

Tanzania

Impact of Macro & Policies on Deforestation

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Foreword

The Nile Basin Initiative (NBI) is a partnership between riparian countries of the Nile; namely Burundi, Democratic Republic of Congo, Egypt, Ethiopia, Kenya, Rwanda, Sudan, Tanzania, and Uganda. The NBI's shared vision is to "achieve sustainable socioeconomic development through the equitable utilization of, and benefit from the common Nile Basin water resources". To translate this shared vision into action, there are two complimentary programmes: the Shared Vision Program (SVP) which creates a basin wide enabling environment for sustainable development; and the Subsidiary Action Programmes (SAPs) engaged in concrete activities for long term sustainable development, economic growth and regional integration of the Nile Basin countries.

The Nile Transboundary Environmental Action Project (NTEAP), one of the seven projects under the Nile Basin Initiative's (NBI) Shared Vision Programme, is mandated to provide a strategic environmental framework for the management of the trans-boundary waters and environmental challenges in the Nile River Basin.

As part of a broader plan of raising environmental awareness, NTEAP seeks to enhance the understanding of common and high priority policy issues that affect the environment of the Nile Basin. This will be done through policy studies of the patterns of economic development and priority transboundary environmental issues. The Nile Transboundary Environmental Analysis which was developed by the riparian countries in collaboration with the World Bank, UNDP and GEF identified priority environmental issues and threats in the Nile Basin. Better understanding of how these environmental threats are influenced by macro and sectoral policies and identifying the root causes is essential to explore possibilities of jointly addressing the threats.

In August 2006 the NTEAP held a planning workshop in Tanzania on the impact of macro-sectoral policies on the Nile Basin environment. The workshop discussed the concept note on macro policies prepared by NTEAP, reviewed country papers and decided on the kind of studies that could be carried out in line with macro and sectoral policies. Topics were selected on the basis of their relevance to the Nile Basin, significance of trans-boundary aspect and where policy intervention/policy reforms will be required. Four research themes/topics emerged. These focused on the macro/sectoral policies: on soil erosion; non point pollution/pesticide pollution; exploration and development of oil projects; and deforestation in the Nile Basin.

This report examines the impact of macro and sectoral policies on the environment, particularly on deforestation in Tanzania. The report examines the severity and extent of deforestation. It also discusses the required policy interventions and /or policy reforms in Tanzania. It is hoped that the content of this report will permeate the government system to form part of the basis for decision making process.

Gedion Asfaw Regional Project Manager Nile Transboundary Environmental Action Project

Executive Summary

The macro and sectoral policies impacts in Tanzania are generally visible through deforestation and forest degradation. Deforestation and forest degradation which are caused by human interference have tended to alter the ecology, cause loss of timber and other non-wood forest products, degrade the natural environment such as land quality and water hydrology. The human activities responsible for both deforestation and forest degradation in Tanzania include timber logging. pit sawing, charcoal burning, firewood and pole collection, harvesting of non-timber forest products such as honey and animals. cultivation and grazing in the forest lands. Establishment of settlements in forest lands, forest fires and outbreaks of pests and diseases are also common causes of deforestation and forest degradation. Tanzania is therefore one of the Sub Saharan countries which faces a serious problem of deforestation and forest degradation. Subsequently, the country has been losing huge amount of revenues due to illegal and unrecorded trade in timber and logging.

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 addresses 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). Unrealised revenues are an evident threat to the sustainability of the forest resource and therefore sustainable development and broadbased growth in Tanzania.

The effect of deforestation and forest degradation due to macro and sectoral policies in Tanzania is widely spread. For example, forest fires cause loss of forests and its products. In Arusha region, about 5,000 ha or 2% of the reserved forests are destroyed by fire every year. The situation becomes worse during long drought spells like the 1996/97 drought in which about 3,700 ha of Meru forest reserve were destroyed by fire. In the 1983 drought more than 5,600 ha of plantation forests were destroyed by fire in Sao-Hill forest plantations in the south of Tanzania. In Mamboya forest reserve. Kilosa district about 1% of the forest is destroyed every year. In 1990, about 3,178 ha of reserved forests in Rukwa region were reported to have been completely destroyed by fire.

Furthermore, in Arusha region where firewood and charcoal demand is about 506,878 m³, it is estimated that about 15,000 ha of forests are deforested every year because of firewood collection and charcoal production. Deforestation in the coastal belt of Tanzania has reached a critical level. Close to half of the Kazimzumbwi forest has been degraded over the past few decades and over 20,000 ha of the Pongwe forest have been lost through charcoal making. Some porches of forests in the areas surrounding Dares-Salaam and coast regions are also under threat. Note that, two forms of forest utilization are dominant: first, by local communities largely for subsistence purposes and secondly by outsiders mainly for commercial purposes following market and trade liberalization.

Other forms of impacts include the greenhouse effect; Changes in the hydrological cycles; Impacts on soils and agricultural land; Impact on forest productivity; Social migration and Invasion of the forests for search of productive land; and health problems to the society.

Tanzania has been trading in timber and timber products with different

countries around the world (including the Nile Basin member countries) such as Kenya and DRC. This is follow the visible and attractive incentives accompanying trade liberalization. The subsequent harvesting and export of forest products has been undertaken haphazardly to the extent of denting the country's precious resources it needs. China, UAE, India, South Africa, Kenya, Thaiwan and Thailand are the major importers of Tanzanian timber.

Huge amounts of revenue due to illegal and unrecorded trade in timber and logging is lost. In mid 2004, Tanzania collected only 4% of the actual timber harvested. The trend has revealed a drastic decline between revenue collected in 2001 and that of 2004. There is a serious governance weakness in the forest sector despite having good policies and legal framework. Most of the logging takes place in unauthorized areas of Rufiji namely Selous Game and Forest Reserve. 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% GDP (approximately US \$ 1.8 bill).

