/03	2003/04	2004/05	2005/06
1	Tree logs	m3	4920.0	8529.0	5867.5	5117.1
2	Timber (Rough sawn)	m3	5539.9	8162.0	87918.3	24859.3
3	Ebony Timber	m3	79.1	231.0	65.2	2269.2
4	Floor Boards	m3	657.9	251.0	75.1	107.7
5	Wood carvings/sculptures	Kg	246034.0	72043.0	6655.0	45296.9
6	Rail gauges	m3	2233.4	2769.0	272.1	19.9
7	Sandals Tree	Tons	195.1	350.0	4964.0	398555.5
8	Furniture	Pieces	3634.0	734.0	-	6504.0
9	Tannin	Tons	295.0	98.0	114.0	0.0
10	Mimosa Bark	Tons	265.0	157.0	15.7	304.0
11	Terminalia bark	Bags			1180.0	0.0
12	Tree Seeds	Kg	100.0	38.0	-	1150.0
13	Bees Wax	Tons	537.0	243.0	288.0	330.6

Sn	Forest Products	Unit	2002/03	2003/04	2004/05	2005/06
14	Honey	Tons	647.0	800.0	465.2	315.8
15	Tree's Glue	Kg	10.0	-	-	0.0
16	Poles	Pieces	-	904.1	8791.8	85000.0
	Total		**265,147.3**	**95,309.1**	**116,671.9**	**569,829.9**

Source: URT (2007)

Estimated nationwide losses of revenue due to under-collection of timber royalties from natural forests is reportedly equivalent to *more than twice* the entire income to the Ministry of Natural Resources and Tourism (MNRT) during 2004/2005 when MNRT revenues constituted 16% of GDP (approximately US $ 1.8 bill), and yet Table 5.3 shows that the total value of exported forest products in the same year was US 116,672.

(e) Honey and Bees Wax

Note that Table 1.3 also shows contribution of non timber forest products such as honey and bees wax. As can be depicted from the table, overtime the value of exports of honey and bees wax has been declining largely due to lack of market information and poor market intelligence on the part of Tanzania. Literature shows clearly that Tanzania exports beeswax and honey albeit under great underutilization of the existing potential. Its honey is purely organic and is ranked among the best in the world, enjoying high demand in the urban domestic market and an ever expanding and reliable export markets in Europe, Japan and the Middle-East. Investment opportunities on beekeeping are manufacturing of beekeeping equipments and opening-up of large scale apiaries in high potential areas; establishing large-scale beeswax processing plants & packaging factories; wholesale exports of honey and beeswax as well as retailing bee products in the domestic market and in the African Sub-Region. The regions which can produce honey above 3,000t per year include Tabora, Rukwa, Shinyanga, Kigoma, Lindi, Iringa, Ruvuma, Mbeya,Kagera, Manyara, Tanga, Singida, Dodoma, Coast.Also regions which can produce beeswax above 500t per year are Tabora, Rukwa, Shinyanga,Kagera, Kigoma, Lindi and Iringa.Tanzanian honey and its by products yields a premium price in the local and export markets such as the EU, Japan and the Middle East. It is ranked among the best in the world and the reason is because it is purely organic and of high quality.

(f) Cooperatives

Cooperative movement in Tanzania has made an exclusive experience. In a nutshell the structure and functions have been changing regularly following inefficiencies in service delivery and financial management. The changes were aimed at addressing such inconsistencies. In terms of responding to the needs of smallholder farmers in Tanzania, cooperatives have played significant role. Cooperative used to provide reliable markets to farmers, supplier of farm inputs, technology, and extension services. Among others, accumulation of huge debts which could not be recovered and serious management crisis prompted its collapse. During the liberal marketing system, farmers have faced many setbacks following poorly developed marketing arrangements which encouraged private traders to squeeze farmers.

The favorable free marketing arrangement which farmers were promised has not been as favorable as they anticipated. The Government has therefore taken some measures aimed at reviving and improving the strength of cooperatives in the country. Two problematic areas have been addressed in favour of Nyanza Cooperative Union (cotton) and others which cater for cashew nuts such as Tandahimba – Newala Cooperative Union (TANECU) and Masasi - Mtwara Cooperative Union (MAMCU). The first step was to recruit new qualified and competent staff to manage the cooperatives, and secondly is to cancel all the debts which were to be shouldered by these marketing institutions. Following these initiatives, it is anticipated that the respective marketing institutions will become relatively efficient. It is expected that, the government monitoring and vigilance will be improved to ensure that the revived cooperatives are not running in to the same trap as the previous ones. Note that, cooperatives have been instrumental to the performance of the agricultural sector and the improved sector linkages.

(g) Hunting

As pointed out earlier, Tanzania has a huge forest land which is also suitable for hunting. There are mainly two types of hunting namely traditional hunting and block hunting. Available statistics in Tanzania do not reflect what takes place on the ground. This is particularly true for traditional hunting. Game reserve is another untapped investment potential in Tanzania. A number of game reserves are not occupied, and the existing ones (hunting blocks) are not operating as desired. Revenue collections from hunting blocks for example are not known, and the regional authorities do not have any mechanism to monitor collection. The region is not therefore sure whether or not 25 % of the revenue allocated for the District Council is real. Procedurally, 25 % of the total revenue collected from Hunting Blocks is allocated to the respective District Council, out of which 60 % is meant for development investments in the neighboring village

communities, while 40 % is for monitoring. Hunting bears an important synergy to other sectors such as tourism, trade, transport, wildlife and forestry.

(h) Irrigation

Like other services presented earlier, irrigation is among the vital support services for agriculture in Tanzania. The National Irrigation Master Plan notes that irrigation holds the key to stabilizing agricultural production in Tanzania, to improve food security, increase farmers' productivity and incomes, and also to produce higher valued crops such as vegetables and even flowers (ESRF 2009). This is because about 70% of Tanzania's crop area is rain-fed agriculture and yet rain-fed production is very volatile. Irrigation reduces substantially seasonal dependence and it potentially stabilizes consumer prices. Years with insufficient rains causes severely stressed rural livelihoods. Irrigated production can significantly reduce climate related production risks and hence raise farmer incomes. Irrigation is therefore an important determinant of improved forward and backward linkages in the agricultural sector.

(i) Other Support Services

As we shall see in the subsequent sections, a number of other support services are required for agriculture to make a meaningful transformation. These include agri-business, research and development (extension services and/or technological uptake), land and rural energy (electrification).

(j) Summary of the Linkages

The agriculture sector remains central to Tanzania's economy, although its contribution to GDP has dropped slightly from around 30% in 1998 to about 24% in 2008. Ideally, structural transformation should be a result of higher farm productivity which would enhance producers' own incomes, in cash and in kind, and create a demand for agricultural labor. Growth is multiplied in three ways: first, through backward linkages with an agricultural input supply sector; second, through forward linkages with agro-processing industries, transportation and trade and, third, through consumer linkages when enhanced rural prosperity leads to new demands for goods and services from rural and urban providers. Moreover, production of export crops brings in foreign exchange while the availability of food at relatively low prices enables a growing labor force (employed in expanding secondary and tertiary sectors) to feed itself at modest wage rates. However, this does not seem to be the case in Tanzania. The modest drop in share of agriculture to GDP which reflects growing rural, and urban, off-farm

employment is not associated with agricultural growth but rather poor performance of the sector and therefore people seeking alternative livelihood activities.

4.1.3 Agricultural Sector's Comparative and Competitive Advantages

Tanzania enjoys comparative advantage in the production of a number of agricultural products, despite the fact that she is also less competitive internationally. This comparative advantage could be further exploited by addressing some weaknesses and/or impediments hindering the reaping of existing opportunities or advantages. These bottlenecks include markets, technology, commercial farming (dominance of subsistence farmers), poorly developed infrastructure, skills, irrigation, capital deficiency, agro-business, transportation and storage infrastructure.

Tanzania has a number of areas in the agricultural sector which have demonstrated to have comparative advantage. These include the rich agricultural land; irrigation land; labour productivity, crop productivity, idle capacity in the livestock subsector, agricultural labour force (reserve); agro industry; and the rich river basins.

(a) Agricultural Land: Resource Capacity, Utilization and Existing Opportunities

Tanzania is endowed with about 44 million hectares of land suitable for agriculture, out of which only 23% (10.2 million hectares) is utilized. It is therefore clear that in terms of the existing potentials in agriculture (crop production), 77% of arable land is literally unutilized. In other words, while the resource capacity is 44 million hectares, capacity utilization is only 23%, and therefore about 34 million hectares are the existing and untapped opportunity.

As we shall also see in the succeeding section (b), the existing idle capacity in the agricultural sector is clear evidence that the country is comparatively advantaged. Strategic interventions are therefore necessary to support utilization of this capacity by promoting production of non traditional crops and especially high value crops whose worldwide demand has tended to increase overtime. These crops include all horticulture and floriculture products; different varieties of spices; fruits and vegetables; and flowers. Recent export development has revealed that, the volume of exports as well as export earnings of non traditional products have been increasing overtime (See Table 1.4).

Table 4.4: Non Traditional Exports '000' USD

Exports/Year	2000	2001	2002	2003	2004	2005	2006	2007
Total Exports	666.2	820.2	938.6	1,170.8	1,339.1	1,613.9	1,736	2,006.7
TNTE	370.5	620.3	773.6	995.7	1175.4	1321.8	1468.9	1716.4
% of Total Exports	55.6	75.6	82.4	85.0	87.8	81.9	84.6	85.5

Source: National Bureau of Statistics and Bank of Tanzania

(b) Irrigation Agriculture: Resource Capacity, Utilization and Existing Opportunities: Irrigation

Investment in irrigation pays-off. According to the recent World Development Report 2008, irrigation returns over 40 % on invested capital. In Tanzania, crop budgets developed in the *National Irrigation Master Plan* show incremental returns of over 214 % for paddy rice, 118 % for maize and 146 % for beans. Similarly, evidence from the recently completed River Basin Management and Smallholder Irrigation Improvement Project shows positive returns to irrigation investment[2]. The project supported the rehabilitation of 15 smallholder irrigation schemes in the Pangani and Rufiji basins, improving average paddy yields by 166 % and average maize yields by 276 %. The review further shows that rehabilitated schemes also doubled their irrigation efficiency, thus improving the overall water availability in the entire basin. In addition, average farmer incomes have increased from US$425 to US$1,250 per annum, considerably improving the lives of people in these areas.

The ASDP document shows that Tanzania has 29.4 million hectares (31 per cent of the total land area) that are suitable for irrigation. Out of the total land suitable for irrigation, only about 289,245 hectares or 1.0 % is under irrigation[3]. Thus, while the existing capacity of the irrigation agriculture is 29.4 million hectares, only 1 % of the available capacity (capacity utilization) is utilized. A total of 28.4 million hectares are therefore un-utilized potential. The potential irrigated agriculture in Tanzania is therefore another area of strength which gives the country an advantage over others.

(c) Agricultural Productivity

[2] River Basin Management and Smallholder Irrigation Improvement Project (RBMSIIP), Implementation Completion Report, December 2004

[3] The ASDP plan is to put at least 1 million hectares under irrigation. But experience to date shows that only 6,000-7,000 hectares are developed for irrigation annually, which makes the ASDP target rather too ambitious, but doable over time.

An examination of the cost of agricultural marketing using monthly retail food prices in 44 markets shows that marketing margins for maize, rice, and wheat between Dar es Salaam and other cities have narrowed significantly (World Bank 2001)[4]. These changes presumably reflect the increased efficiency of a competitive private sector market and some improvement in marketing infrastructure. However, transfer costs, being in the order of USD 0.16 per metric ton per kilometer on the main trade routes, are still too high by international standards. The country's vastness and fringe location of the food basket regions raises the value of investment to bridge the distances and have a more integrated national market.

Yield increase is generally a result of using improved varieties and modern inputs (e.g., fertilizer and agricultural chemicals) in combination with improved farming practices such as early planting, appropriate plant density, and weeding. Average yields for grains have remained depressed overtime. In the case of maize, for example, growth in yields averaged 9 percent per annum which is still unsatisfactory, given the potentials presented by high-yielding maize varieties, which have been around for the last 15 years. Indeed, Tanzania greatly improved the range and quality of hybrid maize in recent years. The low average growth rate for maize yields reflects extremely low adoption rates by farmers of modern varieties, estimated at less than 15% of all smallholder farmers. This is equally valid for other major grains (rice, millet, and sorghum) and legumes.

A crude labour productivity indicator estimated by dividing the agricultural sector GDP by the working population in the sector (See Table 1.5 and Figure 1.4), and based on the 2002/03 sample census data, reveals that average annual labor productivity has been increasing by 3.3% over the period 1996 up to 2004 (URT 2006).

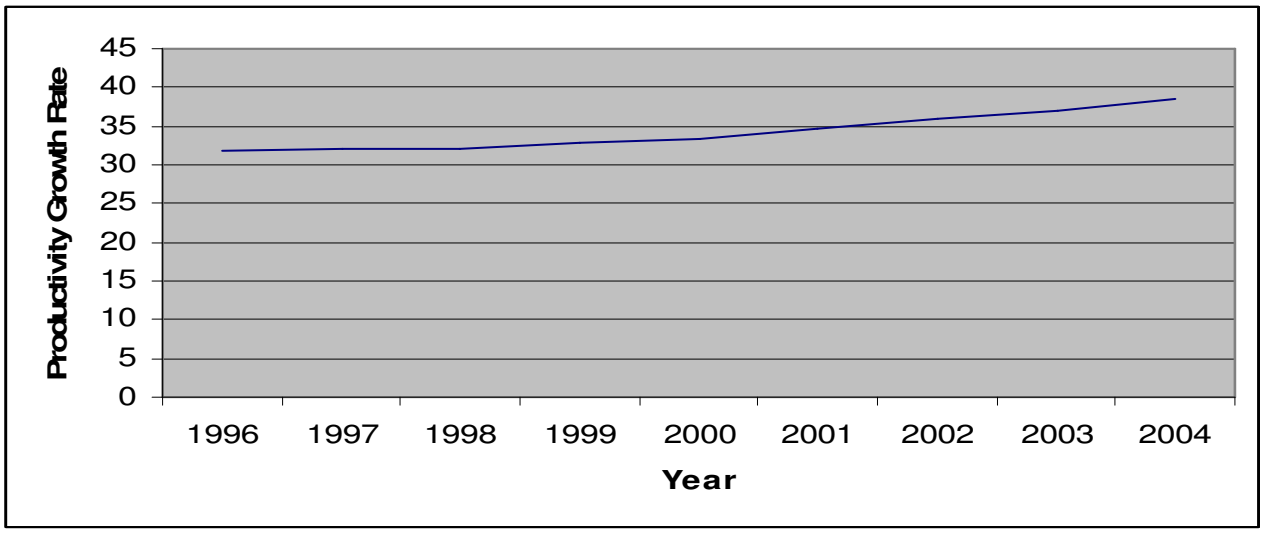
Table 4.5 Agricultural Labour Productivity

Labour Productivity	1996	1997	1998	1999	2000	2001	2002	2003	2004
Agricultural Labour Productivity (TZS)	31,926	32,054	32,076	32,847	33,428	34,755	35,994	36,930	38,635

[4] These findings still relevant today

Productivity Growth Rate (%)	NA	0.4	0.07	2.4	1.77	3.97	3.57	2.6	4.61

Figure 4.4: Agricultural Labour



(d) Idle Capacity in the Livestock Sector

In the livestock sub-sector hides and skin collection for example is estimated at 17 million pieces per year. Currently, most of hides and skin are exported raw as the established Leather Industry can only absorb 10% of the available supply domestically. This presents an investment opportunity in: Tanning industries and Leather products manufacturing industries. A properly managed livestock sector is likely to both benefit from and also provide the much needed diary and meat products for our hotels and therefore contribute to the booming of the tourism industry. This will include the production hides and skins products such as handbags that can be sold to local and foreign tourists. The sector has therefore the potential not only to generate foreign exchange but also to save it by out-competing imported dairy and meat products currently imported by tourist hotels. As explained later, properly working transport and water infrastructure will contribute greatly in raising the productivity and profitability of the sector.

(e) Agro industry

For more than four decades now, agriculture sector in Tanzania has been dominated by small scale farmers who use rudimentary technology. As a result the sector has exhibited very low productivity with majority of the rural households grappling with food insecurity. This has manifested itself wide spreading rural poverty and increased inequality. Investment by large scale commercial farmers and industrialists has not been forthcoming as envisaged, despite such a huge potential and opportunities in the sector.

This is the case despite of Government support and significant investment incentives in terms of tax relief offered to attract large scale farmers. Response of the private sector remains dismal at the farm level and the overall agri-business channels. Subsequently, the country faces low productivity and incomes, diminishing livelihood sources, food insecurity, and therefore intensive poverty and poor quality of life.

The role that agri-businesses can play in terms of enhancing small scale farmer's productivity and poverty reduction cannot be overemphasized. Various empirical studies have indicated through value chain analysis the potential of agro industry in stimulating economic growth and therefore impacting positively on poverty reduction. Agri-business could easily be promoted and expanded in Tanzania by trading in high value crops produced in the East-Northern and Central belts of Tanzania. These belts are rich in horticulture and floriculture products such as cut flower, onions, tomatoes, fruits, cucumbers etc. A list of horticulture and floriculture products which Tanzania has been exporting since 1950s has more than 45 items (See URT 2005b). Other crops which are also produced include a range of fruits such as pineapples, mango, banana, oranges, and apple; and spices such as paprika, vanilla, cardamom, pepper, and ginger. A lost opportunity and potentials in Tanzania can clearly be gauged through a massive post harvest loss of fruits and other horticulture products.

Privatization and restructuring initiatives have resulted in a reduced role of the public organizations in agriculture. Agri-business has a large potential but little has been done to promote value addition of the sector. The sector has remained largely in traditional commodity markets. There has been a shortfall in two other areas: insufficient demand-driven public-private partnership and little effort in identifying new value adding products and tapping new market opportunities.

Agri-business is known to be an economic stimulant in terms of job creation, improved competition, and attractive producer prices domestically as well as in the world market, and income generation. A survey conducted in 2005 reveals that a number of other countries have been successful in processing horticulture and floriculture products for the export market. These are Kenya, Uganda, Zimbabwe, Zambia, and Ghana (See URT 2005). Given the structure of agricultural production in Tanzania, agri-business should particularly focus on adding value to the farm gate raw products, which should subsequently form part of the inputs (raw materials) for medium and large scale industries. Obviously, investors will not be attracted in agro industry when the working environment in agriculture continues to be unfavorable.

(f) Rural Electrification

The energy sector is critical for facilitating Tanzania's development process. Without adequate and reliable energy, economic growth will be reduced if not halted altogether (ESRF 2006) . All sectors require energy to function efficiently. The National Vision 2025 identifies energy as pivot in the country's strategy for poverty eradication. However, despite its importance, Tanzania's current energy provision is seriously inadequate to satisfy domestic and industrial demand. Access to electricity is low at only 10%, out of which access of electricity to rural areas is 1%. The majority of Tanzania's population depends on inefficient and relatively low luminosity fuels, such as kerosene, for lighting. Biomass energy accounts for over 90% of energy source in the country. Commercial sources, particularly petroleum and electricity, account for about 8% and 1.2%, respectively of the primary energy used. Coal, solar and wind account for less than 1% of the energy used in the country.

Thus, most of the rural areas do not have electricity, and yet expansion and therefore development of agri-business is largely determined by availability of energy. Electricity needs to be made available for economic activities in rural areas, rural townships and commercial centres. Rural electrification is, therefore, a case of long-term national interest and a prerequisite for a balanced socio-economic growth for all in Tanzania.

(g) Research and Development (R&D)

Evidence is not scanty to verify that constrained access to inputs and timely advice, to a large extent, holds back progress in the intensification of agriculture (World Bank 2001). Indeed agriculture research and extension services generate high returns on investment. This is also supported by huge literature around the world. It is observed that, government spending on research and development (R&D) ranked as the most effective

for rising productivity growth in agriculture. This observation serves as a reference point for the preparation of R&D. The problem of R&D in Tanzania mainly relate to poor transfer of knowledge from research to application, erratic access to extension agents, and the more recent transitional problems are particularly acute for smallholder crops, such as cotton, food crops, and coffee, in contrast to crops such as tea and sisal, where big farmers or marketing and processing companies finance research, provide the bulk of extension services, or both.

4.1.4 International Competitiveness of Agricultural Sector

Agricultural challenges we witness today could be due to the land law which does not give full ownership to individuals. In recent years the sector has demonstrated that previously neglected crops such as spices and oilseeds have the potential to generate the much needed foreign exchange earnings compared to traditional export crops such as coffee, tea, cotton, tobacco and sisal. While there shouldn't be any intention to ignore or suppress these traditional crops in favour of emerging ones, a careful analysis of the comparative and competitive advantage of the crops produced in the country is necessary in order to have the correct priority in public resource investment.

A preliminary analysis suggests that one of the goals of having an efficiently working agricultural sector is to produce adequate food for the population, which will have the immediate effect of pulling inflation and cost of living, thus making industrial products less costly (food prices account for 50% of the cost of living by the majority of Tanzanians) as demand for increased wages is checked. But perhaps more important is the fact that ample supply of food will lead to a more healthy population necessary for proper functioning of other sectors. For those reasons investment in food production (both technology and infrastructure such as irrigation and mechanised farming) will have to be given priority.

Secondly and but equally important, crops such as cotton and sisal which have the widest backward and forward linkages in the economy need to be promoted. On the supply side, cotton industry has the potential to stimulate the establishment of local manufacturing of fertiliser, pesticides and gunny bags (from sisal industry) as well as the banking (credit) industry. The sector has also forward linkages with ginneries and other cottage industries (yarn and seed oil production) as well as textile industry for local and international markets, all these generating employment, using road and railway transport and utilising water and energy. This means in order to make agricultural sector perform well and realize the country's dream to take off to a middle

income economy by 2025, the Government will need substantial amount both financial and human resources to invest in the selected growth sectors and their identified growth drivers so as to stimulate growth in all other sectors of the economy.

4.1.5 Growth Drivers for Agricultural Sector

Judging from the preceding discussion, agriculture is naturally a growth sector. As pointed out earlier, the sector makes significant contribution to GDP, national employment, export earnings, and entails huge potential in terms of unutilized resource capacities etc. For agricultural sector to be transformed, the following support services and/or growth drivers have been identified according to priority as critically important to drive the sector.

(a) Roads and Transport Infrastructure

The analysis of transport sector indicated that the share of the transport and communications sector in the GDP has averaged around 5.28% per annum between 2000 and 2007 with very slight deceleration appearing after 2005**.** The Transport sector provides employment, attracts FDIs, and contributes to the Balance of Payments. The Integrated Labour Force Survey (2000/01) estimated that out of total wage employment of 1,159,498, transport and communication contributed about 8%. Despite these attributes, Tanzania's transport infrastructure is insufficient to meet the needs of the country's widely dispersed population. For example, the fertile regions in the North-west, the west and south are often cut off from the export outlets due to poor roads during the rainy season.

Setting of routes can enable new or existing interactions between agriculture and other economic entities e.g. manufacturing industries, markets in urban areas and abroad. For example, the transportation of livestock from Central and North-Western parts of Tanzania relies on trekking and road trucking, which affects both quality and cost of delivering animals to Dar es salaam as a market on its own right and as a gateway for overseas markets. The renovation of the Central Railway central system would solve that problem. Some of the high potential production zones in Kigoma, Lindi, Mtwara, Morogoro, Dodoma, Iringa and Manyara region, for example, are not linked to each and to the national all-weather road networks.

With efficient transport system, the potential market and competition for a given product/service increases. Consequently, a wider array of goods and services becomes available to consumers through competition which tends to reduce costs and promote quality and innovation. This increases productivity because there is access to a larger

and more diverse base of inputs (raw materials, parts, energy or labor) and broader markets for diverse outputs (intermediate and finished goods). Improvements in transportation and communication may also lead to geographical specialization that increases productivity and spatial interactions. An economic entity tends to produce goods and services with the most appropriate combination of capital, labor, and raw materials. A given area will thus tend to specialize in the production of goods and services for which it has the greatest advantages (or the least disadvantages) compared to other areas as long as appropriate transport is available for trade. This can also attract investors to establish agro-industries in the respective geographical areas.

For agricultural sector, the most appropriate modes of transport are road, railway and marine. Whereby road transport will be used to feed the railway and marine transport; and marine transport will be feeding the railway transport. The use of railway and marine transport helps to reduce transportation costs since goods and passengers will be transported in large scales using short cuts.

(b) Information and Communication Technologies (ICTs)

In Tanzania mobile phone ownership has increased from just over 2000 subscribers in 1995 to 3.8 million in 2006 (approximately one mobile phone per 10 people). But much of the development has taken place in urban areas. Majority people in rural areas do not know how to use them in a more beneficial way. Being an alternative to Physical Infrastructure, the government can subsidize the development of Information and Communications Technology (ICT) in rural areas in order to help the majority poor people access and exchange information on demand supply and prices of their products. Developments in ICT can greatly increase the opportunities for people to "connect" virtually without the need for a face to face visit or transaction. Mobile phone penetration rates are expanding much more rapidly than transportation.

Virtual mobility acts as a largely complement rather than as a substitute for physical mobility. While mobile phones may reduce the need for some trips to meet people, make enquiries or conduct transactions, they can increase opportunities for others, as people are able to stay connected to larger social and trading networks. Developments in ICT can also increase efficiency in agriculture, and all other sectors. For example, access to market information can facilitate more targeted trade that attracts higher prices. Generally, the use of ICTs reduces transaction cost, time, and space barriers,

allowing the mass production of customized goods and services and substituting for limited factors of production.

The Government can subsidize villages to establish TV/VIDEO centers which can be used to demonstrate the use of different agricultural technologies to people in rural areas. A good example is the TV programmes showing different agricultural projects under SEDP. However, the information portrayed in this programme does not reach most of intended beneficiaries because most of rural dwellers do not have TV to watch it. The efforts by mobile phone companies to invent different ways of connecting people to internet, disseminating information on prices and sending money at lower cost are commended.

(c) Water Supply Infrastructure

Over the past decades agricultural sector in Tanzania could not perform well because of so many factors among which include unreliable rainfall, droughts and floods. Increase in population has made the majority people in rural areas live far from sources of clean water, and hence spend a lot of time looking for and fetching water, instead of doing other more productive activities. Some people decide to fetch unclean water from nearby sources and therefore end up getting waterborne diseases which make them become less productive and spend their income to pay for medical bills/costs.

Therefore, efficiently and sufficiently supplied water for irrigation and domestic use can lead to higher production in the agricultural and other sectors of the economy. For example, it will be possible for agro-processing industries to get reliable and sufficient supply of raw material throughout the year. Animals also will feed on fresh grass throughout the year and hence be healthier. As a result, more meat and milk will be supplied to meat and milk processing industries. Increase in supply of agricultural and agro industry products will lead to decrease in general price level in the country, and hence reduction in the cost of living.

(d) Energy

Less than 5% of the rural population has access to electricity, and the overwhelming majority continues to rely on fuel wood for their energy requirements. Such low access

rate for the rural population is a constraint to the development of farm and non-farm activities and to improved quality of life in these areas.

People in rural areas spend a lot of time looking for firewood, and a lot of trees have been cut for energy requirements. The use of firewood causes deforestation, soil erosion and pollution which consequently lead to low agricultural production. Diseases in plant and animals caused by pollution make the country spend a lot of money doing research on how to cure them or find alternative crops. Lack of hydroelectric power in rural areas has made it difficult to process agricultural products to the stage where they can be transported easily to big markets or industries. It has made it difficult for some of the animal products like milk fail to reach potential markets. In order to avoid losses therefore, farmers decide to produce for nearby markets and hence underutilize their capacity.