The causes of deforestation and forest degradation can be summarized in two major forms of utilization namely: utilization by local communities largely for subsistence purposes, and secondly utilization by outsiders mainly for commercial purposes. Easy access to the forest reserves in the country enables traders and farmers to unlawfully cut down trees. Migration of people from other ethnic groups, increased demand for farmland, unclear (undefined) forest entry and exit points, poverty, poor farming practices, population growth are

among the driving forces of deforestation. On the other hand it has been demonstrated that, to a larger extent deforestation and forest degradation are related to policy changes in the country. The macro and sectoral policy changes in Tanzania have influenced deforestation and the quality of forest reserves, by making some areas of the country's forest better off while subjecting others in distress, in terms of natural resource balance as well as its related economic benefits.

For example, fiscal and monetary policy reforms, trade liberalization which entails adjustment of policy instruments like taxation, interest rates, domestic export prices, and devaluation has attracted more players in the trade industry and subsequently stimulated production and exports of forest products because controls are almost absent and the overall environment to trade is conducive. Tax regimes are friendly, prices are attractive and therefore profitability is in most cases assured. The forest sector has been liberalized along with other economic sectors. Recently, the public, natural resources experts, government leaders and politicians have raised concern that uncontrolled utilization of the forest resources is a tragedy marked by loss of habitats, jeopardizing the advantages envisaged in the trade liberalization policy measures.

Recommendations

Inevitably, immediate firm and strategic interventions are required

to address the ailing conditions and malpractices in the forest sector. It is evident that serious governance shortfalls and complex corruption and capacity constraints are major influencing factors in the forest sector. Thus, recent measure by the government to hold some top government and political executives responsible is a good beginning towards arresting the evils in the forest sector. There is a need to scale up such measures and replicate it in the forest economy.

The priority should be to mobilize efforts to address forestry governance targeting transparency, accountability and corruption at all levels. The issue of property rights, resource ownership and licensing procedure need to be clarified to adequately inform the respective personnel and the public at large.

Since the Participatory Forest Management (PFM) uptake is still very slow, efforts have to be scaled up to promote it through Community Based Forest Management (CBFM) and Joint Forest Management (JFM) in the country. For it to happen the Local Government Authorities (LGAs) must be empowered in terms of financial resources and competent human resources. Note that success of the LGAs and therefore the ongoing decentralization process will largely depend on improved capacity of the LGAs. Thus, resources need to strategically be scaled up towards capacity building of the LGAs.

Some degree of autonomy of the LGAs is inevitable. At present, the

LGAs mandate to initiate and therefore implement its plans and strategies is limited. The LGAs inability to make some basic decisions and implement contrasts the spirit of the Local Government Reform Programme (LGRP) and the concept of Decentralization by Devolution (D by D). All the major decisions are made by the central government. The gap between local authorities and investors has tended to deny the latter the power to monitor and control the forest activities. Similarly, the local authorities are not aware of the revenue collections from hunting blocks which are operating in their jurisdictions, because they do not have mechanism to monitor such collections. LGAs need to demand more autonomy to be able to execute sustainable forest programmes.

The current institutional framework for the forest sector encourages duplication of efforts and potential conflicts among key players. The institutional problems have significantly contributed to the problems observed in the sector. While in most cases the responsibility is referred to the central government, there are other institutions mainly the local government which also has interest in the forest sector but with varying objectives and restricted mandate. This institutional structure makes monitoring of the sector difficult especially when it comes to sustainable forest management. Institutional reforms are therefore required if the forest sector has to be sustainable.

Introduction

Approximately 41 percent of the total land in Tanzania is covered by forest (Meghji 2003). This is about 38.8 million hectares. The main vegetation types include Afro alpine heath and moor land, forests, woodlands and grasslands, bush lands and thickets, swamps, mangroves and plantation forests. About 13 million hectares of the total forest area has been gazetted as forest reserves. Over 80,000 hectares of the gazetted area is under plantation forestry and about 1.6 million hectares are under water catchment management (Kahyara et al. 2001). The forests have social, economic and environmental importance not only for Tanzania but for the World at large. The forests have various species of plants and animals that make Tanzania one of the richest and attractive countries in terms of biodiversity features in the World. For example, Tanzania has Africa's largest number of mammals, third Africa's largest number of birds (with 1,035 species), second for plants with 10,000 species, fourth for amphibians (123 species) and fourth for reptiles with 245 species. Most of these are found in the country's forests (Kahyarara et al. 2001). Tanzania has an agrarian economy with peasant farming that is susceptible to rainfall availability, soil erosion and desertification being dominant. About 6 percent of the total land in Tanzania is used for peasant farming.

Forests play an essential role in the maintenance of the hydrological balance and soil protection. They maintain rainfall pattern and preventing water run off thus, ensuring appropriate hydrology which is necessary for sustainable water sheds. This is important not only for agricultural development in Tanzania, but also for fishing and marine transport. The forests are also important for recycling and fixing of carbon dioxide. For many years agro forestry has been promoted in Tanzania as one of the farming system that has a role and function in nitrogen fixation and provision of natural mulch as well.

There is an important synergy between forest and other economic activities such as tourism, wildlife and trade. Tanzanian forests are important in the growth of sectors like tourism through block hunting and wildlife development. They 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. Forests and woodlands in Tanzania provide 91% of the domestic energy source whereas oil fuel, electricity and coal provide 7, 1.6 and 0.4 percents respectively (Mashindano 1998; Kahyarara et al. 2001; Meghji 2003). Following the World Health Organization (WHO) estimates, over 60% of rural population in Tanzania depends on medicinal plants from the forests (Kahyarara et al; Mascarenhas 2004). The forest also provides construction materials in terms of timber, building poles, ropes, roofing materials etc.

More than 1.5 million people are employed in the forest sector. Employment is 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. Export earnings from the forest sector accounts for over 10% of the total export. Forest products are among the three important foreign exchange earners and the highest contributors to the non traditional exports. It should be noted that a huge amount of exports from forest industry has not been recorded thereby heavily underestimating the actual contribution made by forest sector in the country (see for example Milledge, 2008).

Tanzania Development Vision 2025 (TDV 2025)

Tanzania National Development Vision 2025 (TDV 2025) envisages that by 2025 the country should have eradicated abject poverty, improved the quality of life and created a strong, diversified, resilient and competitive economy. The Vision aims at achieving three key targets: (i) high quality livelihood, (ii) good governance and the rule of law and (iii) strong and competitive economy.

High Quality Livelihood the Vision aims to realize the following important goals:

- Food self-sufficiency and food security
- Universal primary education
- Gender equality and the empowerment of women
- Access to quality primary health care for all
- Access to quality reproductive health services for all individuals of appropriate ages
- Reduction in infant and maternal mortality rates by three-quarters of current levels
- Universal access to safe water
- Life expectancy comparable to the level attained by middle income countries
- Absence of abject poverty

Good Governance and the Rule of Law it is envisioned that by 2025 the Tanzanian society should be characterized by:

- Desirable moral and cultural uprightness
- Strong adherence to and respect for the rule of law
- Absence of corruption and other vices
- A learning society which is confident and that learns from its own development experience and that of others and owns and determines its own development agenda Strong and competitive economy it is envisioned that by 2025 Tanzania will be having:
- A diversified and semi industrialized economy
- A stable macroeconomic situation manifested by a low inflation economy and basic macroeconomic balances
- A growth rate of 8 percent per annum or more
- An adequate level of physical infrastructure needed to cope with the requirements of all sectors
- An active and competitive edge

in the regional and world markets

The main message of Vision 2025 in respect to poverty eradication is echoed in the National Poverty Eradication Strategy (NPES, 1998). The Strategy reiterates the Government's intention and commitment since independence of addressing ignorance, diseases and poverty. The existing policy framework places strong emphasis on the participation of various stakeholders in fighting these issues with a view to realizing sustainable development for the people. It is in this context that the Government continues to carry out the necessary policy reforms and improve the investment climate in the country to allow key players in the private sector to participate effectively in national development.

The National Strategy for Growth and Reduction of Poverty

The National Strategy for Growth and Reduction of Poverty (NSGRP) popularly known as MKUKUTA is a medium term strategy informed by Vision 2025 and aims to achieve the Millennium Development Goals (MDGs). The Tanzania Development Vision 2025 and the National Poverty Eradication Strategy set long term targets with MKUKUTA translating them into medium term goals for implementation. MKUKUTA has an increased focus on growth and governance and is a tool for mobilizing efforts and resources towards its outcomes. The Strategy is strongly outcome focused and aims to foster greater collaboration among all sectors and stakeholders. It identifies three clusters of broad outcomes:

- (a) Growth and reduction of income poverty
- (b) Improvement of quality of life and social well-being
- (c) Good governance

Each cluster has a set of **goals** and **targets**. To achieve each target interventions and actions are identified. There is a strong relationship between the clusters and all are equally important.

Equitable growth leads to higher incomes thus reducing income poverty. Higher incomes enable households to improve human capabilities through better education, health, nutrition and shelter. Human capability in turn is critical for long-term growth. Growth enables the government to collect revenue for provision of services. On the other hand good governance provides conditions for growth, well-being and poverty reduction.

Clearly, the targets set in the National Policy framework are quite ambitious. The government recognizes the importance of participation of various sectors and stakeholders to achieve the specified goals. The most important element is the participation of the private sector both in the productive sectors as well as service delivery. In this respect the government continues to improve the

investment climate, and to encourage a sense of partnership with the private sector. The Tanzanian Government has updated various policies, strategies, programs and standards to create space for effective participation and contribution of all sectors and stakeholders in sustainable development.

ENVIRONMENTAL ISSUE

Macro and sectoral policies have potential impact in altering the economic incentives that govern resource use and conservation in a country. The linkage between policy variables and the natural environment in the Nile Basin is well demonstrated in Table1. The policy-environmental nexus provides a suitable analytical framework for linking macro policies and natural environment to underscore both positive and negative impacts.

Table 1:Linkage between Macro policies and the Environment: An Illustration

Sn	Policy	Intermediate Policy	Environmental Impact		
		Variable			
1	Fiscal	· Government	· Agricultural extension services		
		Expenditure	· Resource management		
		· Taxes	· Demand for resources		
		· Subsidies	· Input effect: fertilizer, pesticides energy, credit		
			· Output effect: depending on crop characteristics		
2	Monetary	· Credit	· Demand for agricultural inputs		
		· Interest Rate	· Demand for investments and resources		
3	Exchange Rate	· Devaluation	· Import effect: Increase input prices		
			· Output effect: Increase export crops depending on		
			Crop characteristics and farming practices		
4	Trade	· Import and	· Same effect as devaluation		
		Export Taxes	· Same effect as trade taxes		
		· Trade Controls			
5	Pricing	· Price Controls	· Impact on output response, depending on crop		
		· Subsidies	Characteristics and farming practices		
		· Taxes	· Demand and use of inputs		
			- Demand for agricultural resources		
6	Institutional	· Land	Farm investment effects		
	Reforms	· Financial	· Investment in resource management		
		· Research and	Agricultural extension services		
		Extension			
7	Investment	· Training	· Human investment in agricultural extension and		
		· Valuation	Resource management		
		· Technology	· Evaluation of environmental costs and benefits		
		· Public	· New agricultural technologies		
		Infrastructure	Access to natural resources		

Source: Adopted from the World Bank in Mashindano (1998)

Table 2: Timber Export from Tanzania

Sn	Products	Species	Qty	Units	Primary Destination
		Swartizia			
		Madagascariensis	846.73	m³	· China (100%)
		Tectona grandis	8930.3		· UAE and India (99%)
					· China (76%)
					· Taiwan (7%)
					· UAE (6%)
1	Logs	Various hard			
		Woods	4282.39	m³	· Thailand (3%)
	Sawn wood, billets	Softwood	19671.49	m³	· UAE (76%)
2	And chips	Sandalwood	116.51	Tons	· South Africa (8%)
3	Dalbergia				· India (100%)
	Melanoxylon				· India
	carvings and other				· USA
	Finished				· United Kingdom
	Products				· China
					· Germany
					· Italy
					· Kenya
			10310.29	Kgs	· South Africa
			77.05	m³	
			5513	pcs	

Source: URT (Forest and Beekeeping Division) 2006a

A decrease in public spending (fiscal policy) through reductions in subsides, extension services, drought relief, food aid and general welfare programs may intensify poverty in an area leading to unsustainable resource management and farming of marginal land.