(e) Financing of Agricultural Sector

Taking special interest in the agricultural sector as a priority growth sector will need a successful rural financial system as a critical stimulant for rural development. In Tanzania, only 6% of people have access to financial loans from banks, and the agricultural sector only accounts for 1% of the total loans. Borrowing in the agricultural sector is a challenging phenomenon because of the inability of farmers to secure collateral.

Banks consider agricultural sector too risky to qualify for financing. This can be supported by the fact that out of 44 million hectors of arable land available in Tanzania, only 0.1million hectors is under medium and large scale farming. Hence, agriculture is dominated by smallholders who operate between 0.2 and 2.0 hectors and traditional agro-pastoralists who keep an average of 50 heads of cattle use approximately 85 % of the arable land. The average per capita holding is only 0.12 ha. The major limitation on the size of the land holdings and utilization is the heavy reliance on the hand hoe as the main cultivating tool. Consequently, small farmers if given loans cannot generate sufficient income to cover the farming costs, repay the loan and able to create profit margin. Banks also fail to advance loans to agricultural sector because land tenure in Tanzania is in the form of occupancy and leasehold.

In order to finance agriculture without hurting financing institutions there will be need to hasten efforts to ensure that the government provides targeted incentives such as improved infrastructure, formalize the operations of hire purchase and leasing system and establish an Agricultural Sector-dedicated Bank for development financing, which is currently lacking in Tanzania.

(f) Mechanization of Agriculture and Education of Farmers

Most farmers in Tanzania depend on indigenous technology. The hand hoe is used by about 80% of the farmers. Ox-ploughs and tractors are used by about 15% and 5% respectively. Externally, developed technology is not easily accessible primarily because it is expensive. Secondly, the low level of education of the farmers slows down the pace of adoption rate of new technologies such as improved seeds, improved animal breeds and storage facilities. Thus, technological uptake in Tanzanian agriculture is generally very low. Thirdly, as noted earlier, as a consequence of low education, technological innovation is also very low, leaving the dominance of the hand-hoe to prevail. The low level of technology use results to heavy crop losses on the farm and during post-harvest and causes farm productivity to be persistently low thus, impairing the efforts to stimulate growth. This makes the competitive strength of the Tanzanian farmer very weak. A Green Revolution is therefore a necessary step towards attainment of the agricultural growth.

(g) Agro-business and Manufacturing

Agro-business is another area in the agricultural sector where Tanzania has comparative advantage. The role that agribusinesses can play in terms of enhancing small scale farmer's productivity and poverty reduction cannot be overemphasized. Various empirical studies have indicated through value chain analysis the potential of agro industry in stimulating economic growth and therefore impacting positively in poverty reduction. Agri-business could easily be promoted and expanded in Tanzania by trading in high value crops produced in the East-Northern and Central belts of Tanzania. These belts are rich in horticulture and floriculture products such as cut flower, onions, tomatoes, fruits, cucumbers etc. a list of horticulture and floriculture products which Tanzania has been exporting since 1950s has mote than 45 items (See URT 2005b). Other crops which are also produced include a range of fruits such as pineapples, mango, banana, oranges, and apple; and spices such as paprika, vanilla,

cardamom, pepper, and ginger. A lost opportunity and potentials in Tanzania can clearly be gauged through a massive post harvest loss of fruits and other horticulture products.

Agri-business is known to be an economic stimulant in terms of job creation, improved competition, and attractive producer prices domestically as well as in the world market, and income generation. The Government should provide special incentives to support industries that add value to agriculture.

4.2 MANUFACTURING SECTOR

4.2.1 Overview

After independence in 1961, Tanzania embarked on import-substitution industrialization strategy in order to meet domestic demand. With advent of structured adjustment programmes intensive international competition and globalization, export-oriented industrialization strategy was adopted, and in 2003 Tanzania came up with a National Trade Policy for competitive and export-lead growth. However this strategy poses inevitable challenge because the products for export should be produced at low cost but with high quality.

In the end of the 20th century, manufacturing activities in Tanzania have exemplified a steady growth, registering average annual growth of over 4 percent. Nevertheless, manufacturing activities in Tanzania are relatively small and at an infancy stage. Its contribution to GDP has averaged 8% over the last decade, with most activities concentrated on manufacture of simple consumer goods - food, beverages, tobacco, textiles and furniture and wood allied products. Most of the present industries were established in the light of import substitution strategy, whereas production focused in substituting previously imported goods in view of saving the country's meagre foreign exchange.

Table 4.6: Growth in the manufacturing sector

The government decision to liberalise trade and investment policies, effected since 1986, witnessed a number of firms even those believed to be as strong, clumping down as they could hardly withstand competition from imported manufactures. A number of measures were taken in view of revamping competitiveness of the local industries and enhancing their penetration into export markets.

The government starting in the early 1990s launched a deliberate programme to restructure and privatise publicly owned enterprises. Out of this programme some sheds of hope are now emerging. The overall utilisation of installed industrial capacities is improving, rising from an average of 20% in 1990 to around 50% at the turn of the 21st Century. Some of the recently privatised industries have undergone intensive rehabilitations - improving their capital structure, production technologies and management and marketing system as well as retrenched workers to match with production levels and improved quality and lower costs of production.

The main industrial activities (90%) are dominated by small and medium sized enterprises (SMEs) specializing in food processing including dairy products, meat packing, preserving fruits and vegetables, production of textile and apparel, leather tanning and plastics. A few larger factories (10%) manufacture cement, rolled steel, corrugated iron, aluminum sheets, cigarettes, beer and bottling beverages, fruit juices and mineral water. Other factories produce raw materials, import substitutes, and processed agricultural products.

Poor infrastructure in water and electricity supply systems continues to hinder factory production. In general, *Tanzania's manufacturing sector targets primarily the domestic market with limited exports of manufactured goods*. Most of the industry is concentrated in Dar es Salaam

4.2.2 Contribution of Manufacturing Sector to Employment, Government Revenue, GDP and Export

Records reveal that there was growth in employment opportunities in the manufacturing industries by 14% between 1994 through 2005 compared with 24% experienced between 1983 and 1994. This negative change in employment could be explained by the change from public to private ownership of major industries. In 2001, manufacturing's contribution to total employment was 245,000 or 1.5%, which is about a third of non-agricultural private employment (industry and services). Labour demand reflected the technical skills-intensive nature of manufacturing which employed 34% of all craft and related-skills workers, 32% of all machine and plant operators and 11% of all clerks. The manufacture of labor-intensive goods such as textiles, garments, and furniture and non-metallic products occurs in both the formal and informal sectors.

The sector is the most reliable source of government revenue in terms of import sales, corporate and income taxes. It accounts for over 50% of government revenue collection. Though manufacturing export has been in a declining trend, it earns the country 20% of total foreign exchange earnings and is the third important sector after agriculture and tourism. Between 1995 and 2005, the manufacturing share of value added to GDP remained quite unchanged around 7-8%, below the average of neighboring East African countries. Currently, the contribution of the industrial sector to the GDP is 9% which is still far below 15% expected by 2010 (vision 2025).

Table 4.7: Performance Indicators in the Manufacturing Sector

Year	% Contribution to GDP (at 2001 prices)	Manufacturing activities Growth (at 2001 prices)	% Contribution to Total Exports	% Contribution to Non-traditional Exports
1998	8.4	5.5	6.1	15.4
199	8.5	6.0	5.5	12.4
2000	8.5	4.8	6.5	11.7
2001	8.4	5.0	7.2	9.1

2002	8.4	7.5	7.4	8.5
2003	8.6	9.0	6.8	8.4
2004	8.7	9.4	8.3	9.4
2005	8.9	9.6	9.3	11.8
2006	9.0	8.5	11.2	13.3
2007	9.2	8.7	14.5	18.0

Source: Ministry of Planning, Economy and Empowerment (2007)

Moreover, it is the industrial sector that provides reliable field to practice invention, innovation and nurturing modern technologies for production and service provision.

4.2.3 Importance and Challenges of Manufacturing Sector

The reason why Tanzania needs a vibrant manufacturing sector today is to ensure economic independence in the long-run. This can be achieved because of different advantages attached to the manufacturing sector which include: Firstly, it helps to diversify the economy away from primary sector towards manufacturing and hence reduce risks and vulnerability to the long-term deteriorating commodity terms of trade and the associated loss in the real income. Secondly, the sector has substantial forward and backward linkages with other sectors of the economy, especially agriculture. Thirdly, with proper choice of technology, the sector can create significant employment. Fourthly, large manufacturing sector can enable export diversification that is necessary to reduce Tanzania's vulnerability to external shocks. Fifthly, the sector provides opportunity to transfer and adapt and create new technology. Sixthly, a large manufacturing sector can enable income smoothing at the household level through the creation of non-farm jobs that are more stable and fetch higher incomes. On average, the monthly income from a manufacturing job is Tshs. 103,407 compared to 76,277 in mining, 49,693 in construction, 31,301 in trade and only 15,234 in agriculture, presently the largest source of livelihood for Tanzanians

However, the importance of the sector is not witnessed in Tanzania mainly because of the challenges it faces. According to UNIDO the challenges include:

- Poor diversification: the manufacturing sector continues to be dominated by food, beverages and tobacco and textiles. Tanzania appears to have been strengthening its bias towards resource-based branches of manufacturing, with little diversification.

- Low-value addition of products: compared to other neighbouring countries in the region, Tanzania's MVA share in GDP in the past years (1995-2005) ranked at the bottom, further underscoring the very low level of industrialization in the country. More critically, more than 60 percent of manufactured exports were resource-based products, corroborating the low value addition in those years; however, during 2004-2006, the share of resource-based exports in manufactured exports dropped and stabilized at 50 percent, corroborating, also, the slight uptake of industry in more recent years.

- Low capacity utilization: capacity in the industrial sector in Tanzania is still being used at below the installed capacity although large-scale industries tend to exhibit relatively greater capacity utilization. Low capacity utilization is associated with infrastructure constraints such as electricity (availability, reliability, and quality), inadequate water supply, poor technology, and unsatisfactory transport and communication services. Recently, however, average capacity utilization increased from 36.6 percent in 2005 to 42.6 percent in 2006, a modest gain can be attributed to the implementation of SIDP Phase I (rehabilitation and consolidation of existing industrial capacities)

- Inward-orientedness: the industrial sector is still inward oriented. Most industries produce consumer goods, which are mostly consumed within the country. In 2005, about 71.6 percent of total sales was accounted for by domestic sales while export sales accounted for 28.4 percent, suggesting that
    i. the competitive ability of the industrial sector is limited and
    ii. Most (foreign) investors concentrate on consumer goods industries and favor domestic markets where they can make quick profits and apparently compete favorably.

- Agro-processing and agribusiness still lagging behind: in the labour and export markets agriculture remains the pivotal sector, employing 85 percent of the work force and accounting for 85 percent of export revenue. It grew by 5.1 percent in 2005 compared to 5.8 percent in 2004, and accounts for more than 40 percent of the GDP. Tanzania is virtually at the bottom of the trade diversification index (103 out of 110), a reflection of the country's continued heavy dependence on traditional exports crops, with cashew nuts, coffee, cotton, sisal, tea, and tobacco

accounting for 21 percent of total agricultural exports This implies that the potential for increasing GDP growth through agro-processing and agribusiness in general is high.

- The quality of the workforce is a serious constraint in Tanzania, even by regional standards. Workers in Tanzania tend to have considerably less formal education and training than workers in either Kenya or Uganda. Whereas only 20 percent of workers in Kenya and Uganda have only a primary education, over twice as many (43 percent) have only a primary education in Tanzania. This can be explained mainly by low capacities of secondary schools and vocational in Tanzania.

- Investment Climate Assessment conducted by ESRF in 2003 showed that Tanzanian enterprises tended to use technology less intensively than enterprises in Kenya and China, but more intensively than enterprises in Uganda. Tanzanian enterprises that used technology more intensively were more productive and grew faster in terms of sales and employment than enterprises that did not. Therefore the performance and competitiveness of Tanzania's manufacturing industries has been adversely affected by weak and underdeveloped technological structures. Furthermore there is no industry-based research and development (R&D)

- Manufacturing enterprises in Tanzania are 18 percent less likely to export and export about 4.7 percent less of their output than similar Kenyan firms. Trade and customs regulation which appear to be more burdensome than they are in Kenya discourage enterprises in Tanzania from exporting. For example, whereas it takes about 7 days on average for exports to clear customs in Tanzania, it takes only 4 days in Kenya

- Access to finance and high cost of financing are some of major constraints in the manufacturing sector in Tanzania. This makes it difficulty for industrial owners to expand their activities, and even more difficulty for those who would have wanted to establish industries. Overall, micro-enterprises are more likely to find that access to finance a serious obstacle. The financial problem also constrained activities and effectiveness R&D institutes which were established by the government in its effort to institute a national innovation system.

- Poor state of infrastructure such as power, water supply, transport and communication adversely affect the performance and competitiveness of manufacturing industries in the country. The amount of losses caused by this problem provides little incentive to invest more in the sector and in new technologies and related innovative measures.

- The call for inclusion of environmental requirements in the global trade agenda pinpoints the likelihood of future market access for developing countries being constrained by stringent environmental standards. This has raised a number of concerns especially for developing countries. The challenge for developing countries is then to adopt systems that facilitate trade restrictions in relation to environmental requirements.

- The main difficulties experienced by SMEs, in the area of market access relate to compliance costs, insufficient facilities and high costs of testing and certification, biases in standard setting process, and lack of financial and technical assistance. In order to stimulate SMEs development and thereby be able to take advantage of the emerging opportunities as provided by globalization and liberalization in the international market, a specific policy is under preparation

4.2.4 Comparative and Competitive Advantages of Manufacturing Sector

Above we have identified agricultural sector as number one growth sector because it contributes much to employment and national income, among others. Therefore it is important to make sure that the recent experienced growth in the sector is accelerated and at the same the majority people benefits from its growth. However, a recent review of the implementation status of the NSGRP/MKUKUTA indicates that while good progress has been made in all key sectors of the economy, progress has been slow in reducing poverty due largely to the decline in agricultural growth. UNIDO observed that the expected transformation of the agricultural sector from basic farming to large scale, mechanized production is yet to be realized and agro-industry is yet chronically underperforming.

In this case therefore, UNIDO argues that the industrial development challenge for Tanzania is to engineer an industrial process that, taking advantage of the abundant commodities and resources, transforms them through sustainable productive activities into higher value, dynamic export ready products. In sum, agro-industry can

potentially play a pivotal role in engineering the industrial process and ultimately in attaining the MKUKUTA vision for Tanzania's industrial development.

As also suggested by UNIDO there is an urgent need for diversification of traditional primary exports into technologically more dynamic manufactured exports enabled, of course, by a restructuring process that increasingly enhances the capacity to innovate. In the long run, the industrial process should establish a stronger and more balanced, broad-based economic structure driven by a technologically advanced industrial sector that is complemented by a viable agriculture sector.
UNIDO observed that in the past few years, new firms have tended to have higher productivity levels than older firms. This suggests that reforms, an improved investment climate and the competitive environment in which industry is now operating are beginning to promote a more effective production structure. This should provide the basis for improved growth potential in the future. However, further action is needed to facilitate progress towards competitiveness in manufacturing in Tanzania.

Manufacturing comparative advantages include the availability of raw materials. Many and different domestically produced agricultural products go to the market unprocessed. This shows that there is a great potential for expanding industrial sector in this respect. Tanzania is a member of East Africa Community (EAC) and Southern Africa Development Corporation (SADC), and therefore has potential market for its products. A greater percentage of consumables are imported from other countries but they can be produced domestically if the investment environment is improved. This also shows the existence of domestic market for manufactured goods. For the SMEs, there is enough labour reserve since these enterprises do not need highly skilled manpower.

Basically the industrial sector of Tanzania was structured with import substitution objectives focusing on local market with no incentive to compete in the export market. However, the advent of the new economic system o globalisation has forced many countries, including Tanzania, to liberalise their economies thus opening up their markets for global competition. Tanzania’s manufacturing sector has not been able to compete effectively in the international market due to inadequate capitalisation of its industries, outdated technology, low quality of the workforce and ineffective marketing strategies. These factors and Others are explained below.

4.2.5 Backward and Forward Linkages of Manufacturing Sector

Although manufacturing sector grew at an annual average of 8% between 2000 and 2006 its contribution to employment and income has remained small partly because of its small size and limited linkage with the economy. Strengthening the sector's backward linkages to small and medium enterprises, the agricultural and natural resources (e.g. forest, mining, fisheries) sectors as well as forward linkages to export market could significantly contribute to economic growth and development.

As stated above growth is multiplied in three ways: first, through backward linkages with an industrial input supply sector; second, through forward linkages with transportation, trade, agriculture, tourism, infrastructure, Small and medium enterprises, social sectors, etc. and, third, through increase in demand for products from other sectors as a result of increase in employment in the manufacturing sector. This can increase savings in non manufacturing sectors that can be invested in the manufacturing sector. The supply of agricultural inputs improves productivity in the agricultural sector and hence food may be available at relatively low prices. Moreover, production of export crops brings in foreign exchange.

4.2.6 Growth drivers for Manufacturing Sector[5]

For manufacturing sector to perform efficiently and grow the following drivers are required:
Good infrastructure which will enable easy transportation of information and goods (i.e. raw materials, intermediate inputs and industrial products). Specifically there must be well constructed roads, railways and a well developed ICT. With well established transport infrastructure, it will be possible for manufacturing industries to have efficient and sufficient supply of locally and imported inputs. This may lead to sufficient and efficient supply of manufactured outputs and hence reduction in fluctuations in prices of both inputs and outputs of the sector. Good infrastructure also can help to reduce inequality in the distribution of manufacturing industries as it will be feasible to establish them in areas where initially it was not feasible due to infrastructure related costs

[5] These Drivers are well explained in chapter three section three

Energy is very crucial for manufacturing industries to run efficiently. Therefore the supply of energy to both urban and rural areas is important. This together with good transport systems can encourage the development of manufacturing industries in places near the source of raw material.

Water for industrial and domestic use is important. It is used for cooling machines, cleaning inputs and outputs, produce drinks.
Finances are needed for investments to take place in the manufacturing sector and especially in SMEs.
Human capital, both skilled and semi skilled is needed in order to run the industries and to make innovations and inventions which will go well with new developments in the economy.

4.3 SMALL AND MEDIUM ENTERPRISES (SME'S)

4.3.1 Contribution of SME's to the Economy

It is estimated that about a third of the GDP in Tanzania originates from the Small and Medium Enterprise (SME) sector. According to the informal sector Survey of 1991 micro enterprises consisted of more than 1.7 million businesses engaging about 3 million people, which was about 20% of the Tanzanian labour force. The International Finance Company (IFC)[6] of the World Bank estimates that there are approximately 2.7 million enterprises in the country of which 98% are micro enterprises. Though data on the SME sector are rather sketchy and unreliable, it is reflected already in the above data that SME sector plays a crucial role in the economy.

Since SMEs tend to be labour-intensive, they create employment at relatively low levels of investment per job created. At present, unemployment is a significant problem that Tanzania has to deal with. Estimates show that there are about 700,000 new entrants into the labour force every year. About 500,000 of these are school leavers with few marketable skills. The public sector employs only about 40,000 of the new entrants into the labour market, leaving about 660,000 to join the unemployed or the underemployed reserve. Most of these persons end up in the SME sector, and especially in the informal sector. Given that situation and the fact that Tanzania is characterised by low rate of

[6] IFC. 2005. Tanzania MSME's Access to Finance Assessment

capital formation, SMEs are the best option to address this problem (Ministry of Industry and Trade, 2002)[7].

Through business linkages, partnerships and subcontracting relationships, SMEs have great potential to complement large industries requirements. A strong and productive industrial structure can only be achieved where SMEs and large enterprises not only coexist but also function in a symbiotic relationship. In addition, SMEs serve as a training ground for entrepreneurship and managerial development and enable motivated individuals to find new avenues for investment and expanding their operations.

The advantage with SMEs is that they are quick in adapting to changes in the market within a short time. Like big manufacturing industries, a lot of problems make it difficult for SMEs to exploit the existing potentials for further employment and wealth creation and to compete internationally. One of the most serious impediments is the limited capacity of people who start and operate the businesses, in terms of the attitudes, motivation, exposure, skills and experiences. This capacity limitation exacerbates the effects of other problems including a cumbersome regulatory framework, limited access to finance and working premises. At the same time, services related to entrepreneurship development are underdeveloped and not readily available or affordable to SMEs. The institutions and associations supporting SMEs are weak, fragmented uncoordinated. Their services are quite basic; mainly focusing on helping the poor eke out a living. There are hardly any initiatives for targeted, comprehensive and sustained support specifically to facilitate upward mobility of micro and small enterprises.

As a result of the above situation, a majority of small enterprises have permanently remained micro and informal, limiting their access to markets and some support services, quality of jobs created by them, their capacity to pay taxes and eventually poverty reduction at the grass root level. This situation is likely to worsen as competition intensifies with the ongoing globalisation.

[7] Ministry of Industry and Trade, 2002: Small and Medium Enterprise Development Policy

4.3.2 Comparative and Competitive advantages of SME's

Tanzania like other developing countries acknowledges a fundamental role SME's play in the economy. First, SME's are said to be creators of *employment opportunities* and therefore hold an important key to employment and poverty reduction. SME's use relatively less capital to create these jobs compared with those created by larger enterprises. This is very important given the fact that Tanzania has abundant of labour and a shortage of capital. Second, SME's are claimed to be the main source of economic growth and innovation. By virtue of their being the source of considerable innovative activity, they are responsible for the development of entrepreneurial talent and export competitiveness. Third, the presence of SME's in the economy tends to increase competition, which promotes greater economic dynamism. Fourth, SME's contribute to a more equitable distribution of income, not only by providing employment opportunities - especially for poorer people - but also because SME's tend to be more widely dispersed geographically than larger enterprises, supporting the development and diffusion of entrepreneurial spirit and skills, and thereby helping to reduce economic disparities between urban and rural areas.

4.3.3 Specific Industrial Investment Opportunities

Available statistics show that up to 40% of the value of fruits and vegetables are being lost after the harvest and only 4% of these produces are being processed. This indicates the availability of investment opportunities in the fruit canning and vegetable processing. Another opportunity is in the cashew nuts processing, whereby the annual production is estimated to be 120,000 tones per year. However, it is estimated that 94% of the cashew nuts produced annually is exported in raw form. Tanzania had the manufacturing capacity well above the estimated production of raw nuts, but the collapse of various state owned Cashew Nuts Processing Industries made the situation worse. Therefore, Investment opportunities exist in reviving available processing industries and the establishment of new Cashew Nuts Processing Industries.

Edible oil manufacturing industries and commercial farming of sunflower and other oil seeds is another area where Tanzania can direct its investment because she has the great potential in the production of oil seeds; but she is importing consumable edible oil and crude oil for further processing. This presents an investment opportunity in the edible oil manufacturing industries.

Coffee is one among the main cash crops in Tanzania; the annual production is averaging 50,000 metric tones. The processing of coffee is mostly done domestically by coffee curing industries owned by Coffee growers' cooperative unions. Currently, there is little manufacturing of cured coffee into Instant coffee (coffee for final consumption), hence there is an investment opportunity in the manufacturing of cured coffee into instant coffee.

Tanzania is endowed with largest fresh water lakes with substantial fish resources. The country owns 51% of Lake Victoria 45% of Lake Tanganyika, 20% of Lake Nyasa and several minor lakes, rivers and dams. The market exists in European Union for the Nile Perch from Lake Victoria and Unexploited sardine in Lake Tanganyika. The Indian Ocean fishing is also not fully exploited. Investment opportunities in the fishing industry include:

(a) Fish processing and canning;
(b) Manufacturing of fishing crafts and gears
(c) Animal feeds processing

Sisal and other natural fibers are poised for resurgence in the world market due to global environmental concerns. Tanzania has comparative and competitive advantage in sisal production. By 1961 Tanzania was the largest sisal grower in the world. The sisal production in Tanzania is estate based on plantations of varying sizes averaging 3, 000 hectors or 7,500 hectors per estate. Every estate has the primary processing facilities. The market potential world wide is running into million tons world wide in paper, automotive, building and handcraft industry. These open-up further market opportunities to sisal. Sisal as a primary product can be used to produce a variety of products such as sisal twine, yarns, ropes, bags, carpets, pulp and paper and pharmaceutical (hexogen). Sisal waste can also be used to generate power. This range of products makes the sisal industry one among the products with high turn-over.

According to Tanzania Cotton Board Statistics, a total of 536,392 bales of lint equivalent to 78% of the cotton produced in the 2005/2006 marketing season was exported to various countries in the world, mostly Far East. Only 157,411 bales of lint equivalent to 22% was consumed locally. This presents investment opportunities in the spinning and weaving industries. There are also opportunities in the production of suiting, jeans, shirting and dress prints materials for which there are no established capacities in the country. Opportunities are also available in the apparel and clothing industry to meet the domestic demand and utilize available market opportunities under AGOA initiative.

Cassava starch is one among the input used in textile sector, for the time being almost all of the cassava starch used in the country is being imported. Tanzania has the wide agricultural land that could be used for cassava production. This presents an investment opportunity in cassava commercial farming and the establishment of cassava processing milling and starch industries.

Tanzania is one of the largest livestock keepers in the Africa with a total of 15.6m herds of cattle, 10.5m of goats and 3.5m of sheep. Hides and skin collection is estimated at 17 million pieces per annum. Most of hides and skin are exported raw as there is no well established Leather Industry to absorb the available supply domestically. Currently, only 10% of total annual production is processed domestically. This presents an investment opportunity in: Tanning industries; Leather products manufacturing industries; Forest Industries

Tanzania has about 33.5 million hectors of forests and woodlands. About 13 million hectors of this total forest area have been gazetted as forest reserves. Over 80,000 hectors are under managed plantation forest and 1.6 million hectors are under water catchments areas. Soft wood and Hardwood plantations offer good opportunities for investment in the establishment of wood-based industries such as: Saw-milling; Furniture and Joinery; Pulp and paper industries
Other investment opportunities are available in the processing of non-wood forest produce such as beeswax and honey. Tanzania's potential for honey and beeswax is 138,000 and 9,200 tons per annum respectively. Investment opportunity is also available in the manufacturing of beekeeping equipment.

In the Mining Sector the opportunities are: The establishment of lapidary industries; Mineral cutting and polishing industries; Supportive Industries
The industrial sector in Tanzania has recently been experiencing an upward trend. This implicates an increase in demand of industrial supportive industries such as metal fabrication industries for the manufacturing of spare parts, Manufacturers of packaging materials (corrugated boxes, bottles, metal cans etc) for food processing and beverage industries. This can be one among the areas where investors could consider worth-while to invest.

4.5 TOURISM SECTOR

4.5.1 Introduction

Tanzania is an up-market tourism destination. The country is endowed with a variety of tourism assets, including six World Heritage sites, numerous wildlife parks, beach resorts, coral reefs and spectacular mountain scenic views. A total of 28% of Tanzania is protected area, consisting of 15 National Parks, the Ngorongoro Conservation Area, 31 game reserves and 38 game controlled areas.