Any fiscal policy through taxation or government spending can affect farmers' demand for resources such as land, labour, energy, fertilizer and farm credit thus, disrupting the resource base.

Monetary policies influence the interest rate since money supply is inversely related to the interest rate. When the interest rate is altered investment demand tends to change thereby affecting aggregate demand as well as equilibrium national output.

In the agricultural sector or fishing industry, for example, a declining interest rate tends to stimulate investments and subsequently disrupt the natural resource balance.

The downward adjustment of the exchange rate (devaluation) may redirect expenditure away from foreign imports and encourage exports.

Devaluation increases both the domestic prices for exports and

imports. This new set of prices may have an impact on resource allocation and indirectly affect management of the natural resources. Since it attracts exports, overexploitation of resources is likely to occur. This is exactly what happens in the timber and logging industry of Tanzania.

Trade liberation tends to direct its attention at removing restrictions (import tariffs, quotas or export taxes) to foreign trade.

Trade liberalization has an impact on the environment through changes in the relative prices of imported and exported goods. Its consequences are similar to those of devaluation. Removal of price controls is likely to stimulate production of the respective commodities.

In agriculture, environmental impact of macro policy change depends on soil erosion protection characteristics of the crop in consideration. Legal and institutional reforms are critical elements in any environment management programme.

Lack of a clearly defined property rights, for example, may encourage individual herders to over-stock cattle causing overgrazing, bush encroachment, erosion and desertification.

EXTENT AND SEVERITY OF DEFORESTATION

Tanzania is one of the Sub Saharan countries which face a serious problem of deforestation and forest degradation (URT 1998c, URT 202c). Literature reveals a number of causes of deforestation in the country. The effects of deforestation. include alteration the ecology of the area, loss of timber and other nonwood forest products, degradation of the natural environment and water shortages. Human activities are the root cause of deforestation in the country. These activities include timber logging; pit sawing, charcoal burning, firewood and pole collection, harvesting of non-timber forest products such as honey and animals, cultivation and grazing in the forest lands (Kahyarara, 2008). Kahyarara (2002) summarizes the activities into two forms of utilization: i) utilization by local communities largely for subsistence purposes, and ii) utilization by outsiders mainly for commercial purposes. Easy access to the forest reserves in the country enables traders and farmers to unlawfully cut down trees. Migration of people from other ethnic groups, increased demand for farmland, unclear (undefined) forest entry and exit points, poverty, poor farming practices, population growth are some of the driving forces for deforestation frequently cited in the literature (for example, Mashindano 1998; Kahyarara et al 2001; Kahyarara 2008). Establishment of settlements in forest lands, forest fires and outbreaks of pests and diseases also cause deforestation.

On the other hand Kulindwa et al. (2001), ESRF (2005), URT (2005b) argue that to a larger extent deforestation and forest degradation are related to policy changes in the country. The macro and sectoral policy changes in Tanzania have influenced deforestation and the quality of forest reserves. Macro and sectoral policies such as fiscal and monetary policy reforms have attracted more players in the trade industry. Trade liberalization which entails adjustment of policy instruments such as taxation, interest rates, domestic export prices and devaluation has

Table 3:The Scale of Distortion of Logging Trade Records (cm³)

Sn	Tanzania Tota	l Export to the World	China Imports fro	m Tanzania Alone
1	2002/03	4,920	2003	45,432
2	2003/04	8,529	2004	41,699
3	2004/05	5,867	2005	21,374

Source: Milledge et al 2008

Table 4: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
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
17	Total		265,147.3	953,09.1	116,671.9	569,829.9

Source: URT (2007d)

stimulated production and exports of forest products. The forest sector has been liberalized along with other economic sectors. The public, natural resources experts, government leaders and politicians have recently raised concern over uncontrolled utilization of the forest resources in the country. The benefits envisaged from the trade liberalization policy measures seem to be reversed by the consequences of uncontrolled utilization of forest resources. Environmental impacts of trade liberalization to the forest sector include increased rate of forest product extraction that accelerates deforestation. Increased deforestation due to timber logging, forest fires and fuel wood and pole collection has already resulted into adverse impacts in the country

Timber Logging

Improper, haphazard and uncontrolled logging in Tanzania which has been flourishing overtime has led to unnecessary clearing of forests, damages to the residual trees and ground cover. Timber

logging has accelerated soil erosion and caused soil compaction thus hampering natural regeneration. Much damage has been done to both logged as well as the remaining trees due to poor felling and bucking techniques. Subsequently, the country has lost valuable timber due to low utilization of merchantable timber.

Following trade liberation in the forest sector, Tanzania has been trading in timber and timber products with China, UAE and India being the major importers. Table 5.1 below presents primary destinations of Tanzanian timber products.

According to a study on Forest Revenues and Governance in Logging in Tanzania i.e. The Traffic Research Report (Milledge et al 2008), Tanzania has for many years been losing huge amount of revenues due to illegal and unrecorded trade in timber and logging. Findings of the study show that in mid 2004, Tanzania collected only 4 percent of the actual timber harvested. This trend has revealed a drastic decline between revenue

collected in 2001 and that of 2004. There is a serious governance weakness in forestry despite having good policies and the legal framework. Huge amount of timber has been harvested illegally in the country but legalized at a later stage by either granting a transit pass or an export permit using fraudulently acquired documentation. Table 9 below compares total exports from Tanzania to the world with total Chinese imports from Tanzania alone.

A huge discrepancy depicted in Table 5.1 clearly demonstrates the prevalence of illegal exports of timber that culminate into massive losses of revenue. This presents a huge lost opportunity for economic growth and self-reliance of Tanzania. If the losses are properly addressed, the country can generate enough revenue to meet priority targets as spelt out in the National Strategy for Growth and Reduction of Poverty (NSGRP) and the Millennium Development Goals (MDGs). Unrealised revenues are a threat to the sustainability of the forest resource and therefore, sustainable development in Tanzania.