Currently, wildlife is the prime tourist attraction. The Northern Circuit, including the Ngorogoro Crater, the Serengeti, and Mount Kilimanjaro is still the principal destination for wildlife viewing safaris. However, the government is encouraging the development of the Southern Circuit, including the Selous Reserve, which is amongst the world's largest natural reserves, to prevent over-exploitation the North. Other principal tourist destinations include the beach resorts, mainly on the island of Zanzibar. Wildlife safaris and beach resorts are offered as single destination attractions and combination packages.

Starting in the early 1990s, there has been a shift from government-led to private sector-led commercial development in the tourism industry. The government formulates policies, regulates, promotes investment and services, and facilitates the supporting infrastructure.

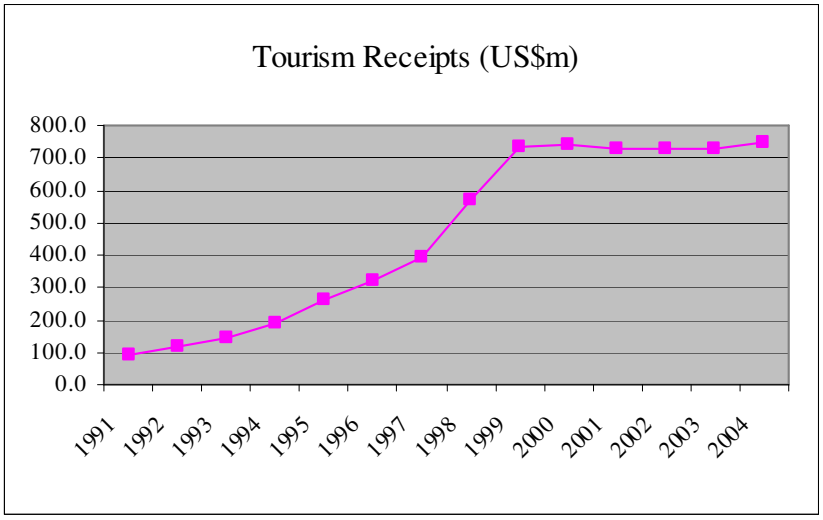
4.5.2 Economic Contribution Of Tourism

The Tanzanian government regards tourism as a priority sector. The contribution of the tourism industry to the GDP rose from 7.5% in 1995 to 12% in 2001. Throughout the 90's, the tourism sector has performed very well and shown high growth rates. From 1990 to 1999 tourist arrivals and foreign exchange earnings from tourism increased by an average annual rate of 15.15% and 27.41% respectively. However, in 2000 the tourist

arrival rate fell by 2.2%, partly as a result of the terrorism attack in Dar es Salaam in August 1998. Since 2000, arrival and foreign exchange earnings have been stagnating at average annual growth rates of 1.49% (arrivals) and 0.09% (earnings). The contribution of Travel & Tourism to Gross Domestic Product (GDP) is expected to rise from 9% (TZS2,399.3 bn or US$1,982.4 mn) in 2009 to 9.2% (TZS6,052.7 bn or US$3,907.6 mn) by 2019.

Tourism plays also an important role in attracting Foreign Direct Investment (FDI) by bringing in 13% of the total FDI (in 1999). Tourism not only contributes directly to growth, but also indirectly through the linkages it has with other sectors of the economy. A study8 establishes that the output multiplier for tourism in Tanzania is 1.8., which is higher than the output multipliers for agriculture, manufacturing and other services. Tourism also requires 44% of its inputs from other sectors, a rate that is above the average of all sectors. The most important input sectors for tourism in Tanzania are agriculture, livestock, poultry, fisheries, dairy, manufacturing, non-perishable foods and dry goods, ground transport and handicrafts. Many of the products are sourced locally, but not necessarily produced in Tanzania.

Figure : Tourism Receipts in Tanzania (US$m)



Source: National Bureau of Statistics, Tanzania

[8] Kweka, Josaphat, (2001) "The Economic Potential of Tourism in Tanzania," paper presented at the DSA 2001 Annual Conference, 10-12 September, IDPM, University of Manchester, UK.

The tourism sector employed 160,750 people in 2004 compared to 96,000 in 1995, increase of 67.5%. The contribution of the Travel & Tourism Economy to employment is expected to rise from 685,000 jobs in 2009, 7.1% of total employment, or 1 in every 14.0 jobs to 879,000 jobs, 7.3% of total employment or 1 in every 13.7 jobs by 2019. The 288,000 T&T Direct Industry jobs account for 3.0% of total
employment in 2007 and are forecast to total 381,000 jobs or 3.2% of the
total by 2019.A study of Northern Circuit hotels and lodges conducted by MIGA9 found that each room is estimated to create two jobs directly.

Moreover, visitor expenditures created an estimated 64% of gross value-added. In addition, the study established that 27% of revenues go into imports, 36% to expenditures on goods and services produced in Tanzania, 15% to income and 24% to government taxes. The average daily expenditure per tourist was US $ 172.58 in 2001, which has risen steadily from US $ 122 in 1995. Export earnings from international visitors and tourism goods are expected to generate 27.5% of total exports (TZS1,557.7 bn or US$1,287.0 mn) in 2009, growing (nominal terms) to TZS4,396.0 bn or US$2,838.0 mn (27.7% of total) in 2019.

Tourism is important for reducing poverty in Tanzania. Households that are involved in tourism are 10% less likely to be poor and therefore show lower poverty rates than food crop or fish producers, and mining sector households.
In 2004, in average 47% of the tourist accommodations were occupied, while the occupancy rate was highest at 64% in 1999. However, there are regional differences. In general, the Northern Circuit shows higher rates (70 – 80%) than the Southern Circuit (40 – 45%). In 2001, Europeans accounted for 31% of the visitors to the Mainland and for 75% to Zanzibar. On the Mainland, 40% of the visitors were Africans in 2001.

Table : Key Tourism Statistics

	1991	1995	1999	2000	2001	2002
Total number of tourists	186800	295312	627325	501669	525122	575000
Total earnings (US$m)	95	259	733	739	725	730
Average earnings per tourist (US$)	507	879	1169	1473	1169	1270
Average daily expenditure per tourist	72	122	152	184	173	172

[9] MIGA, (2002) Tourism in Tanzania: Investment for Growth and Diversification, September 2002.

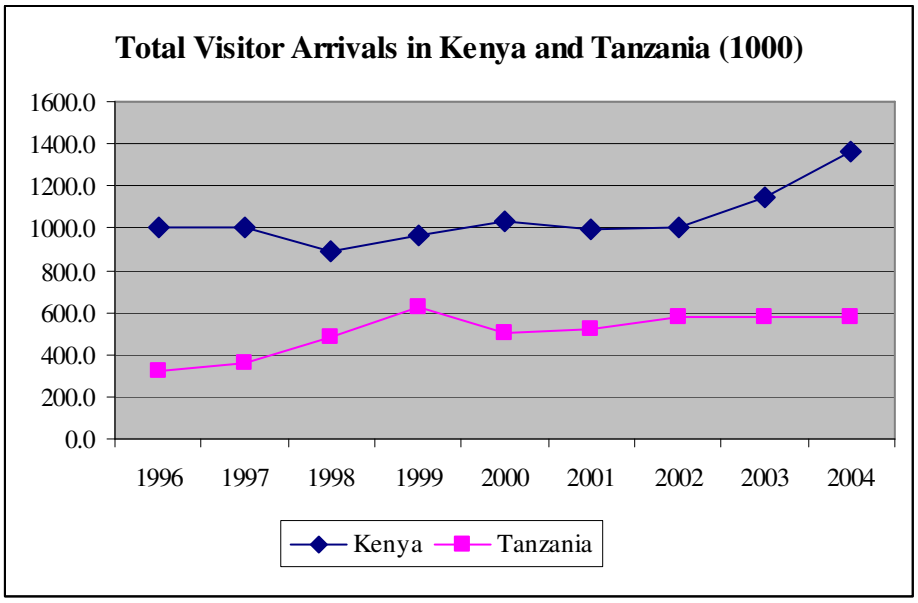
(US$)						
Number of hotels	205	210	321	326	329	465
Number of hotel rooms	5484	6935	9575	10025	10325	25300
Number of hotel beds	9878	12145	15325	17303	18284	45500
Total tourist bednights in hotels	1031136	1662542	1686000	1888000	1955000	8430000
Average hotel occupancy rate per year	56	57	64	54	59	51
Number of employees in the tourist sector	45000	96000	148000	156050	156500	160200

Source: Ministry of Tourism and Natural Resources and the National Bureau of Statistics, Tanzania.

4.5.3 The Tanzanian Tourism Industry in Comparison to Other Countries

In terms of tourism assets, Tanzania can be compared to Kenya, given that both countries feature a number of game parks, mountains and lakes as well as beaches on the Indian Ocean. However, Kenya received in 2004 about 780,000 visitors more than Tanzania, although Tanzania has more than four times the land mass conserved as national parks. In addition, Tanzania's wildlife is considered to be superior in terms of quality, quantity, diversity, and visibility to that in competing destinations.

Figure : Total Visitor Arrivals in Kenya and Tanzania



Source: National Bureau of Statistics, Tanzania and Central Bureau of Statistics, Kenya

One reason of the differential in visitor arrivals is that Tanzania targets higher income tourists and tries to stay away from Kenyan style mass tourism. Mass tourism is not seen as an option for Tanzania, given the fragility of its natural assets. In addition, targeting low volume, high yield tourism allows Tanzania to keep the image of exclusivity, which is feasible because of its assets.

Both, Tanzania and Kenya are endowed with similar tourism assets such as wildlife, beaches and mountains. Tour operators in both countries offer packages that either include only one type of attraction, such as wildlife safaris, or feature the combination of two or more attraction, i.e. mountain trekking and wildlife safari, or wildlife safari and beach vacation.

For example, the same tour operator offers a 6 days tour to Tanzanian game parks in the Northern Circuit for Euro 695 plus US$ 390 local payment, and a similar 7 days wildlife safari in Kenyan game parks for Euro 445 plus US$ 179 local payments. This tour operator also offers safari and beach combination packages for both countries. The 10 days combination of Tanzania's game parks with the tropical beaches of Zanzibar costs Euro 1195 plus US$ 390 local payments. A similar 11 days package featuring Kenya's game parks and the

Box : Tourism packages offered in Tanzania and Kenya

All tours referred to above start from Nairobi, Kenya including the tours to Tanzania.

Tanzania's tourism industry shows better results if compared in terms of earnings from tourism. Tanzania received in 2004 US$ 746 million while Kenya earned US$ 495 million. Tanzania's occupancy rate at 47% in 2004 was also higher than that of Kenya (37.8%). Tanzania's performance in terms of growth of tourism receipts by far surpassed that of Kenya during the 1990s: From 1990 to 1995, Tanzania showed an average annual growth of receipts of 31.8%, while Kenya's receipts grew by 1.9% annually. In the period from 1995 to 2000 Tanzania's average annual growth of receipts slowed down to 23.3%, and Kenya marked an average annual decrease in receipts from tourism by -10.7%.10 Kenya picked up growth in the period from 2000 to 2004 experiencing an

[10] Average annual growth rates of receipts are calculated by the World Tourism Organzation.

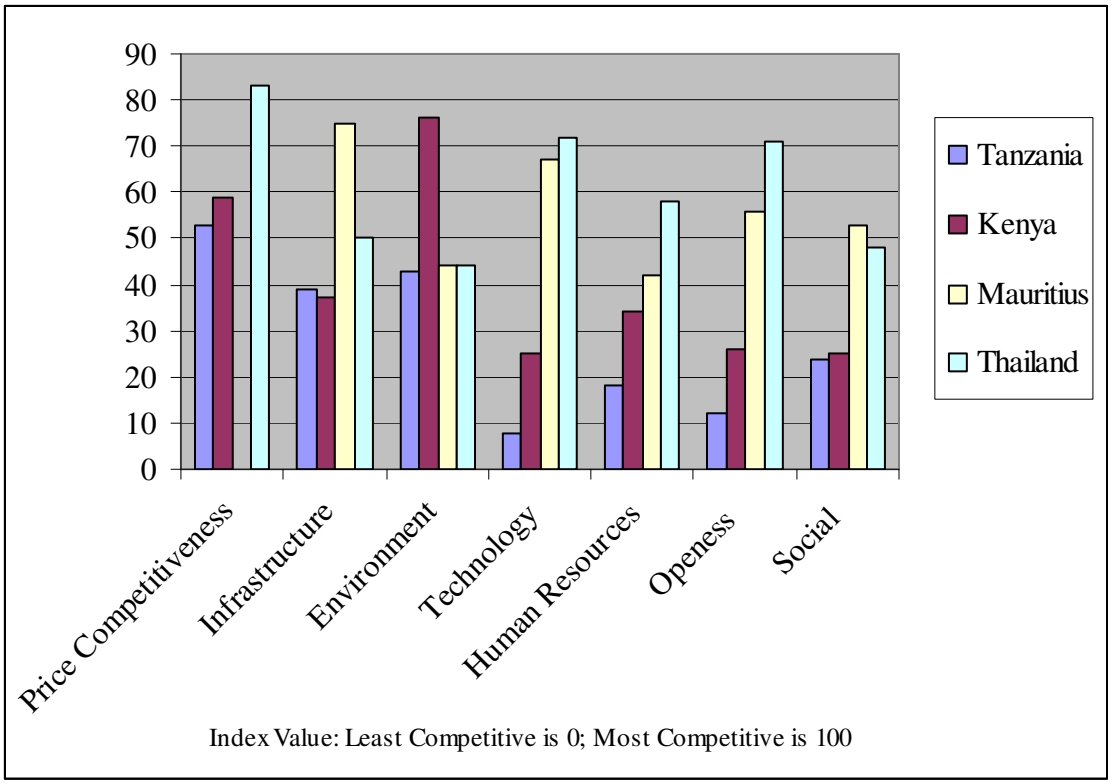
average annual growth rate of receipts of 18.9%, far surpassing Tanzania's slow average annual growth rate of 0.24%.

According to the WTTC Competitiveness Monitor 200411, Tanzania is overall less competitive than Kenya, Mauritius or Thailand. Tanzania's price level is higher than Kenya's and Thailand's. Even though the tourism infrastructure in Tanzania is slightly better than in Kenya, it is still very weak. The levels of technology, education, openness towards trade and visitors, and social index12 are very low in Tanzania, resulting in international rankings in the lowest third.

Figure : WTTC Competitiveness Index

[11] Tourism Price Competitiveness Index is computed using the Hotel Price Index and Purchasing Power Parity Index. The Infrastructure Index shows the level of infrastructure development, combining the Road Index, the Sanitation Index and the Water Access Index. The Environment Index combines the Population Density Index, CO2 Emission Index and the Environmental Treaties Index. The Technology Index unites the Internet Index, Telephone Index, Mobile Index and HiTech Index. The Human Resources Index is proxied by using the Education Index obtained from the 2004 UNDP report consisting of the adult literacy rate and the combined primary, secondary and tertiary gross enrolment ratios. The Openness Index is an aggregate index including the Visa Index, Tourism Openness Index, Trade Openness Index and Taxes on International Trade Index. The Social Index is a combination of the Human Development Index (HDI), Newspaper Index, PC Index, and TV Index.

[12] Social Index is an aggregate social index, combining the Human Development Index (HDI), Newspaper Index, PC Index, and TV Index.



Source: World Travel & Tourism Council

4.5.4 Growth Potential

Tanzania's tourism potential is not yet fully exploited; the sector can therefore make greater contribution to growth and poverty reduction. Kenya, for example, in 2002 received about 250,000 visitors more than Tanzania, although Tanzania has more than four times the land mass conserved as national parks. In addition, Tanzania's wildlife is considered to be superior in terms of quality, quantity, diversity, and visibility to that in competing destinations. One reason of the differential in visitor arrivals is that Tanzania targets higher income tourists and tries to stay away from Kenyan style mass tourism. Mass tourism is not seen as an option for Tanzania given the fragility of its natural assets. In addition, targeting low volume, high yield tourism allows Tanzania to keep the image of exclusivity, which is feasible because of its tourism assets.

Nevertheless, there is still unexploited potential in new destinations and activities, in particular in niche markets. Moreover, the capacity of tourist services in the Southern part of the country is not fully utilized. Moreover, the potential that marine assets on the coast area offer has not yet been fully transformed into tourism products. Any

further exploitation of Tanzania's tourism potential has to ensure long-term sustainability, requiring activity by public and private actors.

4.5.5 Recommendations

a) Development of innovative tourism packages and niche products

Tanzania has also not yet fully exploited its potential in value-added niche products such as bird watching, adventure tourism including climbing/trekking, deep-sea fishing, scuba diving, cultural tourism, and hunting.

Tanzania could also follow South Africa's example and use tourism to reduce rural poverty. Wildlife-based tourism is a potential revenue source for rural communities. This could be combined with cultural tourism and sold as a package.

b) Investment in supporting infrastructure.

- **Transport infrastructure**. Tanzania's international access by air is inadequate and expensive. Many visitors of the Northern Circuit fly to Nairobi, Kenya. Domestic transport is also in great need of improvements. In order to exploit the tourism potential of remote tourism destinations, in particular in the Southern Circuit, the road and air transport has to be improved to allow better access.

- **Telecommunication and electricity**. The costs for both, telecommunication services and electricity are high in Tanzania. Moreover, the Southern part has no access to national electricity grid. Most lodges in national parks and game reserves rely on generators – a situation that needs to be addressed in order to ensure the attractiveness of these important assets.

- **Health services.** The availability of heath services is also very important to the tourism industry, in particular for up-market tourism. In Tanzania, medical care is not available in all parts of the country. There is a need for better provision of health clinics and medical evacuation facilities to meet the requirements of the tourism business.

5.0 GROWTH DRIVERS

5.1 Overview

In establishing the key drivers of economic growth, we stress the aspect of interdependence of different sectors, but in difference with the concept of growth sectors the drivers tend more to cut across several sectors as they support them. Oftentimes, the output of one sector may become the input of another, with some drivers acting as facilitators of this relationship within the economic system (e.g. transport, finance, ICT, and knowledge facilitating in the transformation of agricultural produce to provide inputs into manufacturing here in Tanzania or in overseas markets).

The theory of economic analysis (Leontief, for instance) has highlighted the interdependence among various sectors as seen by observing the product or service output of each sector both as a commodity for consumption or as a **factor in the production of itself and other goods**. The early theories were based on the Soviet model of planning, resulting in input–output analysis of an economy that functioned by instruments of central planning and command control. Tanzania attempted this type of methodology in the 1970s at the Ministry of Planning (DEVPLAN) but the methodology for investigating production relations among factors of production, the inter-sectoral factor flows, demands and public financial transfers were often concealed and not easy to detect from available statistics. Even in the Soviet era the assembly of input-output tables for the material balances was an arduous task and the Tanzania's experiment has not been comprehensively pursued much further.

Since the introduction of a market economy in the 1980s in Tanzania, the demand and supply of factors of production and consumption are largely determined by the national as well as the external markets. The market in the Tanzanian economy is integrated by different forms and degrees of **monetary intermediation** and **public policy instruments**. Generally speaking, the more an economy is developed, the closer the interrelationship among the sectors and the more efficient are the growth drivers. If this hypothesis is tenable, then it would have a profound implication on what to give priority to in the direction of public investments now and in the future.

Another consideration in the concept of key growth drivers relates to the issue of **market accessibility** and reduction of production and distributional costs. In this regard, **infrastructure** (both hard and soft) remains a key driver to exploiting Tanzania's economic potential. To achieve higher growth and modernization targets of the growth sectors and growth drivers, a closer attention needs to be paid to Tanzania's infrastructure network to enable improved accessibility to productive locations. The transport network is geared toward serving an economy that is dependent on the outside world for output markets and imported inputs, leaving gaps in an otherwise interconnected network that should help develop the domestic market. The vastness of the country and the wide geographical distribution of economic activities, partly following the location of natural endowments, have posed enormous pressures on the rather undeveloped communication and transport systems.

Also critical is role of **skills and human capital** in supporting the growth sectors. Levels of human capital are low in Tanzania and building human capital is an important element of the poverty reducing strategy for at least two reasons. First by building human capital, the foundation is laid for higher growth in the future (Barro 1991; Mankiw, Roemer and Weil 1992). And secondly, by building the human capital of the poor, the pattern of growth will be pro-poor. Aspects that build human capital are: education, nutrition, health and fertility. Education is associated not only with income but also with non-income dimensions of poverty. Low levels of education lead to higher total fertility, lower levels of child nutrition (REPOA 2005) and higher child mortality. Thus improving the nutritional situation of Tanzania's population is another element in a strategy aimed at building human capacity for growth and poverty reduction.

Economy-wide improvement in skills and knowledge is needed to cope with competition in the rapidly integrating global economy. The ability to absorb and adapt technology, particularly **information technology**, is of paramount importance for overall productivity enhancement. The nascent efforts in Tanzania for promoting e-ecommerce and electronic public service, as well as the M*kongo (sub-marine fibre optic cable)* offer opportunities to leapfrog technologically into the 21st century. The main constraints in the medium to long term are likely to be the low level of skills and educational attainment among Tanzania's population. In this regard, quality education, health and improved fertility as well as ICT are critical growth drivers.
To sum up, the key growth drivers chosen for the model of the growth strategy are: (i) Infrastructure, (transport, water, energy, etc), (ii) Human Resources, (iii) Land, (iv) Finance, (v) Business environment, and (vi) ICT .

(*Endnote No.1: Save for the tourist sector (Ref.The Economic Potential of Tourism in Tanzania by Josaphat Kweka, Oliver Morrissey and Adam Blake -2003*)

5.2 INFRASTRUCTURE

5.2.1 Economic Infrastructure

The economic infrastructure area embraces two main groups:

(A) The Physical or Hard Infrastructure, which in turn includes: (i) transport (roads, railways, harbors, marine facilities, airways and pipelines), (ii) Energy and Water; and

(B) Soft Infrastructure which entails Information, Telecommunication and Technology.

5.2.1.1 Transport Sector

5.2.1.1.1 Introduction

This section analyses Transport Sector, which in turn include the subsectors of Road Transport, Railway Transport, Marine or Water Transport and other types of transport (such as , Civil Aviation and Pipeline services), each of which may consist of basic route structures, rolling stock and necessary building structures such as stations, ports and maintenance workshops, as well as other ancillary services.

The transport infrastructure is distinguishable as a key provider of transportation to the whole economy. It facilitates the moving of people and goods from the producer or seller (supplier) to the market (or consumer), or simply moving them from one location to another. It thus facilitates domestic and export trade and is the main medium of moving inputs and outputs of other sectors, thereby inherently linked to the other sectors to varying degrees, including notably agriculture, mining, tourism, manufacturing, health and education.

As shown in the **Map** at the end of this Chapter**, Tanzania has a** total land mass of 886,040 square kilometers, with a population of close to 40 million inhabitants (2009 estimates), largely dispersed. More people are concentrated in the periphery of the territory. The geography of Tanzania places it at a special vantage location in comparison with its 6 land-locked neighboring countries, namely: Burundi, Rwanda, Uganda, Malawi, Zambia, and Congo (DRC), with only Kenya and Mozambique having access to the sea. It is bordered by three large inland lakes of Victoria, Tanganyika and Nyasa (also called Malawi in Malawi), that are respectively shared with other countries.

The Indian Ocean provides a coastline of 804 km on the eastern part of the country. An exceptionally large territory and concomitant population is a boon for developing a veritable domestic market. But it is also a challenge in terms of developing adequate physical transportation networks.

5.2.1.1.2 Contribution of the sector to GDP

Transport is an important cross-cutting sector for its critical role and impact on different sectors in any economy. Its efficiency affects competitiveness of most businesses, especially those that need to deliver or export goods to the market, or in turn require inputs from suppliers. As shown in **Table-1** the share of the transport and communications sector in the GDP has averaged around 5.28% per annum between 2000 and 2007 with very slight deceleration appearing after 2005**.** In 2007 Transport activities grew by 6.5 percent compared to 5.3 percent in 2006 (2007 Economic Survey). The Transport sector provides employment, attracts FDIs, and contributes to the Balance of Payments. The Integrated Labour Force Survey (2000/01) estimated that out of total wage employment of 1,159,498, transport and communication contributed about 8 percent. Despite these attributes, Tanzania's transport infrastructure is insufficient to meet the needs of the country's widely dispersed population. For example, the fertile regions in the North-west, the west and south often during the rainy season are cut off from the export outlets due to poor roads.

5.2.1.2 Transport Sector Policies

Transport sector development has been a keen subject reflected in all the key policy formworks, namely Vision 2025, MDG, Mini-tiger Plan, MKUKUTA and its predecessor the PRSP-I, as well as the National Transport Policy (NTP) of 2003. All of them, in varying emphasis, mention effective transport and communication in the attainment of the objective of poverty reduction and growth. The NTP points out the following crucial objectives, more particularly addressed to the roads sub-sector:

- The need to catch up in the lagging of vital investments in the transport sector, with special attention to maintenance work, infrastructure rehabilitation, streamlining the regulatory regime and enhancing institutional capacity.
- Significant coverage of the country with tarmac roads, so that at least the trunk roads provide links to regional headquarters with all-weather communication.

- Participation of the private sector in construction and in the running of transport facilities.
- The use of appropriate technology in construction and in different modes of transportation.
- Developing main transport routes along transport corridors and integrating these with other sectors in a multi- transport-mode framework.
- Paying special tribute to the role of rural roads in meeting household needs and in evacuating produce to the market.
- Providing efficient and competitive transport to neighbouring countries

It in the above context, the NTP highlighted the priority that should be accorded to roads improvement in the poor regions of Tanzania, separately identified as Coast, Dodoma, Kagera, Kigoma, Lindi, Mara, Morogoro, Mtwara and Rukwa[13], and much more specifically directed that significant investments be made in such regions accordingly to foster the development of the transport sector. The NTP emphasizes the roads sector as the most dominant mode, since roads carry close to 70% of the country's freight and 90% of the passengers.

5.2.1.3 Contribution of the Transport Sector to Other Sectors

The effectiveness of the transport sector is in providing transportation services to other sectors. Thus it serves to carry inputs (factors of production) to the agricultural sector, manufacturing, mining, and other growth sectors. The vital role played by the transport sector in supporting the agricultural sector and rural development in general in Tanzania is invaluable, whether in conveying inputs or more particularly carrying the produce and exports, given that they are preponderantly unprocessed and thus are in bulk form. As such, agricultural production relies a lot on the roads. Bad conditions of the road network impose a heavy cost on the marketable produce. If the transport costs are high, they also weigh heavily in the cost composition of the farm inputs, which therefore together with high cost of produce transportation reduces farm gate prices. This contributes to making Tanzania's agricultural exports to be less competitive.

For sectors like mining, it is sometimes necessary to build a road or a railway branch initially so as to be able to carry the heavy equipment needed to open up a mine in a remote place.

[13] TzPPA (2003)

5.2.1.4 Transport Sector Development Framework

5.2.1.4.1 Transport Corridor Concept[14]

The transport sector development approach has adopted the concept of transport corridors, of which there are eight (8) [15] in Tanzania, and four of them seem to be most prominent. They are:

1. Central Transport corridor
2. TAZARA (or TANZAM) Corridor
3. Mtwara Development Corridor
4. North-East Corridor

The other four are (5) Lake Victoria Circuit Zone of Mutukula-Bukoba-Mwanza to Musoma, (6) South-North Corridor of Iringa-Dodoma-Arusha-Namanga, (7) The Western Corridor of Mbeya-Sumbawanga-Mpanda-Kigoma-Nyakahura, and (8) the South Coast Corridor of Dar -Lindi and Mtwara.