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 of the Ministry of Natural Resources and Tourism (MNRT) in 2004/2005. During this period MNRT revenues constituted 16% GDP (approximately US \$ 1.8 bill), however, Table 5.3 shows that the total value of exported forest products in the same year was US\$ 116,672.

Forest Fires and Harvesting of Non Timber Forest Products

Generally, forest fires cause loss of forests and habitats to animals. A study by Kahyara et al. (2001) for example, found that in Arusha region about 5,000 ha or 2% of the reserved forests are destroyed by fire every year. The situation worsens during long drought spells like the 1996/97 drought in which about 3,700 ha of Meru forest reserve were destroyed by fire. In the 1983 drought more than 5,600 ha of plantation forests were

destroyed by fire in Sao-Hill forest plantations in the southern part of Tanzania. In Mamboya forest reserve, Kilosa district about 1% of the forest is destroyed every year by fire

Forest fires are largely motivated by illegal harvesting of forest products such as honey, beeswax, medicinal herbs, hunting, game, fruits, gums, and collection of firewood. These activities have grown in response to favourable market prices resulting from liberalization and/or reforms in the trade sector.

Fuel Wood and Pole Collection

About 90 percent of the population in Tanzania depends on firewood and charcoal as the main source of energy (Meghji, 2003). Almost 92 percent of the rural population use firewood. Charcoal, which requires about 3 to 4 m³ of firewood to make 1 m³, is preferred in urban areas because of its high calorific value. Although the estimated annual fuel wood demand in Tanzania is about 45 million m³, the current forests can only supply about 19 million m³ on a sustainable basis. In order to meet fuel wood demands, some forests especially those close to towns have been heavily exploited. Evidence from the previous studies shows that in Arusha region where firewood and charcoal demand is about 506,878 m³, about 15,000 ha of forests are deforested every year (Kahyarara et al. 2001).

According to Kahyarara et al. (2002), deforestation in the coastal belt of Tanzania has reached a critical point. Close to half of the Kazimzumbwi forest has been degraded over the past few decades and over 20,000 ha of the Pongwe forest have been lost through unmanaged activities such as charcoal making. Some porches of forests in the areas surrounding Dar-es-Salaam and Coast regions are also under threat.

Most of the poles for simple house construction and scaffolds for major construction works are cut indiscriminately from the forests in the neighbourhood of big towns and settlements. Nearly all of the harvested poles are young trees that are yet to produce seeds for

regeneration. In consequence, harvesting of these trees not only deprives the country of good quality sawn timber but also interferes with the natural regeneration or species diversification in these forests.

Reforms of the Local Government Authorities (LGAs)

As mentioned earlier, the local government reforms in Tanzania are aimed at devolving political, administrative and fiscal powers from central government to local present and future generations. For a long time forests in Tanzania have been managed without full participation of the local communities. Recognizing the critical role played by local communities in improving forest management, Participatory Forest Management (PFM) has been given high priority both in the National Forest Programme (NFP). PFM is part of an overall rural development strategy intended to improve rural livelihoods, protect forest resources

Table 5:Estimates of Adoption and Spread of PFM in Tanzania since 1999

Year		inity Based gement (CBFM)	Joint Forest Mar	nagement (JFM)
	Forest area under Number of villages Fo		Forest area under	No. of villages with
	CBFM (ha)	With CBFM	JFM (ha)	JFM
1999	323,219	544	25,335	11
2002	1,085,306	845	1,175,550	525
2006	2,060,608	1,102	1,612,246	719

Source: URT (2007d)

government authorities. This process is expected to enhance opportunities for citizen's participation and to improve transparency and accountability in local authorities. In terms of forest management the changes in local government policies have made some positive impacts. With more powers and resources most LGAs in Tanzania have improved forest management through increased surveillance and/or monitoring. The LGAs in Tanzania are now instrumental in overseeing community based initiatives related to forestry. This has improved benefit sharing among key stakeholders in relevant forest reserves as well as sustainable forest management

Forest resources need sustainable management for the benefit of the

and promote equitable distribution of benefits. Over the past ten years a range of projects have been testing PFM in many parts of the country and have made generally good progress (see Table 4).

As illustrated in Table 6, over 1,800 out of 10 000 villages are currently practising PFM in Tanzania. More than 441 881 ha are under Community Based Forest Management (CBFM) while 396 330 ha are planned or under Joint Forest Management (JFM). Between 2001/2002 and 2005/2006 revenue generation from PFM has been increasing overtime. The PFM generated a total of USD 4.4 billion and 8.7 billion in 2001/02 and 2005/06 respectively (see Table 6).

With devolution of power, roles and responsibilities of managing forest resources to the low level of

Table 6:Trend of Forest Sector Revenue Collection

Year	Average exchange	Average exchange	Revenue in mill	Proportional
	Rate USD/TZS	rate USD/TZS	USD	increase (USD)%
2001/02	921	921	4.4	0
2002/03	1002	1002	5.2	18%
2003/04	1064	1064	5.4	3%
2004/05	1109	1109	5.3	-2%
2005/06	1165	1165	8.68	64%

Source: URT (Forest and Beekeeping Division) 2006a

governance and recognition of indigenous knowledge in managing forests, scaling up of PFM implementation has a bright future. Focusing both on conservation and economic incentives for communities will secure the sustainability of the programme.

Other Dimensions of the Impact

Following Kahyarara et al. (2001) environmental impacts of policy reforms such as trade liberalization on the forest sector have been observed in seven major areas. These are:

The greenhouse effect

Both consumption and production processes of forest products have resulted into increased atmospheric carbon dioxide particularly through burning forest products for fuel or as a result of uncontrolled fire during the process of production.

Changes in the hydrological cycles

Deforestation and forest degradation in the country has led to disruption of the hydrological balance. A study by ESRF (2005) shows that overtime, protected areas of Livingstone Mountains have been encroached by farmers from the Lake Nyasa (Wanyasa) on one hand, and others from Matengo Highlands (Wamatengo). Farmers on the two sides are encroaching marginal areas and water catchment areas in expansion of their farming lands. Vegetation has gradually been removed and rivers and streams are drying up threatening the future of Lake Nyasa and many other rivers which depend largely on forest covered along Livingstone Mountain.