The Central Corridor is possibly the most prominent. It interconnects most parts of Tanzania and is vital in promoting trade and investment that affect areas of significant economic activities, such as rice, cotton and mining areas in the Lake Victoria Zone, tourism and agriculture countrywide, and manufacturing in the coastal areas. The Central corridor comprises the Dar es Salaam - Kigoma central railway network running some 1254 km, connecting to lake vessels on Lake Tanganyika to Burundi (Bujumbura) and to Rwanda by road. The rail line has several branching lines to Mwanza on Lake Victoria, with links by ferry boats to Bukoba, Musoma and Entebbe in Uganda. Other branches go to Mpada in Rukwa region, Singida in Singida region and Kidatu in Morogoro region. A trunk road route joins Dar es Salaam via Dodoma, Singida, Nzega to Bukoba, branching off to Mwanza at Nzega and to Rwanda and Burundi at Lusahunga. The central corridor is critically important in trade facilitation and linkage between Dar es salaam and Tanga ports to the Western and North-West parts of Tanzania and to neighbouring countries of Uganda, Burundi and DR Congo. Some of the central parts of Tanzania are literally isolated from the rest of the country

[14] Article on Internet by Martin Czernowalow of 4 July 2003 on "Tanzania seeks backing for transport project"
[15] The National Transport Policy.

and so an improvement of the transport infrastructure is necessary but not sufficient without corresponding feeder roads connecting districts such as Kondoa to the central corridor backbone.

The TAZARA (or TANZAM) Corridor[16] revolves around the Dar es Salaam port, with a railway to Zambia running about 1860 km. It passes some 970km in Tanzania through 5 regions of Dar es Salaam, Coast, Morogoro, Iringa and Mbeya, the latter three being some of the most fertile agricultural areas in the country dubbed among the "big six" or grain basket of Tanzania. It ends at New Kapiri Mposhi in Zambia, linking to the Zambian railway system. The TAZARA Corridor is connected by a good road to the Mtwara Development Corridor in the Southern Regions. There is an interface of the Central Railway line and TAZARA at Kidatu, whereby transshipment of goods to southern Africa can take place. The corridor provides alternative connectivity between the coastal parts of Tanzania and the Southern parts of Tanzania. But more importantly, it acts as transport backbone that is supposed to be linked to feeder roads within the vast parts of Morogoo region, which is considered as sleeping economic giant due to poor or absent road transport network.

The Mtwara corridor extends from Mtwara port to lake Nyasa in Songea and joins the TAZARA Corridor at Tunduma in Mbeya region. This corridor has in recent years been a subject of concerted consultations between the governments of Tanzania, Mozambique and Malawi, aimed at maximizing trade exchange and stimulating agricultural production in the transient areas. It has also led to initiating several infrastructure projects for linking cities, mining areas and neighbouring countries. The Mtwara corridor complex includes such components as (i) the development of the ports of Mtwara, Manda, Mbamba Bay, Lindi and Kilwa, (ii) the airports of Mtwara and Songea, (iii) construction of the unity bridge on the Ruvuma river and Ferry crossing to Mozambique, (iv) the Mtwara–Mbamba Bay road, as well as a railway from Mtwara–Songea to Manda on Lake Nyasa, and (v) the railway branch from Manda to Mchuchuma coalfield (with 300 million[17] proven reserves) and to Mlimba[18]. This corridor is economically important for a number of reasons: (a) opening up the Port of Mtwara as a gateway for countries south of Tanzania (Malawi, North Mozambique, Zambia and Southern DRC) for exports and imports (b) opening up the southern parts of Tanzania (Mtwara, Lindi, Mbeya, Iringa and Rukwa) to the outside world through

[16] Or sometimes referred to as the TANZAM corridor
[17] NDC sources
[18] Source: 2004 paper by Edward S. Mkiaru economist in the Ministry of Infrastructure

Mtwara port but between districts and regions in the zone (c) stimulating agricultural production the southern parts of Tanzania, and easing access to tourist zones such as the Seleous Game Reserve (the largest in Africa but with very little connectivity in terms of road and rail network.

The North-East Corridor[19] extends from Dar es Salaam, through Tanga (embracing the Tanga port) to in the northern part of the country up to Arusha through Moshi. It has a potential to join Mara region by a road and a railway that can service Uganda[20], Rwanda, Burundi and northern parts of DR Congo. From Arusha the current road and railway extend northwards to Kenya, but the rail is now not operational. The colonial-era fame of this corridor hinged on the vibrancy of Tanga port as well as that of the sisal industry. In addition, the railway from Tanga to Arusha has lost out due to traffic oriented to the larger ports of Mombasa and Dar es Salaam. This corridor is also critically important for the interconnecting of tourists between Zanzibar, Arusha, Serengeti and Lake Victoria.

5.2.1.5 The Comparative Advantage of Geographical Locations

Geoffrey Sachs and others (2001)[21] have demonstrated that poorest regions in the world are those that are furthest from sea trade, such that, economies that are nearer to a coastline have a great comparative advantage over those that are landlocked. This logic can also be extended to geographical locations of regions such as Kagera, Rukwa, Ruvuma, Kigoma and Mara[22]. Long distance from the sea can add as much as 50% increases in transport costs of exports, particularly if this is attributed to poor infrastructure. These places are usually economically disadvantaged[23], such that some of the remote parts such as Newala or Nkasi used to be dubbed "Tanganyika" because of the backwardness of the socio-economic conditions there.

Table 5.1: SUMATRA Announced Prices (Caps Dated 29 April 2009)

Town/District Destination	Distance from Dar in km	Petrol per litre	Differential with DSM	Kerosene per litre	Differential with DSM
DSM	00	1400	00 (0%)	894	00 (0%)

[19] Not to be confused with the North Transport Corridor of East Africa which denotes the Mombasa-Malapa-Kampala-Kigali route
[20] The extension of the railway to Lake Victoria has been in the plans since the British colonial period
[21] Radelet and Sachs (1998) and Sachs, Mellinger, and Gallup (2001)
[22] Such as Eastern DRC and a large part of Tanzania in the South- West, West and North- West
[23] If their trading outlets are restricted by national boundaries and not determined by geographical affinity

Karagwe	1,426 via Bukoba	1616	216 (15.4%)	1110	216 (24.2%)
Kasulu	Over 1,000	1602	202 (14.4%)	1076	182 (20.4%)
Kibaha	40	1405	05 (0.35%)	899	05 (0.5%)
Moshi	563	1479	79 (5.6%)	973	79 (10.9%)
Serengeti (Mara)	1373 via Musoma	1608	208 ((14.9%)	1103	209 (23%)
Kyela (Mbeya)	827 via Mbeya	1532	132 (9.4%)	1026	132 (14.8%)
Morogoro	190	1427	27 (1.9%)	921	27 (3.0%)
Mpanda	1160 via Sumbawanga	1593	193 (13.8%)	1088	194 (21.7%)
Tunduru	950 via Songea	1570	170 (12.4%)	1064	170 (19.0%)

Sources: SUMATRA website and URT Ministry of Infrastructure Development June 2008

A check at the indicative prices of petroleum prices announced by EWURA in 2009, for instance, found that the differences between Dar es Salaam and other outlying towns were substantial, but due to price control they were a bit subdued. All the same, places that are more than 1,000km from Dar experience experienced price differentials of between 12% and 25% according to **Table-2**. Radelet and Sachs (1998) suggested that "*All else being equal, a landlocked country, with shipping costs 50 percent higher than a similar coastal economy, could expect slower growth of about 0.3 percent a year*." This assumption again could be extrapolated to apply to regions in Tanzania that are located far off the coast. As a by-the-way, it should be noted that the EWURA prices cited in **Table-2**, which seemingly were well intended to redress the disadvantage of the distance factor, might be faulted in that they did not take into account the conditions of the transport means, such as the road conditions, that can introduce a huge difference in the cost of transportation.

In addition to the above factor, transportation costs in neighboring countries bear additional mark ups due to customs clearance at the sea port and the borders as well as administrative check points placed along the transportation routes.

5.2.1.6 Road Transport

Geographical Coverage and the Condition of the Roads

Road transport accounts for over 70% of the total traffic in the country. The balance is carried mainly by rail and a smaller amount by coastal and lake shipping. Private sector operators provide about 90% of the total road transport services. About 35% of trunk roads are paved, and only half of these are in good condition. All types of roads

considered, only about 5% of the country's roads is paved or 14.7% of all TANROADS and regional Roads (2007data). An all-paved highway links Dar es Salaam (the commercial capital) and Dodoma (the nominal administrative capital) and another one from Dar to Tunduma (towards Zambia), then Dar to Tanga, and Arusha (extending to Kenya through Namanga border). The condition of the road system seems to have improved between **2003 and 2007 (Table-3),** which augurs well with expected contribution of better roads to economic development. It should be borne in mind, however, that the figures indicated in Table-3 are not comprehensive as they do not include rural roads which characteristically are unpaved. The estimated total road network, including rural roads, is about 88,540 kms (mid June 2008).

Another disturbing observation on the road infrastructure is the uneven distribution of resources across the country, partly due to donor preference for supporting certain regions[24] and partly to casual disregard to information on geographical poverty characteristics found in Household Budget Surveys and MKUKUTA. The regions identified as relatively well off such as Dar es salaam, Kilimanjaro, Mbeya and Iringa have relatively better roads compared to those with more perverse poverty indicators such as Lindi, Singida, Ruvuma, and Mara. The poor regions of Rukwa and Kigoma are a special category in that they are not even appearing in the assessment of roads since they practically do not have paved roads to speak of and yet the two regions have enormous untapped agricultural potential.

Road Development Strategic Plan

The Road Development Strategic Plan has guided government investment efforts in road building. Its implementation has been detailed in the Tanzania Transport Sector Investment Plan ((TSIP-phase I- 2007/8-2011/12) for which Report (April 2008) was a subject of the key Budget Statement by the Minister of Infrastructure's of July 2008. The main objective of the TSIP is to ensure that all trunk roads are tarmac-ed or under compact murram while linking all district and regional headquarters by such roads. The Minister outlined developments with regard to the TSIP, including: (i) 17 truck roads for a total of 1,163 Kms that were completed, (ii) other trunk and regional roads at different stages of construction or detailed engineering study stage, (iii) regional and district link roads as well as (iv) cross border roads and bridges to Mozambique, Kenya

[24] After this statement was written (on 19 May 2009) the Minister of Finance reportedly made similar explanation to the pre-budget session of The Parliamentary Finance and Economic Committee on the Draft 2009/2010 Budget

and Burundi. Most of the roads were/are being funded under the Roads Fund plus support from external partners.

Some of the above roads have been incorporated in the EAC Roads master plan and the Tanzania portion of the East Africa Road Projects. The latter include the following:

1. Dar es Salaam - Dodoma - Isaka - Mtukula - Masaka (2020 km)
2. Biharamulo- Mwanza - Musoma - Sirari - Lodwar Lokichogio in Kenya (449k)
3. Tunduma - Sumbawanga - Kasulu - Nyakanazi (1121km)
4. Tunduma - Iringa - Dodoma - Arusha - Namanga - Moyale, Kenya (1056 km)

Table 1: Condition of the Road Network by June 2003 and by December 2007

	Good km (%)		**Fair km (%)**		**Poor km (%)**		**Total**	
Trunk roads	**2003**	**2007**	**2003**	**2007**	**2003**	**2007**	**2003**	**2007**
Paved	1,874	2,817.91[25]	1,444	876.68	586	227.00	3,904	3,913.77
Unpaved	1,719	2,468.43	2,334	2,624.96	2088	951.25	6,141	6,020.56
Total Trunk Roads	3,647 (36%)	5,286.34	3,717 (37%)	3,501.64	2,670 (27%)	1,178.25	10,045 (100%)	9,934.33
Regional roads								
Paved	88	265.23	93	52.59	64	9.82	245	327.45
Unpaved	5,466	8,197.17	6924	7,079.38	5,830	3,353.39	18,220	18,629.94
Total Regional Roads	5,483 (30%)	8,462.40	6,790 (38%)	7.131.97	6,093 (33%)	3,363.21	18,465 (100%)	18.957.39
Total	9,129 (32%)	13,748.74	10549 (37%)	10,633.61	8,838 (31%)	4,541.46	28,510 (100%)	28,891.72

Source: TANROADS Annual Report FY 2002/03 and Economic Survey 2007]

The above data reveal that almost all LGA feeder and village roads are not paved, and quite a number of them are not all-weather passable. According to **Table-3**, the ratio of trunk and regional roads in good condition improved from 32% in 2003 to about 48% in 2007. Yet according to another source of information, about 46% of all country roads was in bad shape in 2004![26]

[25] Data from MID shows higher figure of 3,913.77km

[26] A document related to the MCC prepared by a World Bank Mission in 2004

5.2.1.7 Railways Transport

The Tanzania railway network comprises two systems that connect about 14 of the 21 regions of the country. It is estimated that about 33% of the goods handled in the network are on transit emanating from or destined for neighboring countries. The two systems are under (i) the Tanzania Railways Corporation (TRC) and (ii) the Tanzania Zambia Railways Authority (TAZARA). Both lines have a track length of 3,685 km.

The TRC line

The TRC line operates on a narrow gauge of 1,000 mm (3 ft 3⅜ in) for a total length of about 2,600 km. Two east-west rail-lines from the coast to the hinterland were built when the country was under German colonial rule and they run from Dar es Salaam to Kigoma, and the Tanga line from Tanga to Arusha (latter now almost closed). A north-south connection from Korogwe to Morogoro linking both lines was built in 1949. The main central line has further branches, one from Tabora to Mwanza on lake Victoria and through wagon ferries connect to the Uganda railways at Entebbe. From the Tanga line a now defunct connection goes north to Kenya; it was in operation during the time of the former East African Community. As for the future, new rail-links to Rwanda/Burundi from the Isaka dry dock on the TRC railway and the Musoma - Tanga railway connection to Uganda are contemplated.

At the moment, the railway connection between the port of Dar-es-Salaam and Kigoma on Lake Tanganyika is the principal route in the Central Corridor, providing linkages to Burundi and Rwanda, via barges on Lake Tanganyika to Bujumbura, and to the DRC. The TAZARA railway on the other hand, links Dar es Salaam port to Zambia ending at Kapiri Mposhi, connecting with the Zambia Railway system that links further to southern Africa and to the DRC. The road and rail networks, if perfectly maintained and operated, could be a key factor in realizing the potential of Dar es Salaam to be the hub for transport services in eastern and central Africa and for industries producing for the regional markets.

Table 5.2: TRL Railway Freight Performance 1995 to 2007 ((*source: MID Transport Statistics and Information June 2008)*

Year	TRL freight in 000 tons	TRL Passengers Traffic (in'000)
1995	1342	NA
1996	1244	NA
1997	1073	NA
1998	955	NA

Year	TRL freight in 000 tons	TRL Passengers Traffic (in'000)
1999	1127	NA
2000	1165	NA
2001	1351	728
2002	1446	685
2003	1443	683
2004	1333	628
2005	1129	674
2006	775	594
2007	714	585

On the other hand, a number of reasons contribute to the inadequate performance of the railways (**Table 5.2),** including incompatibility of the two rail track gauges (TRC's is 1 m and TAZARA's is 1.067 m) ; the aging or low availability of locomotives and wagons, and spare parts; and poor utilization of assets due to ineffective operations management. Prevailing reduced speeds result from poor track condition and poor locomotive reliability; and there are traffic disruptions due to land slides, rail sections washaways or derailments resulting from inadequate and defective signaling, security lapses and poor communications facilities. These deficiencies were nonetheless expected to be resolved under a new Indian investor who has taken over the running of the TRC system. The TRC investor has with the government created a joint venture, with government taking up a 49% stake to run the central railway line. A new company, the Tanzania Railway Limited (TRL), started operations on 1 October 2007 under a holding company called Reli Assets Holding Company (RAHCO).

Despite a hopeful start in 2007, TRL has been facing teething problems that were largely inherited. It has faced financial difficulties that have multiplied the operating woes. In the end the government had to step in to try to rescue the situation by paying up the backlog of the wages. At the beginning of 2009, the government disbursed $500,000 for 3,000 employees[27]. The TRL blues are not unique, however. The financial distress of TRL have somewhat been replicated in Uganda/Kenya railway.

TAZARA line

The TAZARA railway line was constructed by the Chinese in form of a turnkey project financed by a Chinese government interest-free loan of approx. US$ 500 million. The construction works commenced in October 1970 and were completed in 1976. TAZARA provides a gateway to southern, central, and east African business markets, thus covering both Southern Africa Development Community (SADC) and Common Market

[27] The East African newspaper of 30 March 2009.

for Eastern and Southern Africa (COMESA) regions. At the same time, apart from providing Zambia with an outlet, its construction was planned also so as to open up Tanzania's south-western regions. A recent case study (2008) by Tanzanian economists [28] has recounted the situation of the management of TAZARA. It notes that the original railway track has had minimal structural additions afterwards e.g. in form of railway sidings, except the off-shoots to the oil storage facilities in the Dar es Salaam area, the Mufindi Southern Paper Mills, and to the Mbeya Cement plant. Most of the operations, maintenance and renewal funding is dependent on TAZARA's own generated revenues. This source is not enough and as a consequence significant reliance on Chinese assistance is now desired.

The TAZARA railway primarily transports copper from Zambia and agricultural produce and imports for both Zambia and Tanzania. **Some Malawi transit trade also passes through TAZARA**. Malawi operates a Malawi Cargo Centre (MCC), a dedicated container depot close to the port of DSM, to handle the transit shipments. The MCC also has special facilities in Mbeya to handle containers, general cargo and petroleum products. The MCC handles about 44 per cent of Malawi's fuel imports[29]with the rest passing through Nakala and Beira in Mozambique as well as South Africa.

A total of ninety-three (93) railway stations were constructed on the TAZARA. However, due to operational problems cited above, only forty-nine (49) stations are currently active. The rest have been closed down. Out of the operating stations, 28 are located in Tanzanian and 21 in Zambia. The railway's designed carrying capacity was 5 million tons of freight per annum, i.e. 2.5 million tons in each direction. However, it has never operated at that capacity and its performance has been below expectations (**Table-7),** especially since the mid-1990s after the completion of political liberalization in Southern Africa and the end of the civil war in Mozambique. The resultant peaceful situation opened stiff railway competition between TAZARA and the railway systems emanating from South Africa and Mozambique.

Table 5.3: TAZARA Railway Freight and Passenger Performance 1995 - 2007

Year	TAZARA freight in 000 tons	TAZARA Passengers Traffic (in'000)
1995	633	NA
1996	633	NA

[28] From Japan Bank for International Development website from Aid Effectiveness to Infrastructure: A Comparative .....Case Study of Sub-Saharan Africa of July 2008 by Servacius B. Likwelile TASAF , Longinus Rutasitara of , University of Dar es Salaam and Joseph O. Haule Tanzania Road Fund Board

[29] UNCTAD

Year	TAZARA freight in 000 tons	TAZARA Passengers Traffic (in'000)
1997	555	NA
1998	632	NA
1999	615	NA
2000	634	NA
2001	595	1541
2002	552	1069
2003	614	1022
2004	610	929
2005	632	933
2006	601	890
2007	539	1090

Source: MID Transport Statistics and Information June 2008)

The 2008 case study cites good examples of remarkable beneficial spillovers from the core TAZARA investment, such as in the number of towns that have sprung up or expanded in the southern/western regions of Tanzania that are within the reach of TAZARA line of economic influence. They include the towns of Mbeya, Makambako, Mlimba, and Tunduma, just to mention a few. About 50,000 tons of potatoes are produced annually in Mbeya region, most of this depending on the TAZARA for transport to Dar es Salaam. In Makambako, timber production has been on the increase, with about 50,000 tons available for transport. Mlimba Township has been connected to the national electric grid, following the construction of the Kihansi Hydro-electric power station also in the TAZARA impact area. TAZARA facilitated significantly in moving material and heavy equipment for the construction of this power station. Other beneficiaries mentioned before such as the Mbeya Cement Plant and the Mufindi Paper Mills, are both generating considerable traffic for the railway.

Possible measures to improve the railway include intensification of economic activities in the TAZARA corridor such as exploitation of energy, minerals and agriculture projects that would generate more business for the railway. During a recent visit by a delegation from China Development Bank (CDB), it was agreed to pursue the following projects[30],among others:

(i) Private Sector participation in TAZARA : confer a concession in the operations of TAZARA to a Chinese enterprise

[30] Government Briefing to the Delegation from the CDB in August 2008

(ii) To explore more intensive utilization of the rich agricultural land along the corridor, for production of the main food crops – such as maize and paddy- as well as developing new opportunities in Kilombero and Rufiji basins,

(iii) Construction of a road (Ludewa-Kiu-Itoni-Njombe and Songea) linking Kiwira/Liganga mining areas, as early construction of the road will facilitate passage of equipment needed for development of coal and iron deposits.

(iv) Power generation of 200 MW from Kiwira and Kabulo Ridge coal,

(v) Tanzania-Zambia-Kenya power inter-connection – expected to transmit power from the international grid of Southern Africa

(vi) Power development in Rufiji Basin

(vii) Explore phosphate occurrences at Majimoto in Morogoro Region, as well as copper and gold occurrences at Chimala, Mbeya Region

(viii) Exploration of oil and gas in Lake Rukwa basin.

Other projects include infrastructure development in protected game areas that are in the TAZARA and Mtwara corridors. These areas protect over 60% of the country's elephants. Hence, the infrastructure development would open the TAZARA and Mtwara corridors to tourism and improve conservation of natural resources.
Whether or not TAZARA railway will constitute one of the key investment programmes in the envisaged Growth Strategy , the 10 or so proposals presented to the CDB would be a good source of ideas to consider.

In the final analysis, it is fair to conclude that in order to rescue TAZARA from its current financial predicament, emphasis should be on improvements to revamp existing services and the core railway infrastructure. The major solution in this is in the shareholders of TAZARA meeting their financial obligations and then making deliberate efforts to generate more business for the railway.

5.2.1.8 Maritime Transport

Ocean, Coastal and Inland Water Transport

Tanzania has an old maritime tradition going back several centuries. Presently its Indian Ocean coastline is dotted with 4 large ports of Dar es Salaam, Zanzibar, Tanga and Mtwara as well as smaller ports of Wete ,Tanga , Pangani , Bagamoyo, Kilindoni (Mafia) , Kilwa

Masoko/Kilwa Kisiwani and Lindi. As seen in the **Map (Annex-3),** there is a long coastline of over 800km range on the Indian Ocean, which stretches from Mozambique to Kenya. The ocean ports are operated by the Tanzania Harbours Authority-THA - on the Mainland side - and there are 6 lake ports operated also by TRC. The country shares lake Victoria (49%[31]), lake Tanganyika (45%) and lake Nyasa (20%). A public marine transport company scheduled for privatisation runs the lake transport service, while the Tanzania Coastal Shipping Line (TACOSHIL) that used to run the service on the Indian Ocean coast is no longer operational . The marine mode of transport is however liberalised and private operators are abound, although large investors have not yet been identified.

It is worthwhile taking a closer look at the performance of the 3 large ports of Dar es Salaam, Tanga and Mtwara.

Indian Ocean Ports and Shipping services

Dar es Salaam port, with its 11 deep-water berths, handles about 75% of all ships calling at Tanzanian ports and about 92% of the cargo (2007). It has registered overall moderate growth in the last 10 years, though this has slackened somewhat since 2003, with the number of ships declining as seen in **Table-8** below. An important phenomenon has been the emergency of container handling since the 1990s. In 2007, the Tanzania International Container Terminal Service (TICTS) handled through the Dar es Salaam Port a total of 333,980 containers compared to 273,128 in 2006, equivalent to an increase of 22.3 percent. On the other hand in 2007, on average, incoming containers remained at the port for 23.0 days compared to 14.5 days in 2006. The concern is that the efficiency of TICTS has been declining considerably in the last couple of years.

Tanga port has made significant improvements in the last 14 years, with cargo handled rising to 542,000 in 2007 compared to 119,000 tons in 1995. As for **Mtwara** port, the growth of operations has not been steady.

Thus the performance of the 3 ports of Dar es Salaam, Tanga and Mtwara in the last 10-15 years has had mixed assessment as might be observed in **Table 5.4.** The Dar es Salaam port is mainly congested out of inadequate berthing space. This in addition to unsatisfactory cargo handling performance by different stakeholders. On the other hand, after the closure of TACOSHIL operations, coastal transport is offered by small private companies and more significantly by foreign shipping companies that call on the 3 Tanzanian ports, plus Zanzibar. In addition, a popular passenger ferry service is

[31] NB: Other sources say it is 51% (internet)

operated between Dar es Salaam and Zanzibar by the Zanzibar government and private businesses.

Table 5.4: Shipping Records Dar es Salaam, Tanga and Mtwara Ports 1991-2007

Port	Year	1991	1995	2000	2005	2006	2007	Comment
Dar es Salaam	Total ships	2130	3798	5232	3895	4154	3038	Note sharp drop after 2006
	Cargo Handled *	2785	4387	2860	4305	6320	5703	Overall growth in last 18 years except for sharp slump in 2000
Tanga	Total ships	226	174	111	215	281	242	NA
	Cargo Handled *	186	119	168	289	519	542	Steady increase for last 10 years
Mtwara								
	Total ships	109	91	176	107	110	99	Record of growth unsteady
	Cargo Handled*	121	95	203	61	153	112	NA

Source: URT Economic Surveys 2002 and 2007 NB: Mtwara data for 2005-2007 derived from NBS data

On the high seas, the Tanzania government has a successful joint venture with China under SINOTASHIP company since 1967. In 2007 with two ships, SINOTASHIP transported 178,002 tons of cargo compared to 240,244 tons in 2006, equivalent to a decrease of 26.0 percent. Financially, stabilization of cargo transportation in the world in the last two decades has induced increases in the freight cost which in turn has led to a positive outcome of the income for the Company, despite fewer cargo transported. The importance of the port of Dar es salaam is amply recognized by the GOT. It has invested a lot of efforts to the port's improvement for several years. The plan is to boost the capacity of the port so that by 2015 it can handle 10, 0 million tons instead of its capacity of 7 million as at present. This plan is part of the Port Master Plan for the whole country which is partially being funded by the World Bank, the MCC and AfDB. Currently, apart from plans to increase the number of berths, priority is given also to improving container handling. This among others includes acquiring more space within and outside the port area for container storage, so as to decongest the port. The plan also includes development of a new port in Bagamoyo and establishing Export Fee Zones in the Tanga and Mtwara port areas. The latter is part of an initiative to promote private interests in running port associated businesses in the country.

5.2.1.9 Inland Water Transport

Inland water transport in Tanzania is predominantly lake transport. In contrast, river water transport has been insignificant. Indeed, only a few rivers are navigable by medium size vessels for considerable distances such as on the Kagera, Rufiji and Ruvuma rivers. Much more limited transport takes place on the Ruvu, Pangani and Malagarasi rivers, where only canoe transport is applicable.

Lake Victoria has ships plying between Tanzania ports of Mwanza, (the railhead linked to Dar es Salaam), Bukoba, Kemondo, Musoma and Ukerewe. The MV Victoria, launched in the 1950s, and has been joined by MV Serengeti and MV Butiama. Other less important vessels also carry passengers and cargo. On the lake, vessels can ferry rail wagons and vehicles between Mwanza and Entebbe in **Uganda**. The lake services are also linked to Kisumu in **Kenya** and provide considerable cargo for the lake zone of Tanzania and south-western Kenya.

Lake Tanganyika ferries, on the other hand, are no longer as busy as in the 1960-70s and train ferries no longer operate that frequently. Trade on the lake has suffered due to wars in the **DRC**. Boats meanwhile link the communities along the Tanzanian shore of the lake (some with no road access). Commercial traffic on the lake runs between Kigoma and **Bujumbura** in Burundi as well as Kigoma and Mpulungu in **Zambia**. Notable vessels there are ***MV*** Mwongozo and the MV Liemba **(**a vintage passenger ferry boat, known once as the *Graf von Götzen* when it was launched in 1913).

As for Lake Nyasa, the Tanzanian communities along the north-east shore of the lake (some without road access) are linked by ferry and **Malawian** steamer and boat services. The towns with ferry wharves on Lake Nyasa are Itungi, Matema, Manda, Lituhi and Mbamba Bay. Most of them do not have well developed landing facilities.
A Tanzania public shipping Company**,** The ***Tanzania Marine Services Company (MSC)*** (formerly under TRC) operates transport services on the lakes. It is, augmented by small private companies. In 2007, the company handled 200,135 tons of cargo compared to 201,604 tons in 2006, equivalent to a decline of 0.8 percent. The number of passengers served by the company was 569,442 in 2007 compared to 5424,993 in 2006. The income earned on both types of services was shs. 10,159 million in 2007 compared to shs. 8,100 million in 2006.

General assessment of the current situation and future plans of marine transport

Like in many African countries, Tanzania has not invested sufficient effort in inland water transport. This could be because there has been lack of strategic integration between this natural resource with road and rail transport links. The second reason could be that during the period after the adoption of liberalization of the economy and privatization of public corporations, marine transport was left largely to the fate of private investors and operators. The delayed privatization of TRC, left the marine services of TRC almost like an orphan with practically no major new public investments to speak of and very little maintenance of the vessels. **In the age of containerized cargo, easy movement of cargo from one point to another by using a variety of forms of transport is now quite possible and economical**

Planned investment at Dar es Salaam and Tanga harbours are on hand. Plans to upgrade three ports on Lake Nyasa namely Manda, Mbamba Bay and Itungi are actively being pursued. While there is no plan to link the ports of Mtwara and Mbamba Bay by rail, work on a link road is underway**.** The section between Mbamba Bay and the town of Songea is completed. And there are plans to develop the other ports in the country by 2010. On the other lakes, the ports of Mwanza, Bukoba, Kemondo Bay, Musoma, and Nansio on Lake Victoria, as well as Kasanga and Kigoma on Lake Tanganyika are scheduled for rehabilitation in the near future.

Despite the marine transport potential, Tanzania does not have an effective system or strategy to enable the country to fully exploit its important port asset and to make greater use of the natural comparative advantage it has over other landlocked countries.

5.2.1.10 Other Modes of Transport

Pipeline Transport

Pipeline is the cheapest and safest mode for long distance bulk transportation of fluids. This mode has not been given sufficient attention in light of its potential. Two pipelines are of significance in Tanzania. One that serves international transport purpose is the TAZAMA pipeline, used for moving oil products from Dare es Salaam to Zambia for a distance of about 1750 km. It could become important for the transport of natural gas as well. The other one is relatively smaller, having been built to service the Songas and

Mnazi Bay natural gas projects connecting to Dar es Salaam (about 230km). A bigger project to build an oil pipeline from Dar es Salaam to Mwanza is under contemplation. Even a more ambitious plan is to extend the pipeline from the natural gas fields mentioned above (plus Mkuranga gas) to supply the Kenya market.

Civil Aviation Transport

The air transport mode consists of 3 international airports, 11 smaller airports and 50 landing strips with 18 airlines operating in Dar es Salaam. The big airports are Dar es Salaam, Kilimanjaro, Zanzibar and Mwanza followed by Dodoma, Tanga, Arusha, Kigoma, Mafia, Mtwara and Pemba.

Internal air transport services are constrained by the standards of the airport runways, aprons and terminal buildings, the state of navigational aids, fire fighting equipment and cargo terminals, power supply, and storage facilities. Domestic air services have despite these constraints been improving because of the lively competition between Precision Airlines and other smaller private air transport providers.

5.2.1.11 Employment Factor in the Transport Sector

Though employment generation is not the principle objective of building transport infrastructure, in a poor country like Tanzania it has been elevated to a priority consideration particularly at the stage of construction of roads and rail lines. The two modes of transportation also engage significant numbers of employees during their normal service operations. As indicated earlier in this chapter, the Integrated Labour Survey (2000/01) estimated that transport and communication sector as a whole contributed about 8 percent of total country employment. In that context, employment in the transport sector in 2002 was 111,600 out of the country's total employment figure of 16,915,000. Nonetheless, it is noted that the construction of rail-lines is not that frequent.

The development of the roads sub-sector, and rural roads in particular, was earmarked as a priority in the PRSP and in MKUKUTA. Rural roads contribute to growth and employment generation through for instance increasing access of the rural poor to markets and by allowing the use of labour-intensive transport techniques. For this reason, the Rural Development Strategy (2001), emphasized the need for developing rural roads and stressed their link to employment generation.

Although in road construction works the use of Labour Based Technology (LBT) has been going on for ages in Tanzania, the project approach has meant that site activities are wound up once funding ends and this in turn seriously undermines the community's ability to sustain or find alternative sources of income thereafter.
Studies conducted by the Government of Tanzania in collaboration with the ILO[32] show the employment potential of LBT, particularly for road works to be potentially around 75,000 jobs created from labour-based road works p.a. The study reveals that over 18 million worker days of employment can potentially be generated for the benefit of local communities in and around the construction sites.
According to an another report (Awadh-2007), government efforts are undertaken under a comprehensive Local Government Transport Programme (LGTP) for the development and maintenance of Tanzania's LGA transport infrastructure comprising rural and urban tertiary roads; unclassified community roads, tracks and paths; as well as water transport infrastructure and a number of rural airstrips. The LGTP is fully integrated into the National Transport Policy (NTP) and the Transport Sector Investment Programme (TSIP). Among the listed benefits of the LGTP will be the creation of employment for semi-skilled and unskilled workers through the use of labour-based methods in construction and maintenance. The LGTP is designed to use LBT for at least 50% infrastructure rehabilitation works by 2012.

5.2.1.13 Summary Conclusion and Preliminary Recommendations

Conclusion
The transport subsector can euphemistically be described as the nervous system of the whole economy. It "transmits" (moves) goods and people across and among sectors and locations. There is correlation between the volume and quality of transport activity *vis-a-vis* economic growth generally, in that for instance, though transport is a key enabler of economic growth, the latter can stimulate increased demand for the transportation services, which leads to a debate in investment planning as to what should precede, i.e. the building of a road or having first sufficient traffic density to justify its construction.

Transport facilitates trade exchanges within the wide vastness of Tanzania and for the land-locked neighboring countries. Given this pervasive distinctiveness, the role of the transport sector has been evoked in different strategic policies of the country, such as

[32] ILO Report Prepared by: Catherine Geekie and Marko Nokkala . May 07, 2004

Vision 2025, MDG and MKUKUTA and was specifically defined in the National Transport Policy. The NTP rightly emphasizes the roads sub-sector as the most dominant mode of transport, compared to the other modes of railway, marine and air transportation. In recent years, roads have become quite competitive vis-à-vis the other modes not only because of falling comparative costs but also in terms of time and versatility especially in short to medium distance cargo haulage.

The current transport section has also analyzed the concept of transport corridors, as the appropriate means of assessing the transport competitiveness of Tanzania in servicing neighboring countries and concluded that the challenges facing the country's transport systems have not been effectively tackled for Tanzania to benefit more from its natural geographical advantage. And for this to happen, more strategic and integrative planning of investments in roads, ports and railways maintenance as well as in new facilities need to be undertaken. The railways, in particular, require huge amounts of funds to build and maintain. The study has raised doubts about the balance of emphasis of investment priorities among the two actions and urged caution in rushing to new rail-lines. But more spin-off investments in non-transport activities along TAZARA have been seen as more likely to enhance the competitiveness of this railway option.

Preliminary Recommendations

- ✓ **Revision of the Policy platform:** the National Transport Policy (NTP) of 2003 has been overtaken by time factor and many developments especially affecting road construction. It should be comprehensively revised particularly to bring out the importance of (i) integration among the different modes of transport, (ii) the use of appropriate technology in construction including LBT in rural roads building, (iii) addressing the issue of regional inequality by prioritizing roads improvement in the poorest regions; some of them are effectively land-locked territories) and (iii) providing competitive transport to neighbouring countries

- ✓ **Nationwide transport accessibility**: One of the priorities in the forthcoming MKUKUTA should be to ensure that all districts in the country are reachable by any transport modes throughout the year, including during the rainy season. The challenge is more in road penetration and maintenance than for any other mode.

- ✓ **Importance of ports:** the ports of Dar es Salaam, Tanga and Mtwara are key gateways to important country development and transport corridors for Tanzania as well as for

neighboring countries. They require strategic national level attention and financing. Other ports should be prioritized in view of their economic importance.

- ✓ **Management of the railways and railway construction:** in view of teething problems dogging the running of TRL and TAZARA, the financing and maintenance of these existing structures should be the national priority. Construction of new lines and braches should be held in abeyance except where financing is derived from other key stakeholders such as specific neighbouring countries or private investors in new mining ventures and whose operation does not result in significant financial burden to the GOT.

- ✓ **On LBT,** its use including reaching the 50% target under infrastructure rehabilitation works by 2012 will not come about automatically. There must be rigorous monitoring and strategic enforcement processes to that end.

5.3 INFORMATION AND COMMUNICATION TECHNOLOGIES (ICT'S)

Rapid advances in ICTs are dramatically affecting economic and social activities, as well as the acquisition, creation, dissemination, and use of knowledge. These advances are affecting the way in which manufacturers, service providers, and governments are organized and how they perform their functions. As knowledge and innovation become increasingly important elements of competitiveness, the use of ICTs is reducing transaction cost, time, and space barriers, allowing the mass production of customized goods and services and substituting for limited factors of production. The pervasive and global ICT revolution is disrupting all kinds of relationships, helping build new types of organizations, widening the knowledge and productivity gap, and posing serious risks for the unprepared. It thus calls for countries such as Tanzania to develop capabilities to master the new technologies and harness the full potential of ICTs for all sectors of the economy for education, innovation, and learning; public sector management; private sector competitiveness; and capacity building.

Research also shows strong linkages between ICTs and growth. Compelling evidence exists to support the fact that strengthening telecommunications infrastructure and service is pivotal in promoting trade and economic growth. It is estimated, for example, that a 10 percent decrease in the bilateral price of phone calls is associated with an 8

percent increase in bilateral trade.[33] In Africa, significant evidence exists to suggest that if telephone growth rate were10 percent instead of 5 percent (and growth in electricity generation was 6 percent instead of 2 percent), the increase in Africa's growth rate would be at least 0.9 percent higher.[34]

The information infrastructure consists of telecommunications networks, strategic information systems, policy and legal frameworks affecting their deployment, as well as skilled human resources needed to develop and use it. In the ICT application and use, Tanzania is at a very nascent stage. It is behind Botswana, South Africa and Malaysia by a huge margin.

A recent report by UNCTAD also provides some insights into the international digital divide, and evaluates ICT development using a range of indicators to benchmark connectivity, access, ICT policy and overall ICT diffusion in 165 countries. In the benchmarking analysis, OECD countries continue to dominate the upper rankings, while South Asian and African countries occupy the lower half of the rankings. The more developed African countries enter the rankings relatively early, with Mauritius at 52nd place and South Africa at 66th. Botswana comes in at 80th place, while Kenya is ranked 115th, Tanzania is at 135th spot and Uganda is at 154th, indicating that many SSA countries have a long way to go in terms of ICT connectivity and diffusion. [35]

Nevertheless, Tanzania has been making some progress in the ICT area. In 2003, Tanzania published a cross-sectoral National ICT Policy (www.moct.go.tz/ict) that relates ICTs to relevant sectors of the economy, such as education, manufacturing, health, and tourism. The policy notes that weak ICT infrastructure and the lack of adequately trained and skilled personnel are the main barriers to increased adoption of ICTs in Tanzania. The policy was designed to correct these weaknesses and is a broad-based national strategy that addresses Tanzania's developmental agenda, and calls for the creation of appropriate institutional arrangements to ensure that all stakeholders can rise to the challenge of implementing the ICT policy.

[33] Carsten Fink, Aaditya Mattoo and Ileana Cristina Neagu,, "Assessing the Role of Communications Costs in International Trade" Working Paper #2929, 2002. The World Bank: Washington, D.C.
[34] Antonio Estache, "What Do We Know About Sub-Saharan Africa's Infrastructure and the Impact of its 1990s Reforms?" Draft, May 24, 2005, The World Bank.
[35] UNCTAD, "The Digital Divide: ICT Development Indices 2004," New York and Geneva, 2005. Available at: http://www.unctad.org/en/docs/iteipc20054_en.pdf.

Much as the government's ICT policy addresses issues related to rationalization and coordination, the policy fails to loop in the productive economic sectors. In order to loop in the productive sectors, there is need to make strategic investments in infrastructure and in training after having assessed the needs and demands of the private sector; specifically which firms can benefit the most from ICT.
In the sector of telecommunications, the policy and legal and regulatory framework is one that has been encouraging private sector participation. This sector is regulated by the Tanzania Communications Regulatory Authority (TCRA, formerly, TCC). The performance of Tanzanian Telecommunications Company (TTCL) has improved considerably since February 2001, when a Dutch-German consortium, Celtel, took a 35 percent stake in the company. The remaining shares were allocated to local financial institutions (14 percent); international financial institutions (10 percent) and TTCL employees (5 percent); the government retained a 36 percent stake. At present TTCL has around 250,000 operational lines.[36]

The impact of the sector liberalization and privatization of TTCL has had significant impact on the market dynamics, particularly in the supply of telecommunication services: market revenues have grown from US$143 million in 1998 to US$ 389 in 2003, CAGR is 19%, overall teledensity from 0.3 in 1998 to 2.57 in 2003, mobile market growth of 21.19% since liberalization and the introduction of competition, new products and services.
Even so, despite the competition, tariffs remain high and teledensity is one of the lowest in the SADC region (the benchmarking with other countries in the same region articulates the need for further sector reform) in part due to the poor interconnection framework and lack of regulatory independence, and also other issues such as lack of infrastructure sharing. Thus, in general, the country's postal and telecommunications services are weak, and the provision of telephone lines (fixed lines) has been meager. An inadequate regulatory framework persists, and competition has been hampered by various issues, such as inadequate interconnection agreements/directives, high level of fees and royalties levied by the TCRA, and absence, or non-transparency of regulatory oversight.

Progress has, however, been made under the 1997 National Telecommunications Policy, and this trend is expected to continue. The mobile-telephone market for one is fully competitive in Tanzania. Significant liberalization has also taken place in various

[36] Source: EIU: Tanzania Country Profile 2004.

segments: private operators are now providing basic, mobile, data, paging, internet, pay-phone and other value-added services. The mobile-telephone market involves a number of operators, and is growing rapidly. New mobile operators have committed significant financial resources to the development of a state-of-the-art telecommunications infrastructure, and mobile subscribers. There are four providers operating under 15-year licences: MIC Tanzania, Zanzibar Telecoms, Vodacom and Zain. As a result; overall teledensity—mainlines plus mobile phones--has increased to 24 per 1,000 between 1996-2003. Tanzania's mainline and mobile phone penetration is higher than that in Uganda. Anecdotal evidence also exists that mobile phones are increasingly being used in Tanzania to get business-related information and to reduce transaction costs. For example, traders in Dar es Salaam now can place orders with producers of bananas throughout the country—thus linking demand and supply in real time and enhancing the efficiency of markets.

Table 5.5: Telephone and internet providers

Telephone and Internet Operators				
	2004	**2005**	**2007**	2007
Fixed line Operators	2	2	2	2
Mobile Operators	4	4	4	5
Data Operators	18	20		
Internet Service Provider	23	23	25	25

Table 5.6: Television Stations

	2005	**2006**	**2007**
National Television Stations	5	5	4
Regional Television Stations	2	2	2
District Television Stations	22	22	18

Table 5.7: Number of Radio Stations

	2005	2006	2007
National Radio Stations	5	5	5
Regional Radio Stations	7	7	8
District Radio Stations	35	35	29
Total	**47**	**47**	**42**

Table 5.8: Telephone Subscribers

Year	**Fixed lines**	**Mobile**	**Total**

Year	Fixed lines	Mobile	Total
1995	88,000	2,198	90,198
1996	101,000	3,200	104,200
1997	114,600	20,045	134,645
1998	121,769	36,143	157,912
1999	150,220	50,100	200,320
2000	173,591	110,518	284,109
2001	177,802	275,560	453,362
2002	161,590	606,859	768,449
2003	147,006		1,445,006
2004	148,360		2,090,360
2005	154,360		3,544,147
2006	157,287		6,398,070
2007	236,493		8,488,774

Table 5.9: ICT Indicators for Tanzania and Comparators,

	1996-2003				2002	2000	2003
	Mainlines	Mobile telephones	Radios	Televisions	Personal Computers	Internet Hosts	Internet Users
	(per 1000)	(per 1000)	(per 1000)	(per 1000)	(per 1000)	(per 10,000)	(per 1000)
Botswana	87	241	150	44	40.7	13.99	50*
Kenya	10	42	221	26	6.4	.32	200*
S. Africa	107	304	336	177	72.6	41.94	2,890*
Tanzania	5	19	406	4	4.18	.16	240
Uganda	2	16	122	18	3.32	.07	125
Sub-Saharan Africa average	15	37	198	69	11.90	3.10	6,233

Source: African Development Indicators 2004 and 2005, World Bank; * denotes data for 2001

Tanzania also has a comprehensive Internet service, including three licensed data-service providers and 21 Internet service providers. Most Internet users access the Internet from urban Internet cafes—the Internet is not much present in the rural areas.

Tanzania in 2003 had doubled the number of internet users (250,000) as compared to Uganda (125,000). The government has developed a fairly comprehensive national website (http://www.tanzania.go.tz/) which provides considerable background information on the economy and the political structure of the country; it hopes that the site will help to raise the country's international profile and attract foreign investment. In addition to the national website, a number of ministries, state institutions and embassies have their own sites.

In terms of developing human resources in IT, training centers that focus on the development of ICT knowledge workers are only now beginning to emerge. For example, the Soft Tech Training Center, established in 1993, is committed to the development of local expertise through ICT skills enhancement. The government has also initiated plans to encourage Tanzanians to develop content that is relevant to local interests, and Tanzania has implemented several ICT applications relevant to its national objectives. Examples of such initiatives include an information system to strengthen the capacity of wildlife institutions and a computerized case flow management system that has facilitated an increase in transparency and professionalism in the judiciary system[37].

5.4 ENHANCING THE BUSINESS ENVIRONMENT

5.4.1 Overview

The quality of the business environment affects the cost of doing business and thus a country's attractiveness for investors and its international competitiveness. For Tanzania, the cost of an inefficient business environment are estimated to be very high in international comparison amounting to 25 percent of sales, including the cost of contract enforcement difficulties, regulation, bribes, crime, and unreliable infrastructure.

The impact of a poor business environment on firms is often reflected in high indirect costs. Tanzanian firms incur heavy costs for transport, logistics, telecom, water, electricity, land and buildings, marketing, accounting, security bribes and so forth. Indirect costs as percentage of total costs on average of total costs is over 20% in Tanzania, equal to the average cost on labour. In a global economy where Tanzanian

[37] Case Study on Tanzania from "Creating a Development Dynamic: Final Report of the Digital Opportunity Initiative," Accenture, Markle Foundation, and UNDP, 2001. Available at: http://www.opt-init.org/framework/pages/contents.html

products have to compete with those of countries such China or India, high indirect cost are a severe impediment for economic activity. While in China indirect costs are only about 8 percent of total cost, in Tanzania these indirect cost are about 24 percent of total cost. In addition, factors that affect indirect cost also affect the cost of other inputs and thus lead to a loss of competitiveness in the economy that exceeds that at the firm level.

Three aspects of the business environment that promise the highest efficiency gains if appropriate action is taken are: the provision of complementary infrastructure, the cost and access to finance, and the cost arising from bureaucracy and corruption in the interaction of the public with the private sector.

5.4.2 Scaling up Infrastructure

Tanzania's infrastructure is weak and inadequate. Although Tanzania has started reforming its infrastructure sectors and public spending (especially on roads) has increased, Tanzania's infrastructure indicators are still among the lowest in the world.

Thus, infrastructure continues to pose a major policy challenge for the country. According to the 2004 Investment Climate Assessment, infrastructure ranks among the three top constraints to business enterprise growth. Power supply, in particular, is perceived as the most serious infrastructural constraint faced by firms. These constraints have driven business enterprises in Tanzania to invest in their own infrastructure such as own power generators.

The extent to which infrastructure is a binding constraint on Tanzania' growth can be partially assessed from returns to infrastructure. As infrastructure is widely believed to be a binding constraint to Tanzania's growth, one would expect high economic rates of return to this type of public investment.

Transport is of strategic importance to growth and poverty reduction: Given its geography and dispersal of areas of economic activities, roads are particularly critical for Tanzania's growth.

Investing in infrastructure is important for growth. Experience of fast growing developing countries, such as China, shows that infrastructure can contribute significantly to growth. Infrastructure affects growth through its impact on enterprise productivity, cost of doing business, market access and profitability. The analysis of

firm level data identifies access to infrastructure services as a key determinant of enterprise growth and investments. For a low-income country like Tanzania, where the majority of the rural poor are small-holder farmers, reliable and affordable infrastructure (particularly rural roads) is a critical factor in improving market access and enhancing the capacity of farmers to commercialize and diversify into higher value economic activities to improve incomes.

5.4.3 Power

The Power Sector in Tanzania has problems. Per capita power consumption in Tanzania is estimated at 62 kilowatts, much lower than in comparator countries such as Kenya (120 kilowatts per capita), India (380 kilowatts per capita) and China (987 kilowatts per capita). This suggests there is scope for a significant increase in power consumption in Tanzania.

Unreliable power supply is perceived by investors as a severe constraint on enterprise operations and growth. The poor performance in the power sector is reflected in frequent power outages.

There is need to expand and improve efficiency in power supply through sector reform and investment to meet the growing demand by industry and service sector.

Currently, less than five percent of the rural population has access to electricity, and the overwhelming majority continues to rely on fuel wood for their energy requirements. The low electricity access rate for the rural population is a constraint to the development of non-farm activities and to improved quality of life in rural areas.

5.4.4 Water

Inadequate water supply affects both growth and human development. Although Tanzania is endowed with abundant fresh water resources; the provision of water for domestic and industrial use is inadequate. Over 15 million out of the current 39 million population are without safe water supply. Despite the recent improvement, only 50 percent of the rural population has access to clean sources of water and 70 percent of the urban population. Inadequate water supply in Tanzania stems from under-investment, past neglect of maintenance of facilities, weak water resource management and institutional capacity.

All said, Tanzania's infrastructure requirements are large and have to be properly prioritized. Given budget constraints, it is not possible for Tanzania to improve the quantity and quality of infrastructure across the board. Therefore, it is important that Tanzania's large infrastructure investment requirements are properly prioritized. In prioritizing infrastructure projects (particularly roads), the main considerations should include the need to: (i) strengthen connectivity between high growth potential areas and domestic and regional markets; and; (ii) connect the poor to emerging growth opportunities and improve access to basic social services. Priorities in road sector investments, should, thus, focus on upgrading rural roads (to open up areas of high economic potential) and the rehabilitation and maintenance of major transport corridors and regional roads to enhance integration and connectivity to domestic markets.

5.4.5 Scaling up Access to capital and Finance

Access to capital and finance is a critical determinant of investment and economic growth. Countries with well-developed financial systems (banks, stock markets and bond markets) tend to grow faster than countries with less well-developed systems. Causation appears to run from financial sector development to growth not from growth to financial sector development.[38] Both the analysis of the agriculture sector and of the data from the enterprise survey confirm that this holds true for Tanzania, with a significant positive relationship between access to finance and enterprise investment and growth.

The Tanzania Investment Climate Assessment identified the cost of financing and access to finance as two of the key main obstacles to operations and growth of enterprises. Only 20% of the firms in the survey reported having loans from a financial institution. Investment is primarily financed through retained earnings (68 percent of new investment). Close to two-thirds of enterprises that invested did not use the financial sector. Financing enterprise growth through retained investment results in lower levels of investment and therefore reduced business growth and competitiveness.

5.4.6 Enhancing the Public-Private partnership

Regulatory agencies, tax revenue authorities including customs, business and land registries, and the judicial system all form part of the public interface with the private sector that have an important bearing on the cost, risks and barriers to business in

[38] See, for example, Beck *et al*. (2000) and Levine *et al* (2000)

Tanzania. The cost will influence the range of opportunities that are profitable, because investments are forward looking, risks and uncertainty will determine the types and nature of investments, and entry restrictions will limit innovation and the efficient provision of goods and services within the cluster. Aside from the impact on the cost of doing business, the quality of the public private interface also is critical for ensuring that government can play a supportive role in Tanzania's private sector led growth efforts. This relates to the flow of information between the private and the public sector, which allows government to play a supportive role to the private sector by removing obstacles, collaborating in the identification of growth opportunities, and ensuring that the provision of public goods and services (especially infrastructure) is well aligned with private sector needs. An efficient public private interface is part of the second generation reforms that will determine the private sector's response to opportunities which are productivity based.

5.4.7 Drivers of Innovation, Productivity, and Technological Change

Innovation can be understood as the diffusion of a new or improved technology or practice in a given environment. Two levels of innovation are particularly relevant for developing countries: at the micro level, there is the diffusion of available technologies for use by firms, individuals or households which helps to improve their productivity, welfare, living conditions, and so on; at the sectoral level, there is the development of new industries, generally based on foreign technologies that can be a source of new jobs, income, and exports. Thus, innovation can contribute to poverty reduction by:

- Fueling economic growth, as it forms the basis of new activities, industries or services which can generate growth and employment;
- Inducing productivity gains, which is also a source of growth and employment as well as a means to maintain jobs from foreign or other types of competition; and

Innovation in Tanzania concerns not just the domestic development of frontier-based knowledge, but more importantly, relates to the application and use of existing knowledge to the local context. This requires a climate favourable to entrepreneurs that is free from bureaucratic, regulatory, and other obstacles, and that fosters interactions between the local and outside business world, with different sources of knowledge, including universities, public laboratories, as well as with users, think tanks, industries, indigenous communities, and so on.

There are four prerequisites for the country to make effective use of knowledge for its overall economic growth:

- First an *economic and institutional regime* that provides incentives for the efficient use of existing knowledge, creation of new knowledge, and the flourishing of entrepreneurship.
- *Second educated and skilled populations* that can create and use knowledge well.
- Third a *dynamic information infrastructure* that can facilitate the effective communication, dissemination, and processing of information.
- Last an *efficient innovation system* of firms, science/research centers, universities, think tanks, consultants and other organizations that can tap into the growing stock of global knowledge, assimilate and adapt it to local needs, and create new knowledge.