Impacts on soils and agricultural land

Farming in areas near the forests has been done up to the slopes of the mountains which are steep in nature. With increasing deforestation, soil is exposed to erosion especially of important nutrients. The Matengo highlands particularly along Livingstone Mountains have for a number of

years suffered from this tragedy which prompted the Vice Presidents Office Division of Environment to pass some regulations prohibiting settlements around the mountains.

Impact on forest productivity

Increased harvest of forest resources result into a sharp decline of forest products in a given area. This in turn leads to falling productivity of the forests. Specifically this trend is reflected in declining availability of some tree species and general biological diversity in Tanzanian forests. Kahyarara et al (2001) have mentioned a number of lost tree species, some of which are endemic.

Social migration and Invasion of the forests for search of productive land

Decline in productivity of agricultural sector, and increased activities in and around the forests tend to cause social migration and invasion of forest for search of productive land. As noted earlier, a number of migration and settlements have been taking place in areas such as Mbinga (Livingstone Mountains) and Kazimzumbwi forest reserve

Health problems to the society

Increased human health problems are among the social impacts accelerated by the fast expansion of economic activities in the forest sector. Actors in the forests are increasingly contaminating most of the water sources near or within the forests. For example, the two rivers of Minaki and Mzumbwi in the Pugu and Kazimzumbwi forests have traditionally been known for bringing safe water directly to over 10,000 people. However, due to contamination water from these rivers water is no longer safe.

MACRO SECTORAL POLICIES

Social Organization Impact of Trade Liberalization in the forest sector of Tanzania

Milledge (2008) has analysed social organization impacts of the trade liberalization on the forest sector of Tanzania. The purpose was to check

the way social networking has been influenced by trade liberalization measures. The findings reveal a high degree of networking amongst different stakeholders in the forest sector. The stakeholders included senior central government forestry officials, senior local forestry, local traders, prominent Tanzanian exporters etc.

Review of the national policies on the forest sector.

The National Environmental Policy

The recognition of deteriorating trend of the environment led to the 1972 UN Conference on the Human Environment in Stockholm. Since then, there has been a wide acknowledgement on the importance of addressing environmental issues (see for example Barry Dalal-Clayton and Bass Stephen, 2002). The World Conservation Strategy (1980) and the subsequent World Commission on Environment and Development (the Brundtland Commission) (1987) were developed as a response to an increasing recognition of the strong link existing between environment and development.

Agenda 21 and the conventions signed during the Earth Summit held in Rio de Janeiro in 1992 were the subsequent processes in the series of international events related to the environment. Following the Earth Summit Tanzania formulated and adopted a National Environmental Policy in 1997. The overall objectives of the National Environmental Policy is to provide a framework for making fundamental changes needed to include environmental considerations into the mainstream decision-making processes in the country (URT 1997). The policy seeks to provide guidelines and plans in determining priorities. It also aims to provide for monitoring and regular review of policies, plans and programmes. The policy further provides for sectoral and cross-sectoral policy analysis in order to achieve compatibility among sectors and interest groups and exploit synergies among them.

The current study is therefore, a response to the National Environmental Policy's requirement

that policies, plans and programmes need to be regularly monitored and reviewed.

The National Forestry Policy

The National Forestry Policy was adopted by the Government in 1998 forms the basis for development in the forest sector. The policy recognises that ownership of land and natural resources, access and the right to use these resources are of fundamental for enhancing sustainable development. Equally important is sound management of those resources to ensure greater benefits to society and sustainable preservation.

As mentioned earlier Tanzania has abundant forest reserves. The country has 33.5 million hectares of forests and woodlands that translates into 46 percent of the country's total land area. However, the management of these resources is poor. Deforestation is estimated to range from 130,000 to 500,000 hectares per year. The root causes for deforestation are clearing for agriculture, overgrazing, wildfires, charcoal burning and overexploitation of wood resources.

The National Forest Policy seeks to ameliorate the negative impacts of deforestation arising from encroachment and over-utilisation. Its main policy statements are:

- To enable sustainable management of forests and public lands. This entails developing clear ownership of all forests and assigning management responsibility to villages, private individuals or Government authorities.
- To establish a legal framework for the promotion of private and community-based ownership of forests.
- To develop management plans for biodiversity conservation, protection of water catchment areas and preservation of soil fertility.
- To enhance the capacity of local governments to manage forest resources and strengthen the coordination mechanism between

- the local and central government.
- To strengthen the forest management extension services through skills upgrading in order to facilitate better management of farm and community forests.

National Trade Policy of 2003

The 2003 Tanzanian Trade Policy Vision is: "... to transform the economy from a supply constrained one into a competitive export-led entity responsive to enhanced domestic integration and wider participation in the global economy through national trade liberalization". The role of the trade sector in eradicating poverty in Tanzania will be attained through a structural transformation of the economy and enhanced productivity. This is expected to contribute to the process of international competitiveness and lead to rapid economic growth.

Trade is not an end in itself but a means for achieving a higher welfare to society. The function of the trade sector is to integrate the Tanzanian economy into the global economy. This entails structural transformation of the national economy and product/market diversification. To sustain an economic growth rate above the 7% as envisioned in the National Development Vision 2025, the country is expected to develop a modern export-led economy. High volumes of exports are necessary to achieve the goals of Vision 2025. The mission of the trade sector is therefore to: "...stimulate the development and growth of trade through enhancing competitiveness aiming at rapid socio-economic development."

The main goal of the trade policy is to raise efficiency and widen linkages in domestic production and build a diversified competitive export sector with a view to stimulating higher rates of growth and development. The following five specific objectives emanate from and reflect this goal.

 To stimulate a process of trade development as the means of triggering higher performance and capacity to withstand intensifying competition within the domestic market. This includes the establishment of improved physical market-place infrastructure and stimulating dissemination of market information and increasing access to the market.