5.4.8 Major issues in innovation in Tanzania

The innovation climate in Tanzania presents serious weaknesses, including first and foremost, a generally poor business environment coupled with mediocre infrastructure, bureaucratic hurdles, corruption and so on. The technical culture of the population is also not much developed, as is evidenced by high illiteracy rates. In the past, Tanzania had no deliberate strategies or plans for appropriate selection, acquisition and transfer of technology or for effective integration of imported technologies with local capacity for R&D. However, it enacted the first National Science and Technology policy in 1985, which was subsequently revised in 1995. The major thrust of this policy was to establish relative priorities and programs to generate new knowledge and to determine strategies for science and technology (S&T) development in Tanzania. It also established the Tanzania Commission for Science and Technology (COSTECH) in 1986 and the Centre for the Development and Transfer of Technology (CDTT) in 1994 in an effort to institute workable mechanisms for coordinating capacity building efforts, adopting new technologies, strengthening R&D, and facilitating information exchange and extension services.[39]

[39] For more information, see the Science and Technology Section of the Tanzania Country Profile on Tanzania's national website: http://www.tanzania.go.tz/science_technology.html. According to this website, Tanzania's S&T infrastructure includes education infrastructure and R&D institutions, such as the University of Dar es Salaam, Sokoine University of Agriculture, University College of Lands and Architectural studies, Muhimbili University College of Health Science, Rwegalulira Water Resources Institute, National College of Mbeya, Arusha and Dar es Salaam Institute of Technology.

R&D in Tanzania: There are currently about 62??? R&D institutions in Tanzania covering agriculture, including livestock and forestry (28), industry (11), medical (11), wildlife and fisheries (4) and Universities and other higher learning institutions (9).[40] Most of these are government institutions, and have the objective of conducting scientific research and designing and manufacturing machinery and equipment for agriculture, as well as appropriate technologies for rural, small and medium-scale industrial enterprises. However, they lack real incentive schemes for researchers to conduct this type of research; as a result, only a few individual researchers tend to be very instrumental in R&D activities. In the main, there is a crucial lack of resources for R&D institutes, as a result of a deliberate liberalization policy of the government. Mechanisms for technology diffusion are also modestly developed, with a quasi absence of decentralized structures such as agriculture extension services.

The low level of R&D as percentage of GDP--only 0.2 percent (comparable to other African countries), reflects the modest nature of Tanzania's research and innovative effort. Other more sophisticated indices such as the UNDP's *Technology Achievement Index*, which includes also measures of the diffusion of new technologies (such as computers), as well as of the technical qualifications of the population, also confirm the low technological capabilities of the country.

5.4.9 FDI and technology

FDI is an important source of *technologica*l upgrading in developing countries. There is no doubt that in Tanzania, *FDI*—which is relatively high compared to other African countries—has played a key role in the modernization of important sectors of the economy such as trade (retail), banking, tourism and the telecom networks. It has also been crucial in the take-off and growth of new industries such the fishing and the gold mining industries. But, as shown by the international experience, it takes time to build an indigenous innovative capability through foreign investment, and this requires explicit mechanisms such the employment of large contingents of local cadres at managerial positions as well as programs to closely link local suppliers of components and materials to upgrade their equipment and the quality of their products. Mechanisms such as these do not exist in Tanzania, and consequently, the transfer of knowledge and technology from foreign sources remains modest.

[40] Background note on Tanzania for the Policy Workshop on Knowledge for Development, ESRF, 2002.

Policy proposal for developing a nation-wide innovation support scheme: In addition to improving the overall business environment and the upgrading the education system, it is necessary to develop specific actions for the promotion of innovation and technology diffusion in order to put Tanzania's R&D infrastructure in service of the country's development. There is a need for a systemic approach that provides complementary support on three basic aspects: financial, technical and regulatory.

Innovation institutional framework

In order to efficiently implement and fund the multi-component program discussed above, it is suggested that Tanzania establish a new ad hoc facility—an Innovation Multipurpose Facility—which would be administered at the level of the President's office, and which should be endowed with a critical mass of funds and operate with a maximum of flexibility in the use of different types of policy actions outlined above.

5.4.10 Institutional Capacity

This is another important perquisite for supporting growth sectors and drivers more specifically and other areas of the economy more generally. Within this domain, priority areas are prevention of corruption as a country-driven agenda; enforcement of contracts; enhancing revenue transparency and exercising voice for scrutiny of public policy and action, mainly by civil society, parliament and media.

5.4.11 Transit Trade

We single out transit trade as a potential growth sector. Tanzania has a geographic area of 945,000 square km and a coastline of 1810 km. With its largely rural population, the country relies on its transport network to facilitate communications as well as to transfer goods and people between domestic, regional and international markets. The country's transport network links Tanzania's landlocked neighbours to international markets; Rwanda, Burundi, Malawi, Zambia, Uganda and Congo DRC depend on Tanzania's roads, railways and ports to get their goods overseas. Transit trade can play a big role in Tanzania's growth but to realise this, the country must expand and modernise the infrastructure; if this is done it will kill two birds with one stone. First it will open up the hinterland of the country and enable the economy grow faster. Second

it will link with landlocked countries and expand transit trade, which will further act as a catalyst for even higher growth.

3.5 CROSS-CUTTING ISSUES: HIV/AIDS

3.5.1 Infection Status and Effects

Tanzania's development prospects are being threatened by the HIV/AIDS pandemic. It is equally endangering a vital human reproduction process. The burden effect of the pandemic has been accumulating in the country for the past 25 years, with the resources applied not catching up adequately to grapple with the challenge. The infection rate now is about 5.8% - 6.5%, thus still intolerably high. The growth of the economy is being seriously compromised by HIV/AIDS, probably by as much as 1 to 3% p.a. due to HIV/AIDS.

Despite some signs of the infection rate declining the last few years, the statistics on the danger are still alarming. The number of infected persons since the disease struck in 1983 was about 2.2 million by 2002 (ESRF- 2003). Deaths countrywide due to HIV and AIDS is around 140,000 per annum. New infections are still taking place in the country daily. According to estimates by UNGASS[41] , life expectancy as likely to plummet from 55 years to 37 years[42] between year 1990 and 2010! The number of orphans due to AIDS was estimated to be around 1,100,000 (2008). It is expected to jump to between 2.4 and 4.2mn by 2014. Children in HIV-affected households find it difficult to attend school: they stay home in order to care for an ill parent or for lack of school uniforms.

3.5.2 Main Institutions and Policies Involved

The institutions in the forefront to fight the HIV/AIDS have included TACAIDS, as the focal coordinating centre. Other coordinating/financing ministries and agencies include Ministries of Health, Finance, TAMISEMI and PMO. There are other sector ministries and agencies with significant roles to play too, such as Ministries of Education, (MOEVT) , Women's Affairs & Gender, Defence, Home Affairs and Agriculture, as well as the regions and districts. They have worked together to deliver important

[41] UNGASS = UN General Assembly Special Session on HIV AIDS
[42] This figure of 37 years is now disputed (i.e. as too low) as Life Expectancy in 2008 was about 51 years

services such as Treatment and Care for the infected, including administration of ARVs, as well as carrying out preventative programmes.

The Main Funding Programmes under which the resources were mobilized in supporting HIV/AIDS activities have been derived from both the GOT and external DPs. Important donors have included PEPFAR of the US Government, The World Bank (T-MAP), the Global AIDS Fund to Fight Tuberculosis and Malaria (GAFTM), and other donors with not so big amounts. But these resources have not been adequate to meet the AIDS challenges.

In 1999 the Tanzania Government rightly declared the infection a national disaster. It has marshalled a number of policy measures and actions to fight the epidemic, such as the National Poverty Strategy MKUKUTA (2005-2010), that recognises the effect and influence of HIV/AIDS on poverty reduction, and the HIV/AIDS Policy as well as the Strategy (2001). In this framework, for instance: (i) TACAIDS became operational as the central coordinating structure for the National Response; (ii) Most MDAs started some HIV interventions for their employees and their sector; (iii) Focal persons were appointed in all MDAs and AIDS Committees were established . (iv) The portfolio of a Deputy Minister for Disasters and HIV and AIDS was created in the PMO; (v) Consolidation of the reporting on HIV and AIDS in the health system was instituted. During the 2001/02 - 2006/07, the annual budget for the multi sectoral response to the epidemic increased from Ths. 17 billion to over 381 billion.

The Tanzania Government is also signatory to a number of international agreements, conventions and declarations that morally and diplomatically raise its stake in the fight against the AIDS disease. To name but a few of these commitments, apart from the MDG: The Beijing Platform of Action, United Nations General Assembly Special Session on HIV and AIDS (UNGASS), Declarations by New Partnership for Africa's Development (NEPAD), Southern African Development Community (SADC -2003), The Great Lakes Initiative on HIV and AIDS (GLIA), OAU/AU Abuja Declaration against HIV/AIDS, TB, and Malaria (2000) and Maputo Declaration (2003) on Tuberculosis, Malaria and other Related infectious diseases.

3.5.3 AIDS in the Labour Force:

The sectors of education and health, with the largest numbers of public servants respectively in the country, have been highly affected. Their staff are also scattered

often in remote rural areas, with sometimes uncertain living conditions for their staff, which makes them vulnerable to catching the HIV virus. The morbidity and mortality of rural population may be more or less as high as that of these two categories. The education sector for instance is in danger of losing as much as 27,000 Teachers by 2020 (or above 2,000 annually) who may die because of the virus. A similar distressing level of loss in the health sector may be imminent.

If there were no AIDS, by 2015, deaths in the country would possibly be 40 percent less (Kessy). And the AIDS deaths, in most cases, are expected to affect the 18-49 years age group, who are the most sexually active. This group is the primary source of population reproduction and labour, and with the youth (18-40 years) constituting the bulk of the labour force that is most productive in workplaces that requires energy and drive (i.e. in *agriculture, industry , construction, fishing, mining, etc, and even in the two largest professions mentioned above of teaching and treating patients in difficult conditions*).

6.0 THE FINANCING FRAMEWORK

6.1 Overview

Long-term sustainable economic growth requires the development of a sound and efficient financial system that accommodates coordinated development of three complementary forms of finance namely: bank finance, budgetary finance and other non-banking financial services such as stocks and securities, micro-finance and insurance.

6.1.1 Banking Finance[43]

Bank finance operates through the intermediation of banks in compliance with relevant regulations requiring asset security, capital and interest repayment. This type of finance is an indirect form of financing which brings significant multiplier effect to project realization. Its effectiveness depends on the level of development in credit culture and financial infrastructure. In order to maximize national economic development, bank finance has to be used as a public policy tool as well as a commercial medium. Non-bank financial institutions, such as insurance companies, mortgage providers, and pension funds, are critically important for mobilizing savings and providing market-based safety nets. In Tanzania the three forms of finance explained above are not balanced; the economy heavily depends on government finance. The banking industry and securities markets are not developed enough to give support required to achieve sustained high levels of economic growth and development. The financial sector as a whole is not very competitive, vibrant, and efficient and does not reach the majority of the population. As a result, a lot of resources are not mobilized and pooled together, and hence not efficiently allocated. This also limits the room for expansion and diversification of investment opportunities, risk sharing, and easier exchange of goods through effective payment systems. Furthermore, inadequacy of resources mobilized reduces lending activity and maintains external financing barriers and thus limits the expansion of firm and entrepreneurial activities. Consequently, expansion of the economy as a whole is constrained.

[43] See annex 2 for details on varius sources of banking finance

6.2 Budgetary Financing

Though the government budget often is not considered in analyzing operations of the finance sector, is in fact the biggest player through its use of domestic borrowing instruments. In Tanzania the experience of fiscal deficits is quite common. The ratio of fiscal deficit to GDP increased steadily from 2.3 percent in 1997/98 to 11.2 percent in 2003/04 and then to 13.8% in 2006/07 and slightly fell to 12 in 2007/08. The deficit was mainly financed by money borrowed foreign sources.

Between 1991 and 2000 domestic borrowing dominated government finance while during 2001-2005 the government used extensively foreign sources of finance. During the periods 1991-1995 and 2001-2005 the Government borrowed mainly from domestic banks while borrowing from non-bank sources dominated during the period 1996-2000. Table 6.1 shows trends in difference sources of government finance.

Table 6.1: Trends in Different sources of Government Finance (in Million Shillings)

	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08[b]
Tax revenue	827,789	938,478	1,105,746	1,342,798	1,615,248	1,946,433	2,529,439	3,188,415
Non-Tax revenue	101,836	104,467	111,771	116,505	158,462	178,411	209,583	314,168
Total Domestic Revenue	929,625	1,042,945	1,217,517	1,459,303	1,773,710	2,124,844	2,739,022	3,502,583
Total Gov Expenditure	1307214	1462767	1989538	2516942	3248352	3972607.8	4474680	5998083
DEFICIT	**-377,589**	**-419,822**	**-772,021**	**-1,057,640**	**-1,474,642**	**-1,847,764**	**-1,735,658**	**-2,495,499**
External Sources (Grants, Basket support, project loans, import support, amortization (foreign))	380,575	501,949	822,027	1,053,531	1,416,618	1,604,640.6	1,689,337	2,509,489.7
Internal sources (non-bank borrowing, bank borrowing, proceeds from privatization, Adjustment to cash, Amortization (local), expenditure float)	20426	-82127	-50007	-7648	58024	243123	46323	-13990

[b] -budgeted

Source: Ministry of Finance and Economic Affairs

6.2.1 National Debt

By end of December 2007 the national debt stock stood at US$7,041.3 million compared to US$7,188.4 million, at end December 2006. This is a decrease by 2%. Of this amount the principle was US$ 4.057.4 million and the interest was US$ 1,310.4, whereby external debt accounted for 72.6% or US$ 5,367.7 million of the total amount. When compared with 2006 however, external debt reduced by 6.6 i.e. from US$ 5,748.8 million to US$ 5,367.7 million. This decrease is mainly explained by debt relief which was more than amount borrowed in the same period. The Government received debt relief of US$ 3,353.9 million and debt rescheduling of US$ 171.2 million.

Total domestic debt by end December 2007 was Tsh 1,894.6 billion compared to Tsh 1,816.0 billion at end of December 2006; an increase by 4.3 %. Out of that amount Government Securities and Treasury Bills accounted for 99.6% and were mainly bought by commercial banks (43.1%), Pension Funds (29.8%, Bank of Tanzania (18.7%), Insurance companies (4.1%) and private sector (3%). On the other hand the payment of domestic debt decreased from shs. 1,059 billion end of December 2006 to 361.3 billion, a decrease by 65.9%.

6.3 Accessibility of Financial Services

A vibrant financial sector can result in expanded banking and credit services to low-income households. But its biggest contribution is that it raises the amount of credit available to all entrepreneurs, which, in turn, increases the level of economic activity, generating more job opportunities and higher incomes among the poor

The banking system in Tanzania, which dominates the financial system, is liquid, well capitalized, and resilient to most shocks; however, it performs only a very limited role in the economy, even by Sub-Saharan Africa standards. Despite some indications of progress following the recent extensive policy reforms, the current depth and efficiency of the financial system fall well short of what is needed to help support economic growth. Credit to the private sector remains very small and mostly short-term. Interest rate spreads, though declining, are high, and banks accumulate extensive holdings of government paper and sizeable offshore dollar placements. Non-bank financial institutions have been growing but are still too small to be of much systemic effect.

There is a huge unsatisfied demand for financial services especially in rural and (peri-) urban areas of Tanzania. A large segment of (54% overall; 45% of urban, 57% of rural) of

the adult population has no access at all to financial services, either formal or informal. Overall, 9% has a formal bank account, 2% has access to semi-formal finance (NGOs, SACCOs) and 35% has access to informal finance like Accumulating Savings and Credit Associations (ASCAs) and moneylenders - these categories are mutually exclusive. Only 20% of the population has access to formal bank within 1 hour walking distance. At client level, the three main bottlenecks on the demand side are i) limited capacity to invest money effectively (limited basic education, lack of entrepreneurial attitude, lack of business and management skills; ii) lack of financial literacy; iii) lack of collateral.

Only 6% of people in Tanzania have access to financial loans from banks, and the agricultural sector only accounts for 1% of the loans. Borrowing in the agricultural sector is an especially challenging phenomenon because of the inability of farmers to secure collateral. The Land Act describes the conditions needed for Tanzanians to acquire land. However, few Tanzanians fulfill the needs for land acquisition which could be used as collateral

Nonetheless, the nascent microfinance instruments are greatly enhancing developments in this sector because the poor can access funds without having a large amount of collateral. Because they are rural-based and therefore can be accessed by farmers more easily, SACCOs[44] and Village Community Banks (VICOBA[45]) seem to be the most convenient options for the provision of funds in the agricultural sector in Tanzania. SACCOs also encourage savings by allowing clients to set up a savings account. However, even microfinance has problems because there are significant barriers such as high interest rates and management problems especially with correlation to inadequate funds.

Total bank credit to the private sector has increased from an average of around 4 percent of GDP during 1986-90 to about 7 percent during 1991-95 and then fell to about 4 percent during 1996-2000 before picking up again to about 8 percent during 2001-2005. The increase was due to among other factors: declining credit risks as a result of continued implementation of financial reforms; increased competition in the banking sector; and increased public awareness about products offered by the banking system. However, very little of this credit went to agriculture and the rural economy, where the majority people live. Apart from crop finance neither banks nor microfinance

[45] ***Village Community Banks (VICOBA)*** is a village savings and loans scheme based on groups of between 25–30 people that have proven to be very successful in very isolated, illiterate and poor rural areas. It started in Tanzania in 2001

institutions (MFIs) have made any significant headway in finding secure and cost-effective ways of lending to these areas.

Worldwide comparative analysis (A.D Kunt of World Bank) of average annual growth rates in poverty, private credit and GDP over 20 years shows that countries with higher levels of private credit reduced poverty more quickly. For example, in Chile, where private credit accounts for 54 percent of GDP, the percentage of people living on less than US$1 a day decreased by 14 percent a year between 1987 and 2000. Compared with neighboring Peru where private credit amounts to just 13 percent of GDP, the proportion of extremely poor rose by 19 percent from 1985 to 2000. The new estimates, taken at face value, imply that, if Peru's financial sector had been as developed, or its private credit market as well-stocked as Chile's, the proportion of the population living on less than US$1 a day could be just two percent today, instead of 15 percent-a difference of 3.4 million people.

A similar calculation suggests that, average incomes of poor people in Brazil could have grown by more than 1.5 percent a year from 1960 to 1999 instead of zero percent, if Brazil's financial system had been as developed as Korea's; Korea's private credit amounts to 74 percent of its GDP, while Brazil's is just 28 percent of GDP.

Such analysis is relevant for Tanzania and suggests that finance helps expand the range of firms and economic sectors that can get a foothold in the modern economy, and likely reduces concentrations of wealth that ultimately may undermine prospects for reduction of poverty and shared overall economic growth. International survey evidence shows that small firms gain most in terms of access to finance where financial and legal systems are strengthened.

6.3.1 Bank Liquidity

Among the current concerns of policymakers, economists, and analysts in Tanzania is that banks are very liquid despite the high private sector credit demand. On one hand, excess liquidity constrains banks' productivity/efficiency; while on the other hand, it strangles the share of credit allocated to the private sector therefore upsetting economic growth. The causes of excess liquidity are suggested to include high cost of funds, credit risks, volatility of deposit holders' cash preference, and the rate of required reserves perpetuated accumulation of excess liquidity in commercial banks in Tanzania.

6.3.2 Capital Market Finance

The Dar Es Salaam Stock Exchange (DSE) is the central fulcrum of the capital market in Tanzania. It was incorporated in September 1996 as a private company limited by guarantee and not having a share capital under the Companies Ordinance (Cap. 212). The DSE is therefore a non-profit making body created to facilitate the Government implementation of the economic reforms and in future to encourage the wider share ownership of privatized and all the companies in Tanzania and facilitate raising of medium and log-term capital. It is closely regulated by The Capital Markets and Securities Authority (CMSA). By the end of 2006 the DSE had a market capitalization of US$ 2.4 bn and only nine Listed Companies[46] two of which were cross-listed.

6.4 Conclusion

The above analysis clearly show that for growth drivers to be financed effectively much need to be done to improve budgetary finance, bank finance and non-banking financial services. The Government has to find other domestic sources of finance, and the respective bank and non-bank institutions need to invent more efficient ways of directing more credit to private sector.

[46] Listed companies are: TOL Gases Ltd.(formerly known as TOL Ltd.)(TOL), Tanzania Breweries Ltd.(TBL), Tanzania Tea Packers Ltd. (TATEPA),
Tanzania Cigarette Co. Ltd. (TCC), Tanga Cement Co. Ltd.(SIMBA), Swiss port Tanzania Ltd.(Formerly known as DAHACO), Kenya Airways Ltd.
(KA), East African Breweries Ltd. (EABL), Jubilee Holdings Ltd.(JHL)

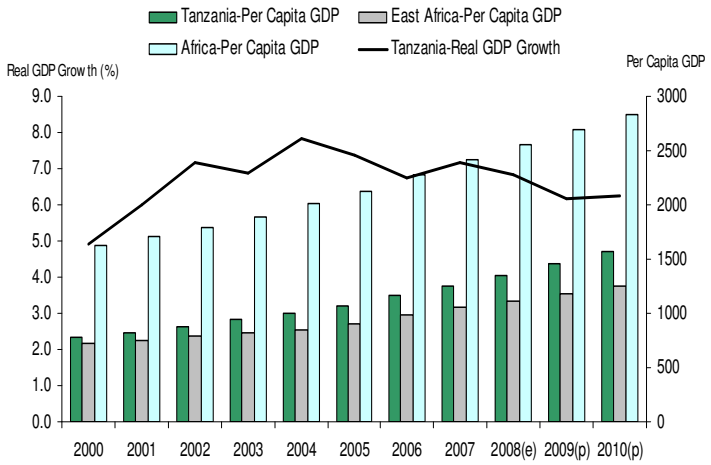
7.0 PRE- REQUISITE ENVIRONMENT FOR GROWTH SECTORS AND DRIVERS

This section argues that the above identified economic sectors and drivers necessary for sustainable economic growth would require supportive environment from the following key area: sound macroeconomic environment for growth; conducive investment and business climate; good governance; and institutional innovation. These pre-requisites for performance of growth drivers and sectors are explained in detailed hereby below:

7.1 Macroeconomic Environment

Tanzania like many other developing countries has been facing some challenges in improving its economic growth for poverty reduction. In order to sustain economic growth, from mid 1990s Tanzania adopted comprehensive program of reforms, which has yielded sustained macro-economic stability, a liberalised economy, and enhanced scope for private sector to be the main agent of economic activity. The foreign aid-inflows supported Tanzania's reforms and contributed significantly to economic growth through demand side effects, primarily in the construction industry, which has had, ripple on effects throughout the economy. Therefore since mid 1990's, the country has successfully pursued macroeconomic stability with monetary and fiscal policies strategically designed and implemented with the objective of price stability. The GDP growth has also been increasing positively in recent years with a slightly downward trend in 2008/9 which most likely is a result of the impact of global economic crisis. According to the PHDR 2007 report, Tanzania's real GDP growth has reached historically high levels, averaging 6.0% during the period 2000-2006. Figure 1 below shows the trend of GDP growth over the recent years.

Figure 7.1- Real GDP growth and Per capita GDP at Purchasing Power Parity Prices (CurrentUS$)



Source: AEO, 2008

Furthermore, another major debate concerns the impact of GDP growth in improving overall wellbeing of the people in the economy. It is debated that the increase in GDP growth in the period 2000 – 2007 has not improved adequately the livelihood of the people at the grassroots level. The challenge therefore is to ensure that the positive development of the economy at the macro level translates into poverty reduction at the grassroots level (Views of the people survey, 2007, PHDR, 2007). This evidence shows broad based economic growth is not sufficient strategy for poverty reduction. This study argues that the identification of specific growth sectors and growth drivers and hence systemic improvement based on growth sector and drivers is imperative, especially for achieving progress in poverty reduction. According to the Household Budget Survey (HBS 2000/01), 36 per cent of Tanzanians are below the basic poverty line and 19 per cent are below the food poverty line. Poverty remains largely a rural phenomenon with 39 per cent of population below the basic needs poverty line compared to 18 per cent in Dar es Salaam and 26 per cent in other urban areas (HBS 2002). In addition, the finding of the 2006/07 Household survey indicates a minimal improvement of poverty levels between these two periods. According to these results, 33.3 per cent of Tanzanians are still below the basic poverty line and 16.5 per cent are below the food poverty line. Poverty remains to be a rural phenomenon with 37.4 per cent of population below the basic needs poverty line compared to 16.2 per cent in Dar es Salaam and 24.1 per cent in other urban areas (URT-NBS 2008). The employment rate, as another important indicator used to assess the impact of growth, also indicates marginal improvement in both rural and urban areas. In 2006, the total unemployment

was still at 12% whereas the MKUKUTA/NSGPR is targeting to reduce unemployment from 12.9 % in 2000/01 to 6.0% by 2010 (PHDR, 2007).

Given this scenario there is a need to explore further the Tanzania's agricultural potential, and ensure that its development takes a central role in the current poverty reduction efforts. This is important because the agriculture sector accounts for about 75% as a source of the livelihoods of the population, the majority of whom are poor. The focus should also be on improving farm level productivity through focusing on promoting upstream activities, such as agro-processing and developing better linkages to domestic and foreign markets. Furthermore, there is also a need to increase income generating opportunities in non-agricultural activities, both in urban and rural areas. This is important for poverty reduction and also for the medium to long term structural transformation of the economy.

GDP by Sectors: The increase in economic growth rates has occurred across all sectors, with mining, manufacturing, and construction being the fastest growing sub-sectors (see Table1). However, the Tanzanian economy still displays structural weaknesses, which requires urgent attention if growth is to be sustained and poverty reduction targets achieved. Among the main concerns are:
Private sector investment has declined since the early nineties and been stagnant during the past decade;

- There has been relatively little technological change in manufacturing and agriculture.
- With the exception of the emergence of natural resource based industries – primarily gold mining and fish from Lake Victoria -, Tanzania's economy and exports have seen little diversification;
- Aside from gold, fish, and tourism, the value of exports remains low and volatile;
- Governance of Tanzania's natural resources is weak and threatens the sustainability of natural resource based growth;
- The economy remains vulnerable to volatility in foreign aid inflows, which also could harm Tanzania's competitiveness and institutions, unless properly managed; and

- The past pattern of growth has primarily benefited the urban areas and specific regions of Tanzania, while more broad based poverty reduction remains a challenge.

Table 7.1: Sources of Growth (production)

	Avg. Ann. Growth Rate			Avg. Contr. To Growth		
ECONOMIC ACTIVITY	1990-94	1995-99	2000-04	1990-94	1995-99	2000-04
Agriculture	3.1%	3.6%	4.8%	1.5%	1.8%	2.3%
Industry	2.0%	5.4%	8.7%	0.3%	0.9%	1.5%
Mining and Quarrying	11.8%	14.8%	15.2%	0.1%	0.2%	0.4%
Manufacturing	0.4%	4.6%	7.0%	0.0%	0.4%	0.6%
Construction	2.2%	3.5%	10.0%	0.1%	0.2%	0.5%
Services	1.9%	3.8%	5.9%	0.7%	1.3%	2.0%
Trade, Hotels and Restaurants	2.0%	4.5%	6.9%	0.3%	0.7%	1.1%
Total GDP (factor cost)	2.5%	4.0%	5.8%	2.5%	4.0%	5.8%

Structure Reforms and Economic Growth: A Focus on Macroeconomic Policy Making Tools:

Tanzania economy is envisioned on Tanzania Development Vision 2025 as strong, diversified, resilient and competitive economy. Creation of conducive environment that paves the way for sectoral growth and linkages in the economy is emphasized toward achieving the short and medium term goals. However, general assertive of conducive environment for economic growth per se is not sufficient for strategic economic growth that does not utilize adequately its comparative and competitive advantages. The main challenge now in the Tanzanian economy, is to preserve and consolidate the achievements of the macro economic reforms which have been instrumental in accelerating economic growth. The main issue here is not so much on further reforms, but rather consolidating reforms and guarding against any backsliding in the pace of measured poverty reduction.

There is also a need to identify priority areas that require changes in policies or scaling up of expenditure, this may include: investment in infrastructure, enhancing access to finance, and building an effective public-private sector interface, which currently suffers from ineffective regulation, bureaucracy and corruption. A focus on these issues promises to generate increased economic activities in areas readily identifiable by the

private sector. In addition, as opportunities for quick wins are exhausted, sustaining economic growth will increasingly depend on the capacity of the economy to innovate, that is, to produce an increased array of goods and services and to accelerate the pace of technological change. This will require foremost a focus on investment in human resource development, strengthening of the innovation environment and of Tanzania's information and communication technology (ICT) infrastructure.

Furthermore, proper management of the Tanzanian macroeconomic policies is important towards enhancing macroeconomic stability with the growth based on competitive and comparative advantage. In this regard, the determination of specific macro-economic instruments, sector specific instruments and respective management strategies within the context of macroeconomic environment is therefore crucial for managing economic growth trajectory. In 1960's Robert Mundell, thought of "assigning" each instrument of macroeconomic policy to appropriate policy objectives in an effort to achieve internal and external balance at the same time. This idea is currently becoming increasingly important due to the growing openness of national economies to the world economy. The following is a brief discussion of the main macroeconomic policy tools used by the government to influence the macroeconomic performance.

7.1.2 Fiscal Policy

The country fiscal policy should aim at maintaining tight fiscal measures to ensure budget stability. This is mainly because budget deficit negates investment promotions needed to create export led economy. One widespread view is that fiscal deficits should be avoided because they are inflationary and 'crowds out' private investment, which can lead to a loss of investors' confidence. Fiscal policy is also an effective tool for stimulating an economy facing an economic slowdown and/or preventing the current effects of the global financial crisis.

The macroeconomic and fiscal objectives of the government of Tanzania are to achieve real GDP growth of 8 per cent by 2010, reduce inflation to 7 percent, and raise domestic revenue growth to at least 20% of GDP in 2010/11. In this regard, there is a need to strengthen tax instruments in order to increase mobilization of internal resources to meet the requirements of public expenditure. In Financial year 2007/08 government revenue realised from domestic resources was 16 percent of GDP, this is an increase of 1.6 percent compared to 2006/07. In 2008/09 the budget is anticipated to be supported by domestic revenue collection to the tune of TZS 4.73 trillion, equivalent to 18 percent

of GDP (ESRF, 2009). This data indicates that the revenue realised from domestic resources is still marginal to meet the required amount needed for the yearly government budgetary requirements. This is because the government of Tanzania has been relying substantially on foreign resources to finance its budget expenditure.

In the 2008/09 budget (TZS 7.2 trillion budget), 38 percent is expected to be financed through foreign resources (URT, 2008). Though there is slight improvement compared to previous financial years, this figure still indicates higher dependence of external resources in financing the government budget. External financing of the budget, like any other foreign inflows, has impact on the stability of macroeconomic variables e.g. foreign exchange rates, interest rates, and domestic prices. The injections of liquidity, through the conversion of external flows into domestic currency, can cause disruptions in interest and exchange rates, since these flows are volatile and unpredictable. In addition, external flows may produce exchange-rate appreciation and, if sustained over a length of time, could lead to the kind of overvaluation phenomenon known as a 'Dutch disease' (McKinley, 2005). Prudent management of the economy using fiscal policy instruments is therefore imperative to maintain the pace of the country's development particularly the competitiveness of the domestic sectors including manufacturing and agriculture sectors.

The government therefore needs to design and adopt appropriate policies and strategies to reduce external aid dependency by maintaining and increasing domestic revenues in a sustainable fashion. Careful expenditure planning should be implemented to ensure that productive investments are given higher priority compared to non-productive investments. This will ensure that the government is not denied its important source of taxation. The best way to minimize foreign aid dependency is to mobilize domestic resources mainly through widening of the tax base and strengthening tax instruments including VAT (Gordon and Wei Li, 2005).

7.1.3 Monetary Instruments and Inflation

High inflation is a signal that the government fiscal and monetary mechanisms are not functioning well (Taylor, 1988). Inflation is used to measure price stability and also as an indicator for economic growth. In this regard, lower inflation rates are important for a country that depends on primary exports and manufacturing sector as drivers of growth. Evidences from Argentina in 1965-1974, Brazil in 1965-1980, Chile in 1986-1996, and Poland in 1992-1998 indicates that Moderate rates of inflation have been

accompanied by rapid economic growth quite often. Monetary policies should therefore be well managed to allow moderate inflation (Frankel, 2004).

The inflation trend in Tanzania has been on an increasing rate since the beginning of 2006 and broke to a double digit average, 10.2 percent in 2008. This has been the highest inflation rate for the first time in a decade. The inflationary pressure has been attributed by the impact of global rise in food and fuel prices, and expansion of liquidity induced by growing government spending (AEO 2008). Furthermore, heavy reliance on assigning monetary policy instrument (e.g. issue of government bonds) to stabilize the economy may has also contributed to the inflationary pressure. Therefore, strategic growth of economy needs prudent monetary policy on inflation control including better management of government financing instruments.

In most cases central banks use direct methods, such as regulations and controls, to manage the money supply. This is done by using indirect and direct instruments that works through market interventions. In the 1990s the Bank of Tanzania (BoT) has also followed suit after the adoption of trade liberalization policies in the country. It adopted standard indirect interventions which include open-market operations, changes in reserve requirements, and central bank lending facilities. However, the direct measures are often very effective to developing country like Tanzania than indirect measures. This is because the central bank can use direct measures to target specific sectors of the economy to enhance a strategic growth of particular sectors in the economy. In adoption of direct measures there are three issues that are particularly important: how to target control business cycles; ways to encourage credit when constraints are specific to certain sectors of the economy; and ways to encourage bank lending when credit constraints are more general.

7.1.4 External Balance

External balance is an intermediate variable that plays an important role on enhancing macroeconomic environment needed for stability and growth. This summarizes the transactions between the residents and non residents of the country into three major accounts namely current, financial and capital. The economy of Tanzania is open and operates under flexible exchange regime. Therefore excessive external borrowing should be limited in order to restore the lenders and other investor's confidence in the country. This is because excessive borrowing brings imbalances in the external balance account. It is therefore important to discourage investors to take money out of the

country when exchange rate plunges, as it will be difficult for the domestic importers/investors to repay in foreign currency such as the US dollars.

The Tanzania current account deficit increased to 12.1% of GDP during 2007, from 9.5 percent of GDP in 2006 (AEO, 2009). This deficit was attributed by an increase in trade imbalances due to high growth of import value of intermediate goods and growth of importation of capital goods. This deficit has continued to be financed by substantial donor inflows and foreign direct investments which have kept the overall balance of payments position afloat than remittances. This is not an ideal situation where by external resources which are not predictable in financing the current account deficit. There is a need to improve the export sector performance to generate foreign currency to replace external financing. Investment should be considered in areas where the country has a regional comparative advantage. In addition the government could think of using trade policy aiming at import substitution. Since the trend on the increase of current deficit is attributed by importation of intermediate and capital goods. It is also advised that in managing growth of external deficit, inflation and external debts should be minimized to ensure the economy is growing in a desirable trajectory.

7.1.5 Exchange Rate Policy

An exchange rate policy through having lower exchange rates in the market can be an effective instrument for economic growth and job creation. Lower exchange rates enhance the attractiveness of exporting by making the country's products cheaper abroad. Lower exchange rates also have a positive impact on domestic industries (import substitution industries) as they tend to make foreign goods more expensive relative to domestic goods. In this regard, in the context of Tanzanian economy, effective exchange rate policies will have positive impact on exports of, primary agricultural products (cotton, sisal, coffee etc), products from Economic Processing Zones and Special Economic Zones. Exchange rate policy, then, is not simply a tactical matter of getting-prices-right, but may turn out to be a strategic matter of a deliberately undervalued exchange rate, maintained over a period of time, to provide an entry into the world market for differentiated manufactured goods. Several Asian countries have used such strategic exchange rate policy to promote manufactured exports. Similarly, the build-up of the Chilean boom of the 1990s was clearly preceded by a lower exchange rate policy in the late 1980s and early 1990s (Ocampo, forthcoming).

Furthermore, a competitive exchange rate is also seen as an essential ingredient of dynamic growth and employment in developing countries. This allows for domestic

firms to benefit from rapid growth in international trade and attracts international firms searching for the best location for their worldwide sourcing of their goods. This may also have positive spillovers for domestic technological development, and lead to a process of learning how to produce with the best technologies available, and with the best marketing tools for the global economy. Furthermore, a competitive exchange rate means that spillovers of export production on other domestic sectors are enhanced, as exporters find it more attractive to buy the inputs and services they need domestically. In a world of reduced trade barriers, import-competing sectors see a competitive exchange rate as their major (and perhaps only) source of protection (Frankel, 2004).

7.2 Investment and Business Cimate

Promotion of economic growth from the growth sectors and drivers as identified in this report requires conducive investment and business climate for smooth operation. Reduction of cost of doing business and minimization of rent seeking is needed to encourage private investment, production and exchange between economic agents. The regulatory costs for doing business in Tanzania are relatively higher than its comparative economies in East Africa. Despite the implementation of Business Environment Strengthening in Tanzania (BEST) and reform of Tanzania Investment Center (TIC) to one shopping center, doing business report 2008, by the World Bank ranked Tanzania (130) behind Kenya (72) and Uganda (118) in terms of ease of doing business. This indicates regulatory investment costs in Tanzania are growth draggers which inhibit further investments in growth sectors (World bank, 2008).

Similarly, the East African Business Climate Index report (2008) which collected views from the business leaders, found Tanzania positive business climate dropped from 50 points to 42 making it trailing behind Uganda and Kenya. The main problems mentioned in these strategic reports that affects growth sectors and drivers include transport and energy costs, customs delay, weighbridges, unfriendly police checks, roadblocks, and corruption at customs. Improvement of the business and investments climate based on therefore mentioned dimensions is imperative for dynamic operation of the identified growth sectors activities and facilitated by growth driver's investments.

7.3 Innovation Efficiency

Innovation efficiency is important element for growth sectors and drivers to overcome constraints. Innovation allows actors to adapt to different economic challenges thus allocate/make timely decision to sustain growth sector and to take advantage of growth drivers' activities. Wuyts (2008) quoted Douglas North that "it is adaptive rather than allocative efficiency which is key to long run growth". The dimensions of innovations are broader and it includes knowledge acquisition, diversification of products and technological progress. These dimensions are needed for transforming exports in agriculture sector, tourism, SME's, Manufacturing, and natural resources products which for decades have been exported raw or substandard. To develop appropriate skills that will be needed for the innovation in growth sectors, Institutional changes are imperative to allow the following:

(i) Tanzanian with high promise to study abroad for skill acquisition needed in respective growth sectors. The so called "tiger nation" adopted this strategy but they focused on priority industries/sectors needed for speeding up development.
(ii) Simplifying labour exchange rules but enforcing on the transfer of skills needed in particular growth sectors.
(iii) Institute special skill building schools focusing on the needs of growth sectors

However, Wuyts (2008) cautioned that "growth as innovation entails more than dealing with new technologies from developmental perspective in particular; it also requires dealing with two other important externalities; namely, information and coordination externalities". Therefore, institutional arrangements to ensure externalities are minimized through property and intellectual rights are imperative.

7.4 Good Governance and Conducive Political Environment

Fighting against the channels of grand corruption in contracts and dubious procurement deals which cost the nation billions of public funds is crucial especially at this moment when economic growth is rekindled through identification of growth sectors and drivers. Demands for the natural resources in the world are higher which gives options for the government to negotiate profitable contracts. This calls for greater accountability, transparency and higher priority to the nation interests. The available natural resource base in coal, gas, forestry products, diamond, gold, Tanzanite and other germ stones needs good governance and stable political environment to allow both local and foreign investors to participate effectively thus accelerating the rate of economic growth. Government efforts should continue in mainstreaming public accountability from lower to higher echelon of government official to ensure public funds and natural resources are prudently managed for the nation gains. Equally important is that further efforts are needed to ensure public funds and natural resources are wisely managed and utilized for the development and facilitation of growth sectors and drivers identified.

7.5 Policy Design and Management

The Tanzania development process required proper policy design and Implementation management. The design of Tanzania Development Vision (TDV) 2025 stated broad long term goals though it does not provide specific mandates for government programmes for it implementation. Similarly, it lacks the strategic path for economic growth through growth sectors instead emphasized on broad economic growth and poverty reduction indicators. These are expressed in four main clusters, high quality livelihood, peace, stability and unity, good governance, a well educated and learning society. On the other hand, a medium term operationalization strategy - MKUKUTA - is one year ahead before completion. However the achievement of the key economic and poverty reduction variables are lagging behind due to unfavourable implementation environment.

Therefore there is a need to strengthen the aspect of policy design, management and implementation environment. Currently, implementation of policies weakened mainly by frequent changes in ministries and other institutional arrangement and weak policy synchronization of old and new policies. This study argues that, stable implementation

and result base monitoring is important for the growth sectors and drivers to stimulate economic growth and gradual transformation of the economy. The following key areas on policy design and implementation in Tanzania further explained in detailed hereby below:

7.6 Analysis of Key Economic and Social Policy Statements and Plans

Policy statements and development planning has been advocated as the fastest and least painful path and one of many other means which the state in successful cases may be able to further growth and therefore spur development in resource poor countries like Tanzania (Wagao 1993, Mashindano 2007). After the 1961 independence Tanzania had formulated and adopted a number of medium and long term development frameworks aimed at stimulating economic growth and subsequently improving the livelihood of the people of Tanzania. The National Development Vision 2025; a five years (2005 – 2010) medium term National Strategy for Growth and Reduction of Poverty (NSGRP) and/or MKUKUTA; Millennium Development Goals (MDGs); The Mini-Tiger Plan; and Property and Business Formalization Programme (PBFP) and/or MKURABITA are 5 such programmes.

The framework of implementation and/or implementation approaches of the various policy frameworks have been among the challenging aspects, which have also impacted on the outputs and therefore outcomes of these policies. The question of the linkage between policy statements, plans or strategies on one side and the budget process/planning (as well as socio economic change) on the other side (i.e. how these policy frameworks have been driving or informing the budget process and therefore influencing the socio economic change in the country) has also been a widespread and prominent concern.

7.6.1 The National Development Vision (TDV) 2025

The TDV 2025 was formulated in 1999. It is an umbrella framework, national commitment, roadmap and a shared responsibility between the people and their leaders. The Vision 2025 stands out as the strategic pillar in which all other reforms and initiatives are hinged on. In other words, all other frameworks such as economic and social policy statements, plans and strategies in Tanzania are drawn from the National Vision.

The TDV has outlined the long-term social and economic development goals and aspirations with respect to improving quality of life, improving governance and rule of law and transforming the economy to a middle-income country by year 2025. In order to operationalize the Vision, targets were identified for each key sector (Health, Education, Water, Agriculture, Gender, Governance etc) for effective implementation by stakeholders. Thus, as we shall see later, implementation of the National Development Vision 2025 is through priority sector interventions which are clearly spelt out in the National Priority Poverty Reduction Frameworks namely, National Poverty Eradication Strategy (NPES), the 3 years (2002/03 – 2004/05) PRS, MKUKUTA, Mini-Tiger Plan and other regional initiatives and programmes. Naturally, the assessment of its implementation and the degree of alignment to the National Budget process can best be undertaken by looking at sector performance through.

TDV is the umbrella policy framework. It outlines the long-term social and economic development goals and aspirations with respect to improving quality of life, improving governance and rule of law and transforming the economy to a middle-income country by year 2025.

7.6.1.1 Implementation Framework for the TDV 2025

As pointed out earlier, implementation of the National Vision 2025 has been through other subordinate policy statements, plans and strategies which are also linked to the National Vision. Thus, to understand the implementation process and the degree of alignment to the National Budget planning the various policy statements, plans and strategies will be considered.

In the process of implementing the National Vision 2025 several measures have been put in place in terms of policies, plans, strategies and institutional frameworks for implementation (ESRF 2008). This includes the National Poverty Eradication Strategy (NPES), which sets out long-term poverty eradication objectives, consistent with the International Development Goals (MDGs). The focus has been to translate the long-term objectives into short and medium-term policies and targets. To this end, the 3 years (2002/03 – 2004/05) Poverty Reduction Strategy (PRS) was first implemented. Afterwards, the National Strategy for Growth and Reduction of Poverty (NSGRP) commonly known as MKUKUTA was formulated and implemented (2005/06 – 2009/10). The NSGRP keeps in focus the aspirations of Tanzania's Development Vision 2025 by

focusing on medium term goals of attaining (i) economic growth and reduction of poverty (ii) improved quality of life and social wellbeing; and (iii) good governance and accountability.

To complement MKUKUTA, another plan put in place for attaining the targets and goals for Vision 2025 is the Tanzania Mini-Tiger Plan 2020, which is critical in taking the country to a middle-income economic status. Tanzania Mini-Tiger Plan is a strategy designed to build among others things, Special Economic Zones (SEZs) needed to fast track realization of the set targets for investments from local and external sources. Like TDV 2025, the goal of the Mini-Tiger Plan is to transform Tanzania into a semi-industrialized economy with a per capita income of around US$2,500 by 2025. The plan was designed by the Government of Tanzania as a vehicle to achieve the twin objectives of the MKUKUTA and TDV 2025. The mini-tiger plan is inspired by the growth experiences of South East Asian countries which were regarded as Asian tiger economy due to their pace and strength of their economies growth (e.g. Malaysia, Indonesia and Singapore). As we shall see below, in addition to the Mini-Tiger Plan, there is also the Property and Business Formalization Programme (PBFP) and/or MKURABITA.

(a) The National Strategy for Growth and Reduction of Poverty (NSGRP) or MKUKUTA

In essence MKUKUTA embodies a step-wise approach, in 5-year planning phases, in realizing goals outlined in Vision 2025. The strategy is addressing poverty in a comprehensive outcome-based approach in the three broad clusters already mentioned: Growth and Reduction of Income Poverty, Quality of Life and Social Wellbeing and Governance and Accountability. In terms of economic growth the target by 2010 is a growth rate of 6-8 per cent per annum from a base of 6.7 per cent in 2004. The poverty reduction targets by 2010 (basic needs poverty) are from 25.8 per cent (2000/01) to 12.9 per cent in urban areas and 38.6 per cent (2000/01) to 24 per cent in rural areas. The targets are currently under review. The intention is to revise them in 2010 for the successor strategy which is planned to end in 2015.

The mechanism for MKUKUTA implementation entails the following organizational and monitoring structure. The Secretariat for MKUKUTA implementation is hosted by the Ministry of Finance and Economic Affairs (MoFEA). There are more than 80 indicators monitored across the board in all sectors as part of MKUKUTA – Poverty Monitoring System (M-PMS). These have ultimately been used to construct composite indicators for assessing the attainment of the targets as set out in Vision 2025.

The monitoring of MKUKUTA implementation is undertaken by stakeholders organized in Technical Working Groups (TWG) namely: (i) Research and Analysis TWG (ii) Survey and Census TWG (iii) Routine Data TWG; and (iii) Dissemination TWG. Subsequent to the 3 years Poverty Reduction Strategy, a tool for monitoring and evaluation of the poverty reduction initiatives in the country i.e. the National Poverty Motoring System (PMS) was developed. It was through PMS that during PRSI, 3 annual PRS Progress Reports were published. The structure of PMS allowed data collection, research and analysis, surveys etc.

Afterwards, PMS was revised in 2005 to take into account new dimensions spelt out in MKUKUTA, such as *a new outcome based approach*, *a 5 years implementation period (2005/06 – 2009/10) as opposed to a 3 years implementation period*, etc. A revised PMS has subsequently refined and strengthened some of the functions. The revised PMS contains two major parts, the first of which describes the overall system (eg national ownership, partnership, the government's strategic planning, budgeting and reporting system), while the second part provides details of national indicators.

Different approaches are used to disseminate PMS outputs to stakeholders. They include, stakeholders' workshops, media (radio, television, news papers etc), and drama. For example, Poverty Policy Week (PPW) has been an annual event from 2002. Monitoring of growth in the economy is reported annually to Parliament through the Economic Surveys produced by the Ministry of Finance and Economic Affairs (MoFEA) in collaboration with MDAs and other key actors such as the Bank of Tanzania. The PMS outputs are documented through various publications such as *MKUKUTA Annual Implementation Reports (MAIR)*, *National Poverty and Human Development Reports (PHDR)*, and the *Status Reports* which are published by the Research and Analysis TWG under the custodian of MoFEA[47]. The Household Budget Surveys (HBS) by the National Bureau of Statistics (NBS) is another tool used to disseminate the outputs.

The planning and financing of MKUKUTA appreciates the fact that all sectors and MDAs have important roles to play in the whole process of economic growth and poverty reduction. For that reason, substantial amount of the government budget is allocated to activities that have a direct bearing on MKUKUTA targets and outcomes.

(b) Main Thrust of the Mini Tiger Plan 2020

[47] Note that, during a 3 years PRS, PMS outputs used to be disseminated through Annual PRS Progress Reports (URT 2002a, URT 2003 and URT 2004)

The Mini-Tiger Plan 2020 is multi-stakeholder driven with the private sector taking centre stage in its implementation while government provides the necessary conducive environment for investment and improved productivity and competitiveness[48]. The expected results and targets for the plan include:

- To attain an average GDP growth of 8-10 percent per annum
- To raise GDP to US$ 40 billion by 2020
- To raise export earnings from about US$ 1.1 billion to US$ 20 billion
- To increase per capita income from about US$ 280 to at least US$ 1000.
- To develop at least 25 – 30 SEZs in Tanzania and to embark on an aggressive promotion of FDIs and domestic investment
- To create 2 – 3 million new jobs by year 2020

(c) Other Regional Plans Complementing MKUKUTA and Mini-Tiger Plan

The national plans and strategies has been complemented by other regional initiatives under the auspices of the East African Community and SADC, all aimed at improving investment climate, enhance trade and global competitiveness of Tanzanian goods and services. They include East African Private Sector Strategy, Regional Indicative Strategic Development Plan (RISDP), and the Finance and Investment Protocol (FIP)[49].

(d) Property and Business Formalization Programme (PBFP) and/or MKURABITA

Since Independence, the government of Tanzania has made significant efforts to ensure that all Tanzanians are empowered. A few successes have been recorded. Tanzanian citizens now have the right to own things, to operate businesses, and to reside wherever they wish. Tanzanians have been liberated by national policies and laws that bring management and authority down to the village level, creating freedom to people to make decisions for themselves. In the last four decades legislation has been re-engineered and written law has been thoroughly revised and therefore modernized.

Nevertheless, the government has realized that there is still much to do to unleash the country's economic potential and opportunities. Poverty still prevails. The legal tools created to enable citizens tape the existing rich potentials and opportunities are not being used. As a result, assets cannot be fixed in such a way to be economically useful

[48] Under the oversight of the Office of the President who chairs the Tanzania Private Sector Foundation (TPSF)
[49] See for example EAC (2001) and Mashindano (2008a and 2008b)

or be pulled together from their dispersed local arrangements into one consistent network of systematized representations; people are not held accountable for their commitments; assets are not liquid and cannot be used to create credit or capital etc[50]. Subsequently, wealth continues to elude the majority of the nation's people; women have yet to be empowered. In order to reverse this trend the government through MKURABITA decided to reach into the grassroots of Tanzania to find out what obstacles remained and what tools were available for Tanzanians to lift themselves out of poverty. MKURABITA is intended to shine a light on the shadows of Tanzania's extra-legal economy to learn as much as possible about the many local, informal practices that people use to do business among themselves. The Government felt that among those informal rules might lie the building blocks of the kind of formal legal system required to build a prosperous modern economy, rooted in the beliefs of the majority of Tanzanians and, therefore, legitimate and enforceable.

During the last ten months, MKURABITA has gone deep into the world of extra-legality in Tanzania in an all out effort to trail, find, compile, and diagnose the kinds of documents, rules, and other social devices that Tanzanians have spontaneously generated for organizing their production and assets (URT 2009). The programme has also tried to identify the legal and administrative obstacles that uselessly get into people's way. The over-riding goal has been to get a good picture of how the nation's extra-legal economy actually operates and how the official legal system interacts with it.

About 90 percent of economic activities in Tanzania take place outside the legal framework. Note that, one cannot build a modern economy without including most of the nation's economic activities. There is no way that Tanzania can escape poverty if the overwhelming majority of its citizens do not have the legal tools to create wealth.

7.7 The Degree of Alignment of Policy Frameworks to the Budget Planning and Process

[50] In addition, according to MKURABITA people are not interconnected, and transactions cannot be tracked from owner to owner; business organizations do not have statutes that allow members to work under one control; they do not have the means to divide labor and control risks through limited liability and asset partitioning, or associate in standard forms such as corporations, cooperatives, and other collectives; people cannot be identified, and contracts are unable to reach a market outside the limited confines of family and acquaintances

As noted earlier, implementation of all economic and social policies, strategies and plans in Tanzania are intended to compliment MKUKUTA which is the implementing instrument of the National Development Vision 2025. The government of Tanzania approved MKUKUTA in early February 2005. Following approval of the new strategy, the government through the Ministry of Planning, Economy and Empowerment (MPEE) by then prepared implementation framework for MKUKUTA. The implementation of MKUKUTA thereafter started officially in 2005/06 financial year. The Government Budget is the main mechanism and/or tool of resource allocation for implementing the strategy. In view of this background the Government had undertaken a study on costing, which was intended to identify important sector interventions for the attainment of the MKUKUTA targets as well as MDG targets. The ultimate goal was to estimate and make projections of resources required to implement MKUKUTA.

Tanzania's budget serves as a tool for economic and financial management. It is the mechanism used for allocation of resources among different needs and priorities, as well as bringing balanced growth within regions of the country and economic stability and growth. As such, the budget is an important tool for implementation of MKUKUTA, which provides a framework for national development planning and budgeting. Therefore, all economic and social policies, strategies and plans are formulated, budgeted and/or implemented in the context of MKUKUTA.

In other words, all Ministries, Departments and Agencies (MDAs) as well as the local government authorities prepare their budget submissions within the poverty reduction strategy framework. This is also evidenced by the Budget Guidelines for the Preparation of Medium Term Plan and Budget Framework for 2006/07 – 2008/09 (URT 2006) which states that, all plans of Ministries, Independent Departments, and Executive Agencies (MDAs) as well as Regions and Local Government Authorities for the medium term will address themselves to the Tanzania Development Vision 2025, MKUKUTA and Ruling Party (CCM) Election Manifesto, 2005.