- To transform Tanzanian economy towards an integrated, diversified and competitive entity capable of participating effectively in the Multilateral Trade Systems (MTS).
- To stimulate and encourage value-adding activities on primary exports in order to increase national earnings and income flows.
- To stimulate investment flows into export-oriented areas in which Tanzania has comparative advantages. This is a strategy for introducing technology and innovation into production systems towards realising economic competitiveness.
- To attain and maintain long-term current account balance and balance of payments through effective utilization of complementarities in regional and international trading arrangements. This will ultimately enhance income generation and the people's earning power at the grass-roots thereby reducing poverty levels in the country.

Unlike sector economic policies trade policy a cross cutting collection of strategies that address the goal of achieving a high rate of economic growth. The trade policy seeks to address a range of economy-wide constraints. There is a wide package of policy instruments that Tanzania applies in line with international obligations to address economic constraints. They include:

- (a) Tariff -based instruments such as Tariffs, Taxation and Duty Draw-Back (DDB) Schemes.
- (b) Non-Tariff Measures Quotas, Import Licensing and Registration, Pre-shipment Inspection (PSI) and Customs

Valuation, Local Content Requirements, Standards, State Trading Operations, Government Procurement and Administrative Barriers.

- (c) Trade Defence Mechanisms Subsidies, Safeguards, Antidumping and Rules of Origin (RoO)
- (d) Trade Development Policy Instruments Investment Code and Rules, EPZs, Export Promotion Measures and Export Facilitation Measures.
- (e) International Trade Policy Instruments Bilateral Cooperation Initiatives, RTAs and WTO Agreements.

The application of each group of trade policy instrument calls for the identification of underlying constraints and challenges, a specific objective for each and adoption of an appropriate and consistent strategy for its implementation. The treatment of trade policy instruments adopted in National Trade Policy reflects the fact that the nation has been implementing the recommended trade policy in the course of economic reforms initiated in mid-1980s. Chapter five presents the impacts of implementing trade policy instruments in Tanzania.

The National Energy Policy 2003

The National Energy Policy of 2003 recognizes the critical importance of adequate supply of sufficient and cost-effective energy in accelerating development. The main policy statements enshrined in the National Energy Policy includes the following:

- Ensuring sufficient energy supply to meet the increasing demand in the economy
- Encouraging energy efficiency
- Facilitating agro-processing centres with appropriate energy alternatives with emphasis on electrification in order to promote small-scale industry, employment creation and economic growth
- Creating an enabling environment for governmental

institutions and private sector engaged in the research, development and distribution of energy products in the country

The strategy of the Ministry of Energy and Minerals for implementing the Policy is to triple the generation of electricity in the next twenty years. This involves encouraging the private sector to generate, transmit and distribute electricity and other sources of energy such as solar and wind in a sustainable manner.

National Water Policy of 2002

The National Water Policy of 2002 is the first revision of the 1991 National Water Policy. The revision was made following a series of changes in the Water Sector that required the government to shift from the role of provider to facilitator in the sector. These changes, which took place after the 1991 launch of Water Policy, emphasize the active participation of new players such as local communities, the private sector and the local government. The changes were a response to Agenda 21 that requires all nations to protect the natural resources including water, and conservation of the ecosystems. The 1991 Water Policy had put the Central Government as a sole investor, implementer and manager of all water related projects. This conflicted with emerging changes in the management of water resources.

The 1991 Water Policy was revised in 2002 with an aim of developing a comprehensive framework for sustainable development and management of water resources. This provided an effective legal and institutional framework for managing water resources in the country. The 2002 policy aims at ensuring that all beneficiaries participate fully in planning, construction, operation, maintenance and management of community based domestic water supply schemes. In addition, the policy addresses cross sectoral interests in water, watershed management and integrated and participatory approaches for water resources planning, development and management.

The National Water Sector Development Strategy (NWSDS) and subsequent Water Sector Development Programme (WSDP) are also in place. NWSDS was finalized in 2006 and endorsed by the Cabinet in March 2008. The strategy informed the WSDP that was implemented in 2007/08. The National Water Sector Development Strategy highlights major problems of the sector, possible causes, possible effects and comprehensive solutions (strategies for sector development). It also captures fully the components like resource requirements, performance indicators and draws out a welldefined National-wide strategic implementation framework.

Land Policy of 1995

The Tanzanian land policy dates back even before independence in 1961. The 1923 Land Ordinance provided a legal framework for facilitating imperial interests. The 1963 Freehold Titles and Government Leases Act was the first attempt to reverse colonial policy on land issues. Further policies were initiated until the recent adoption of the National Land Policy in 1995. The main focus of the policy is not only to guide the allocation, ownership and use of land but also to help resolve recurring land conflict problems in the country. The overall objectives of the Land Policy of 1995 are to:

- Promote an equitable distribution of and access to land for all citizens.
- Ensure that existing rights in land especially customary rights of small holders (i.e. peasants and herdsmen) are recognized, clarified, and secured in law.
- Set ceilings on land ownership, which will later be translated, into statutory ceilings to prevent or avoid the phenomenon of land concentration (i.e. land grabbing).
- Ensure that land is put to its most productive use to promote rapid social and economic development of the country.
- Modify and streamline the

- existing land management system and improve the efficiency of land delivery systems.
- Streamline the institutional arrangement in land administration and land disputes adjudication and also make them more transparent.
- Promote sound land information management.
- Protect land resources from degradation for sustainable development.

Community Development Policy

The Government stresses that Donors, NGOs and other stakeholders should support community efforts to develop themselves in line with the Community Development Policy. The policy puts emphasis on collaboration and strengthening people's capability to be self reliant as an essential ingredient in community development interventions. The government further recognizes that although people are responsible for their own development, there are times when external contributions are needed in order to complement and reinforce their efforts. In this regard, the government continues to create a sense of partnership with various stakeholders that include private investors operating within communities. The government expects private investors to feel part of the communities that they operate in, before complementing community efforts in development. The implementation of Community Development Policy has resulted in programmes such as the Community Based Forest Management (CBFM) and Joint Forest Management (JFM) among others

Agriculture Policy of 1997

In this review agriculture includes livestock. The current agriculture policy is a result of a comprehensive review of past policies and strategies that have shaped the social and economic development of the country in the past two decades. It takes into account the changed role of government with regard to

provision of goods and services. The policy is based on economic reforms to direct the economic system towards a free market economy with increased role for private sector participation. In this regard, the Government is explicit about disengaging itself from commercial activities and direct production functions. The policy seeks to ensure that the direction and nature of agriculture sector development meets social objectives, provides adequate public goods, and builds competitive agricultural and livestock markets. All these are to be accomplished by taking into account environmental and development concerns in the agriculture sector.