LIST OF ANNEXES

ANNEX 1: GROWTH DRIVERS AND GROWTH SECTORS FORWARD AND BACKWARD LINKAGES

ANNEX: Matrix of Growth Drivers with their forward and backward linkages with the Sectors											
Sector (shown horizontally impact factors (OR Drivers shown vertically)	Food security	Forex	Transpo-rtation	Knowl	HRs	ICT	Water	Energy	Fin ance	Employ ment [3]	Total Y
Agriculture	YS	Y S	YDS	Y D	YS	YD	YD	YD	YD	YD	10
Livestock	YD	NA	YD	YD	YS	NA	YD	NA	NA	NA	5
Forest	NA	YS	YDS	NA	NA	NA	NA	YS	NA	NA	3
Fisheries	NA	YS	YD	NA	YS	NA	YD	NA	NA	YD	5
Mining	NA	YDS	YD	YD	NA	NA	YD	YDS	YSD	YD	7
Tourism	NA	YS	YD	NA	NA	YD	NA	NA	YS	YD	5
Manufacture	NA	YSD	YDS	YD	NA	YD	YD	YD	YDS	YD	9
SMEs	NA	NA	YSD	SDS	NA	NA	NA	NA	NA	YD	3
Roads	NA	YD	YS	NA	NA	YD	NA	YDS	YD	YDS	6
Railways	NA	YD	YS	NA	NA	NA	NA	YD	YD	YD	5
HRs	NA	NA	YD	YDS	YD	YDS	NA	YD	YD	YD	7
Health	YD	NA	YSD	YD	YDS	YD	YD	NA	NA	YD	7
Telecom	NA	YD	YS	YS	NA	YD	NA	NA	YD	NA	7
Total Y frequency	3	9	13	8	5	7	6	7	8	10	
Rank	8	3	1	4	7	5	6	5	4	2	
NB: Question to ask: Does the factor drive the sector? (is the factor/driver demanded by the sector as a crucial input (D) or supplied as output (S) from the sector?) Note (i) NA= implies negligible or not major input/output (ii) Y =Yes or strongly positive. In all cases we register only strong correlation (and manifestation) of a factor impact to/on the sector, leaving out minor results. Without this differentiation, the results would be uniform for all the boxes in the matrix thereby rendering the matrix useless.											

ANNEX II: BANK AND NON BANK FINANCING

II.I Introduction

The financial sector reform which started early1990s provided the room for the establishment of private banks and the participation of foreign banks in the country's financial market. This, together with the privatization of two big public owned banks namely: The National Bank of Commerce (NBC) and Cooperative and Rural Development Bank (CRDB) transformed the structure of not only the banking sector but also the overall financial system as well. However, despite the progress, Tanzania's financial sector remains relatively small, and access to financial services remained stunted for the majority of Tanzanians. The Tanzanian financial sector is diverse, but concentrated in commercial banking and very small in relation to the economy. It comprises 25 banks[51], which can be subdivided into three main categories: (a) large domestic banks, subsidiaries of major international banks, and small, mostly domestic, banks; (b) non-bank financial institutions (9)[52] which include insurance companies (14), exchange bureaus (157) (c) savings and credit cooperatives SACCOs (about 3,500 were functioning in 2003). Pension funds industry[53] that is not supervised and regulated by the BoT, constitute the second largest industry in the Tanzanian financial sector; its assets in 2006 accounted for more than 10 percent of the total assets of the financial system. There are also several hundred other micro-finance institutions (MFIs), and one stock exchange.

1. Registered commercial banks include: Standard Chartered Bank, Stanbic Bank (T) Ltd., Citibank (T) Ltd., FBME Bank Ltd, Eurafrica Bank (T) Ltd., Diamond Trust Bank (T) Ltd., Exim Bank (T), National Microfinance Bank Ltd., National Bank of Commerce Ltd., The Peoples' Bank of Zanzibar, Co-operative and Rural Development Bank Ltd., Akiba Commercial Bank Ltd., Kenya Commercial Bank Ltd., International Commercial Bank (T) Ltd., Habib African Bank Ltd., African Banking Corporation, United Bank of Africa, CF Union Bank Ltd., Savings and Finance Commercial Bank, Azania Bancorp, and Bank of Baroda (T) Ltd. Other financial institutions supervised by BoT include Tanzania Investment Bank, Tanzania Postal Bank, and Twiga Bankcorp Ltd.

2. These are in essence banks with a limited license prohibiting the issue of checking accounts, but enjoying a lower capital adequacy requirements and no minimum reserve requirements. Total assets of the nonbank financial institutions are equivalent to only 6 percent of commercial bank assets.

3. By June 2006 pension funds in Tanzania included four institutions namely, Parastatal Pension Fund (PPF), National Social Security Fund (NSSF), Public Service Pension Fund (PSPF), and Government Employees Provident Fund (GEPF).

As a result of the liberalization, the banking sector in Tanzania has been booming, particularly over the last few years[54]. The value of its total assets has increased by 60%, from $ 1.7 billion at the end of 1999 to $ 2.7 billion at the end of June 2004. By December 2006, total bank assets stood at Tsh. 6.6 Trillion, total customer deposits amounted to Tsh. 5.3 Trillion, with Tsh. 2.4 Trillion outstanding in loans and advances. In all three aspects, there has been over 200% growth compared to 2002. The sector comprises a few big players and several small banks. In 2006 the sector counted 294 bank branches and 176 ATMs, and employed 6,400 Tanzanians. Of the total deposits, 90% is in the hands of eight banking institutions, three of which are local banks and five are foreign banks. Local banks primarily service local customers while foreign banks tend to operate as subsidiaries of large international groups, such as Citigroup and Barclays, using strategies oriented to the international market. As a consequence, they focus on international customers and national clients who prefer to keep their deposits in foreign currencies.

Banks account for about 80 percent of the financial system's assets,[55] and by far the largest number of depositors. However, the ratio of bank deposits to GDP is only about 14 percent and bank credit to private sector accounts for only 6 percent of GDP. These ratios are among the lowest in Sub-Saharan Africa (IMF, 2003). Foreign participation in the banking sector is sizeable and growing. Foreign equity participation accounts for about two-thirds of banking system capitalization, and 57 percent of total banking assets are in banks with majority foreign bank ownership. Approximately 13 percent of banking system capital and 19 percent of banking assets remains state owned

MicroNed's[56] study on Country Scan on Microfinance for Tanzania found that monetary aggregates have grown at a stable pace since 2000, reflecting rapid financing deepening. Bank lending to productive non-government sectors has expanded sharply (average 32% per annum). However, small and medium enterprises and agricultural activities in rural areas, have so far failed to benefit from this increase. The spread between lending and deposit rates has continued to narrow, indicating more efficient intermediation by banks (5% in August 2007). Nevertheless, general lending rates remain high. Treasury

[54] The data on contribution of financial sector to GDP could not be found.

[55] The three large domestic banks (National Bank of Commerce (NBC), National Microfinance Bank (NMB), and Cooperative and Rural Development Bank (CFADB)) account for 49 percent of the system's assets; the four subsidiaries of major international banks (Citibank, Standard Chartered, Stanbic, and Barclays) account for a further 41 percent; and 14 small banks account for the remainder. NMB is the only large bank in state ownership

[56] MicroNed is a network that brings together the four Dutch development organisations Cordaid, Hivos, ICCO and OxfamNovib. It was created in 2006, and aims to provide a structural basis for coordination and establishment of a specialised sector approach to microfinance

Bill rates have become increasingly volatile since 2005, and overall yields remain high (between 12-18% in 2006/2007). This reduces the financial sector's incentive to broaden the provision of credit to the private sector. In the June 2007 budget, the GOT introduced various strategies to reduce the level and volatility of Treasury bill yields, including focusing its fiscal policy on minimizing domestic borrowing, and transfer of all government deposits from commercial banks to the central bank (approx. Tsh. 1 Trillion) (Triodos Facet, 2007).

Recent development in the banking sector include: (i) There is excess liquidity in the formal banking sector (ii) Several commercial banks are entering the lower income/SME market by introducing and refining their products for retail clients, often combined with short seminars/training for SMEs (iii)There is increasing competition in (peri-)urban areas, between commercial banks, MFI-NGOs and to some extent SACCOs and their networks to lend particularly to individual and middle and upper segment of micro-enterprises, (iv) There is technological innovations that is more conveniently bringing financial services within reach of more people. There is growth in delivery channels. Electronic banking, extension of access points are changing the nature of banking. All major banks now have ATMs, or are in the process of deploying them, and POS devices are entering the market, creating new partnerships but also new regulatory challenges. Mobile phone banking is expected to become the next 'revolution' and (v) Salary-based consumption lending is on the increase (Triodos Facet, 2007).

II.II Concentration In the Banking System

The study by IMF in 2003 found that concentration in the banking system is rather low. Calculations using the Herfindahl index suggest that concentration in lending is broadly equivalent to a system with nine banks of equal size (eight in deposits). Furthermore, the system has been open to entry and as such appears quite contestable. Although the different groups of banks do concentrate in different submarkets there is sufficient overlap in service provision to prevent the market from being segmented. The average loan to deposit ratio is low at only 34 percent. The three large domestic banks with wide branch network account for 54 percent of total deposits but account for only 24 percent of loans. In contrast, the international banks lend 60 percent of their deposits and account for 57 percent of total private sector credit. The loan to deposit ratio varies widely among the small banks, but on average small banks lend over 40 percent of deposits.

II.III Domestic savings

Gross domestic savings to GDP ratio rose from 5.4 percent achieved during the period 1991-95 to an average of about 15 percent between years 2001-2005. The ability of banks to stimulate long-term savings is expressed by the continuous fall in the ratio of M1 to M2 beginning the year 1986. It declined from an average of 71.1 percent during the period 1986-1990 to an average of 67.2 percent during the period 1991-95 and further to an average of 64.8 percent and 63.4 percent during 1996-2000 and 2001-2005 respectively.

The ratio of currency in circulation to total deposit ratio (CC/TD) as well as that of demand deposit to total deposit (D/TD) reflect the increasing ability of banks to attract financial savings. Total bank deposits increased by an average of about 18 percent during 1991-95 then fell by about 15 percent during 1996-2000 before rising again by about 20 percent during 2001-2005. Nonetheless, overall, trends of financial ratios are indicative of the less impact of the reform on financial deepening and thus, financial development in Tanzania.

II.III Bank Liquidity

Among the current concerns of policymakers, economists, and analysts in Tanzania is that banks are very liquid despite the high private sector credit demand. On one hand, excess liquidity constrains banks' productivity/efficiency; while on the other hand, it strangles the share of credit allocated to the private sector therefore upsetting economic growth. The causes of excess liquidity are suggested to include high cost of funds, credit risks, volatility of deposit holders' cash preference, and the rate of required reserves perpetuated accumulation of excess liquidity in commercial banks in Tanzania.

Table 5.1: Distribution of Commercial Bank Lending: 1991-2005

Year	Public	Private	AGP	MMF	BCO	TRD	PAD	MAG	EAP
1991-95	2.5	53.5	46.5	8.3	21.6	1.7	21.0	3.8	27.0
1996-00	8.6	91.4	7.7	26.5	2.6	23.3	2.9	2.2	1.1
2004-05	0.1	99.9	-	12.9	26.1	4.7	25.3	1.4	0.0

KEY: **AGP - Agricultural Production**
MMF -Mining and Manufacturing
CO - Building and Construction;

TRD - Trade (Including trade in capital goods and all other trade)
PAD - Public Administration
MAG - Marketing of Agricultural Produce
EAP - Export of Agricultural Produce

Sources: Bank of Tanzania (BoT): Economic and Operations Report (Various Issues); Economic Bulletin (Various Issues).

II.IV Regulations

A series of Banking and Financial Institutions Regulations have been put in place. For instance, the 1997 Regulation prescribe conditions of entry or exit into banking industry in Tanzania. In general it deals with licensing requirements for new entrants into the banking system. Other relevant regulations are:

- The Management of Risk Assets Regulations, 2001
- The Capital Adequacy Regulations, 2001
- The Liquid Assets Ratio Regulations, 2000.
- The Publication of Financial Statements Regulations, 2000.
- The Independent Auditors Regulations, 2000
- The Credit Concentration and Other Exposure Limits Regulations, 2001
- The Internal Control and Internal Audit Regulations, 2005
- The Microfinance Companies and Micro-credit Activities Regulations, 2005
- The Foreign Exchange (Bureaux de Change) Regulations, 1999

II.V Insurance Services

The insurance sub-sector could be seen together with the pension's services. As of December 2006, the financial sector included 5 pension funds which comprised the National Social Security Fund, The Parastatal Pension Fund, the Public Service Pension Fund, the National Health Insurance and the Zanzibar Social Security Fund. These pension funds are self regulated, with the major funds being state-operated. The creation of a retirement benefits regulator is under consideration then.

The insurance and pensions sector, regulated and supervised by the Insurance Supervisory Department (ISD) within the Ministry of Finance, comprises 4 life insurance companies and 12 registered general insurance companies, including life and non-life insurance activities. The sector holds 3% of the financial system assets. The

insurance sector remains dominated by the state-owned National Insurance Corporation (NIC). In the general insurance sub-sector, the NIC holds nearly 25% of premiums and has a near-monopoly market share in life insurance premiums.

II.VI Micro-financing

Micro-Finance is often hailed as a critical component of successful development initiatives. A lack of access to capital is a difficult hurdle to clear on the path towards self reliance. Over the past 5-10 years the enabling environment for microfinance in Tanzania has improved significantly. The GoT has come out strongly in support of the development of the industry. The National Microfinance Policy, approved by Cabinet in May 2000, articulates a clear vision for the development of a sustainable microfinance industry, specifying the respective roles of the key stakeholders. According to the policy, the private sector is to be the key provider of financial services; the Government is not to engage actively in the delivery of microfinance. Providers of microfinance are expected to apply sound financial principles in delivery of their services, particularly with respect to pricing, loan delinquency control, financial reporting, appropriate techniques and products, gender equity and governance (TBA Newsletter, June 2007).

The microfinance policy is part of the wider policy framework for Tanzania. Other national policies and strategies with relevance to microfinance include:

- The National Strategy for Growth and Reduction of Poverty (known as MKUKUTA, 2005 -2010) contains Tanzania's overall development strategy.
- Small and Medium Enterprises Development Policy, (Ministry of Industry and Trade, 2002);
- National Land Policy, 1995

In more recent years, the microfinance landscape has been dominated by SACCOs, which are strongly supported by the government. For this reason, in 2001, the Department of Cooperatives within the Agricultural Ministry was upgraded to the Ministry of Cooperatives and Marketing. In 2002, a new National Cooperative Development Policy was approved, in line with the 1995 International Cooperative Alliance (ICA) Statement of Cooperative Identity and Principles. In 2006, the Government introduced the National Economic Empowerment and Job Creation Programme. The programme encourages the establishment of SACCOs at ward level and offers to lend them a total of Tsh. 21 Billion (Tsh. 1 Billion per region, therefore

popularly known as the JK Billions'). So far, the Government has approved NMB and CRDB as its agents to channel the funds to individuals and SACCOs.. In the near future, MFIs, SCCULT and SELF are expected to handle part of the funds (Triodos Facet, 2007). The Government and BoT, with support from FSDT, aim to develop a fully fledged Rural Finance Services Strategy.

a) NGOs

Most NGO-type MFIs are registered as companies limited by guarantee, societies or trusts. The main players include PRIDE-Tanzania, FINCA-Tanzania, SEDA, BRAC-Tanzania and Presidential Trust Fund with over 90,000; 43,000; 17,500; 50,000 and 10,000 active borrowers respectively. In addition there are a number of smaller NGOs, whose outreach is limited to their immediate geographical area, including SEF and FAULU-Tanzania, both with over 2,000 active borrowers. Others include WEDAC in Kilimanjaro and FAIDERS in Biharamulo, SELFINA with over 1000 and 2,000 active borrowers, specializing in micro-leasing. Other, relatively new entrants into the Tanzanian market are Tujijenge Afrika, Easy Finance with over 1,100 active borrowers and GroFin Tanzania. All operate in Dar es Salaam. Another new entrant is Micro Provident Tanzania (Faidika), with employee-based lending through 7 branches.

Most of the NGO-type microfinance players are credit-driven and mainly based in urban and semi urban areas. Some (notably SEDA, PRIDE, FINCA) are in the process of transforming into Microfinance Companies (MFCs), so as to be able to attract savings from the public. However, the requirements for an MFC license are stringent and these transformation processes will take time.

b) Savings and Credit Cooperative Societies (SACCOS)

SACCOs are the main providers of financial services in the rural areas. In December 2006, there were over 3,500 SACCOs registered with the Ministry of Cooperatives and Marketing, with approximately 420,000 members. About 60% can be classified as rural and 40% as urban (mostly wage-based). Over the past two years, the number of SACCOs has increased rapidly (this can be attributed to the 'JK Billions' cited above), however, the average number of members per SACCO has come down to about 120.

In general, capacity in SACCOs in Tanzania is weak. There is lack of full-time staff; leaders, managers and staff lack training, adequate record keeping systems and appropriate facilities (secure, with professional image). The majority of rural-based SACCOs are very small (in terms of membership and savings and therefore loan portfolio) pursuing the atomized model. Sustainability of such stand-alone rural SACCOs is questionable, due to sparse population, limitations in infrastructure (roads, power, and communication), subsistence economy with limited business accentuated by seasonality and difficult loan diversification (cotton, coffee, tobacco) thus high risks.

Current trends in microfinance thinking, based on worldwide experience, increasingly agree that stand-alone SACCOs are not likely to survive in the long run. External monitoring, supervision and support will continuously be required, in order to allow the SACCOs to grow and prosper. In addition, there are common, specialized needs amongst SACCOs like liquidity management, insurance and auditing, which are better placed in an intermediary organisation.

There are a number of other organisations that provide capacity building services to SACCOs, without being a network in the sense as described above. These include: (i) Savings and Credit Cooperative Union League of Tanzania (SCCULT); (ii) CRDB (iii) Rural Financial Services Programme (RFSP, a 9-year IFAD-funded programme under the Prime Minister's Office, focusing on strengthening of SACCOs. It is being implemented in the Northern Central and Southern zones, head office in Mbeya. Besides training, SACCOs receive some material support (stationary, safes). RFSP works through the government system, i.e. the District Cooperative Officers. Other facilitators such as KADERES, an NGO in Karagwe; MuCCOBs through its field wings, e.g. ICCDE-Dodoma, Small Enterprise Loan Facility (SELF) and , Arusha Community Initiatives Support Trust (ACIST)

Informal savings and credit associations, in their various forms, play a significant role in creating access to financial services in Tanzania, as the FinScope survey confirmed. These include the examples of Village Savings and Loan Associations (VSLA), Text omitted Village Community Banks (VICOBA) being promoted in various parts of

Tanzania [.Text omitted], Community Conservation Banks (COCOBA supported by World Wildlife Fund (WWF) and Financial Services Associations (FSAs) International supported in Tanzania by Plan International[57].(Registrar of SACCO's, December 2006)

c) Regulated and Supervised Institutional **Microfinance Suppliers**

Three out of 25 commercial banks provide financial services and products aimed at the poor and low income households: National Microfinance Bank; CRDB Bank and Akiba Commercial Bank (5 branches in Dar es Salaam and Arusha, with over 15,000 microfinance clients). The Tanzania Postal Bank, a state-owned non-bank financial institution, provides a variety of savings deposit services nation-wide (total over 100 outlets, and more than 1 million account holders) and has entered into micro-credit provision on a small scale.

NMB has by far the largest network of branches, followed by CRDB. Barclays Bank has recently turned its strategy around, and intends to focus on lower segments of the market. It will increase its currently small network to 24 branches in 14 regions by early 2008, using cheaper methods: reinforced containers, rather than the traditional, expensive 'brick and mortar' branches. In addition, the National Bank of Commerce (NBC) has vowed to go rural, and is increasing its branches from the current 42 to over 50 early 2008, using prefabricated (and thus cheaper and more flexible) branch buildings.

A new entrant into the market has recently opened its first branch in Dar es Salaam: Access Bank Tanzania, which will focus on SME's and the low income population. Shareholders include Access Microfinance Holding (38%), ADB, BOI, IFC and KfW (all 15.8%). Grameen Bank is also considering starting operating in Tanzania - initial discussions were held with GoT and BoT

Currently there is a trend of commercial banks down-scaling and entering into microfinance (both at the wholesale and the retail level). CRDB provides microfinance services through SACCO's: more than 270 SACCO's are linked to CRDB (with more

[57] Source: Microfinance in Plan, A Brief, Delores McLaughlin, October 2006; Member-owned Financial Institutions, lessons from Uganda and Tanzania, 1997 - 2004, A. Jazayeri, 2005.

than 140,000 members), and at least Tsh. 25 Billion has been loaned to these SACCO's in 2006. With assistance from DANIDA (also 30% shareholder in the bank), CRDB has developed an effective business model that combines tailor-made capacity building with provision of financial services. CRDB has established a separate subsidiary company to drive the growth of this product. SACCO's also make use of the Tembo-Card (debit card) through CRDB's ATM (over 40) and POS network (over 600).

NMB is another major player, with large potential given its network of over 120 branches. Since 2006, the influence of Rabobank Netherlands and its consortium is increasingly apparent in the strategic direction of the bank, including a stronger focus on rural lending. NMB is lending to both the top segment of MFIs as well as SACCO's and smaller MFI's.

Uchumi Commercial bank is also on-lending to SACCOs (63 by end of 2006), and so is Mbinga Community Bank. Other commercial banks active in the wholesale market include Standard Chartered (Tsh. 5 Billion for wholesale to MFIs, including PRIDE); CitiBank (Tsh. 24 Million to BRAC in DSM), Federal Bank of the Middle East, and to some extent Akiba Commercial Bank and Azania Bank (both provide overdraft facilities only).

As per BoT regulations, unsecured loans to a single borrower may not exceed 5% of a licensed bank's capital, with acceptable collateral limited to cash or near cash securities. This ceiling is likely to have an adverse impact on the wholesale lending by licensed banks, including regional banks, to microfinance NGOs or SACCOs

d) Other Relevant Actors

(i) ***Village Community Banks (VICOBA):*** The VICOBA which started in 2001 in Tanzania is a village savings and loans scheme based on groups of between 25–30 people that have proven to be very successful in very isolated, illiterate and poor rural areas. The Programme has the capacity to mobilize and enthuse socially and economically marginalized individuals and households to influence and master their own future. Experience shows that the majority of participants in VICOBAs are women. From Norwegian Church Aid's (NCA's) monitoring

visits and partners reports, there were approximately 392 VICOBA groups with total of 10,268 members and shares amounting to Tshs1.75 billion.

(ii) ***Village Savings and Loan Association (VSLA)*:** These are informal, time bound accumulating savings and credit associations (ASCAs) of 15-30 people. This model has been being used by CARE Tanzania. In July 2006 there were 158 VSLA with a total membership of 4,552 (70% women). Various CARE supported projects have also adopted the methodology.

(iii) ***Community Conservation Banks (COCOBA*):** They are informal savings and credit associations supported by World Wildlife Fund in various regions in Tanzania as part of their conservation programmes. A similar model is used by the Wildlife Conservation Society Tanzania, around Pugu forest and has 7 groups with a total membership of 300 people

e) Other features of the microfinance segment

(i) **Demand for Microfinance Services:** There is a huge unsatisfied demand for financial services especially in rural and (peri-) urban areas of Tanzania. A large segment of (54% overall; 45% of urban, 57% of rural) of the adult population has no access at all to financial services, either formal or informal (overall, 9% has a formal bank account , 2% has access to semi-formal finance (NGOs, SACCOs) and 35% has access to informal finance like ROSCAs/ASCAs and moneylenders - these categories are mutually exclusive). Only 20% of the population has access to formal bank within 1 hour walking distance.

Financial literacy is generally low as 92% of the population has heard of loans, but 84% do not understand how these are procured.; 27% has never heard of a savings account. Beyond loans and savings, financial literacy is close to nil (e.g. on insurance, ATMs). Nevertheless, 82% of the total population indicated that they would like to know how to open an account in a financial institution. This indicates a huge need for better and

more communication on financial services with the larger population, in the right language.

(ii) **Sources of income**: Only 4% of the population is employed in the formal sector. A large majority of people (61%) goes without cash income at times. Many (28%) depend on getting money from family and friends.

(iii) **Availability of other credit and loan facilities**: of those that borrow, most (38%) turn to family and friends. An additional 33% has a loan from a kiosk, 23% borrows in-kind (e.g. livestock). Only 4% said that they have a loan from a bank (5% of men, 1% of women). SACCOs and MFIs serve only a small percent of all borrowers; 9% and 6% respectively.

(iv) **Other forms of savings**: most people with money do not save it with a bank or financial institution. Of those who save, four out of ten favour saving in-kind (even more so in rural areas) and three out of ten say they keep money in a secret hiding place (similar for urban and rural). Another interesting aspect is that of the people with a bank account (9%), many also save with or borrow from informal providers (48%), SACCOs (26%) or MFIs (15%).

(v) **Availability of other means of Transferring money**: 90% of all remittances are within Tanzania. When people want to transfer money around the country, they are seven times more likely to use a personal contact, and three times more likely to use a courier (usually a bus), than any kind of financial institution.

(vi) **Technology Advancement:** the internet and mobile phone technology is expanding the potential for financial service customers more rapidly than anything else. Although the number of people who use internet is very low (9% overall, 23% in urban and 4% in rural), nearly half the population already has access to a mobile phone. Internet access is expected to

increase in the medium term when connectivity speed increases and cost goes down (e.g. through EASSy project - connecting Tanzania to international glass fibre network in 2-3 years time). Also other technological advances are taking place, like use of use of ATM, card payment, credit cards, internet banking and mobile phone banking but their regulatory rules have yet to be addressed.

f) Capital Market Finance

The Capital Markets and Securities Authority (CMSA) is a Government Agency established to promote and regulate securities business in the country. It was established under Capital Markets and Securities Act, 1994 (amended by Act No: 4 of 1997)].

In order to maintain a certain level of local ownership, foreign investors are not permitted to hold government paper, which remains a major holding for domestic investors

The Capital Market is affiliated and associated to the following organizations:

(i) Dar Es Salaam Stock Exchange (DSE);
(ii) East African Member States Securities and Regulatory Authorities
(iii) Capital Markets Development Committee
(iv) The International Organization of Securities Commissions (IOSCO)

The Dar Es Salaam Stock Exchange (DSE) is the central fulcrum of the capital market in Tanzania. It was incorporated in September 1996 as a private company limited by guarantee and not having a share capital under the Companies Ordinance (Cap. 212). The DSE is therefore a non-profit making body created to facilitate the Government implementation of the economic reforms and in future to encourage the wider share ownership of privatized and all the companies in Tanzania and facilitate raising of medium and log-term capital. It is closely regulated by CMSA.By the end of 2006 the DSE had a market capitalization of US$ 2.4 bn and only nine Listed Companies[58] two of which were cross-listed.

[58] Listed companies are: TOL Gases Ltd.(formerly known as TOL Ltd.)(TOL), Tanzania Breweries Ltd.(TBL), Tanzania Tea Packers Ltd. (TATEPA),
Tanzania Cigarette Co. Ltd. (TCC), Tanga Cement Co. Ltd.(SIMBA), Swissport Tanzania Ltd.(Formerly known as DAHACO), Kenya Airways Ltd.

The East African Member States Securities and Regulatory Authorities (EASRA) is comprised of the Capital Markets Authorities Kenya, Uganda and Tanzania, and was established on 5th March 1997 through a Memorandum of Understanding (MOU) with a mission to facilitate the harmonization of securities laws among the East African member states and to promote information sharing and cooperation among the members.

The Capital Markets Development Committee (CMDC) on the other hand was established in 2001 and operates under the auspices of the East African Community as one of the standing committees. CMDC membership comprises chief executives of the securities regulatory authorities of the member countries and the chief executives of the securities exchanges of the member countries. It formulates policy, develops and makes recommendation to the council of ministers, regulation and integration of Capital Markets of Kenya, Uganda and Tanzania. The OISCO headquartered in Madrid has approximately 140 members aimed at protection of investors, ensuring that markets are fair, efficient and transparent and the reduction of systemic risk. Tanzania is a member of IOSCO.

(KA), East African Breweries Ltd. (EABL), Jubilee Holdings Ltd.(JHL)

ANNEX III: MAJOR TRANSPORT ROUTES MAP

ANNEX IV: LIST OF REFERENCES

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