The ultimate goal of the policy is the improvement of the well being of the majority smallholder farmers and livestock keepers who produce only a small surplus. The policy sets national food security as the primary objective. It aims at improving national standards of nutrition by increasing output, food quality and availability. In order to achieve this objective, production growth rates of food crops and livestock production are targeted at least 4 percent and 5 percent per annum respectively. Food crop production is to be increased through productivity and area expansion and livestock growth through encouraging private sector based initiatives in the industry.

The main objectives of the Agriculture Policy of 1997 are to:

- Ensure food security for the nation, including improving national standards of nutrition
- Improve standards of living in rural areas
- Increase foreign exchange earning
- $\bullet \quad \hbox{Produce and supply raw}$

- materials and expand the role of the agricultural sector as a market for industrial outputs
- Develop and introducing new technologies for land and labour productivity
- Promote integrated and sustainable use and management of natural resources
- Develop human resources for transforming agriculture and livestock
- Provide support services for enhancing agriculture
- Promote access of women and youth to land, credit, education and information

The agricultural policy is implemented through the Agricultural Sector Development Strategy (ASDS) and the subsequent Agricultural Sector Development Programme that were adopted in 2001.

Macro policy in Tanzania

Since independence in 1961, Tanzania has been committed to fighting poverty and improving the livelihood of its people. In the first five years following independence, the country made steady progress in economic growth and in meeting the basic needs of its citizens (see Table 7).

Tanzania made a major economic and political change in 1976 by adopting a socialist model of development as outlined in the Arusha Declaration. This ideological shift was characterized by a central government that controlled key areas of the economy. A series of economic crises during the 1970s almost led to economic collapse and put under threat achievements made in the initial period after

Table 7: Human Development Indices

Human Development Indicators	1960	1970	1980	1987	1996	1999	2002	2004
Life expectancy at birth (in								
years)	41	45	52	53	52	na	51	na
Infant mortality (per thousand								
Live births)	146	na	120	107	88	99	95	68
Literacy rate (%)	na	33	na	90	na	na	69	na

Source: Ndulu B (1994) and URT (2005) and URT (2007a)

independence. Macroeconomic imbalances aggravated the predicament even further. The imbalances were manifested through budgetary deficits, balanceof-payments deficits, growing debt burden, increasing inflationary pressures, and weakening productive sectors, among others. The capacity of the country to sustain delivery of basic social services came under enormous strain. From the early 1980s to date, Tanzania has been undertaking macro-economic and sectoral specific policy reforms as a longterm strategy for economic growth. Table 8 below shows economic development indicators of the

economic environment. In parallel with macro-economic reforms, the government also carried out structural reforms. Structural reforms focused on realigning the incentive structure towards increased exports, efficient use of scarce foreign exchange, liberalizing markets and reducing the involvement of the public sector in commercial activities.

In summary, macro policy reforms in Tanzania have mainly revolved around fiscal and monetary reforms, public sector reforms, anticorruption measures (including institutional reforms and Law enforcement), constitutional

Table 8: Economic Development Indicators (1966 2002)

Sn	Economic variable	1966-	1971-	1976-	1981-	1986-	1993-	1998-
		1970	1975	1980	1985	1992	1997	2002
1	Real GDP growth rate (%) ^a	3.9	3.8	2.8	0.7	4.1	3	5
2	Gross Capital Formation/GDP	24.2	26.8	28.0	18.1	24.6	23	20
3	Gross Domestic Savings/GDP	17.1	12.9	15.3	10.5	5.1	5	9
	Current Account Balance (millions of							
4	US\$)⁵	(4.7)	(157.7)	(256.9)	(241.9)	(231.6)	(374.4)	(450.8)
5	Current Account Balance/GDP (%)	(1.3)	(7.7)	(6.4)	(5.8)	(13.3)	(15)	(8)
6	Recurrent Budget Balance/GDP	0.3	0.8	(0.4)	(4.1)	(4.8)	(6)	(7)
	Overall fiscal balance/GDP (excluding							
7	Loans, grants, and import support)	(5.3)	(8.8)	(12.6)	(11.5)	(10.9)	(11)	(11.42)
	Overall fiscal balance/GDP (including							
8	External finance)	(3.7)	(4.8)	(7.1)	(8.2)	(3.0)	(5.2)	(6.68)
9	Inflation	2.8	13.7	13.7	30.2	26.2	25	10

Notes:

^aWith exception of 1986-92, (which is 7 years), the rest are (5 years) annual average growth rates.

^bThe current account balances are also annual averages. They include receipts and payments for the merchandise exports and imports respectively, as well as receipts and payments for exports and imports of other goods and services respectively.

Sources:Ndulu B. (1994); Musonda F. (1992) and BoT (2002)

country since 1966.

Economic Crisis and Policy Reforms

Economic crises in the early 1980s reversed social progress that was achieved soon after independence. This led to a public outcry in the fall of education, health services and many other social services rendered by the government. As a response to the economic crisis, a shift from a state controlled economy towards economic liberalization was

made. Macro-economic policy reforms associated with this shift brought about fundamental changes in the way the country's economy was managed. The reforms sought to create a more stable macro-

matters and political and electoral processes. Public sector reforms include public sector restructuring and privatisation, public finance and financial sector, civil service reforms and decentralisation of governance (Local Government Reforms).

Some of these reforms are briefly reviewed to provide a clear understanding of the Tanzanian macro-policy framework.

Fiscal and Monetary Policy Reforms

Tanzania follows prudent fiscal and monetary policies consistent with her poverty reduction priorities. Fiscal discipline that is defined in terms of recurrent deficit targets is a major policy objective. Following pressure from international money lenders (e.g. International Monetary Fund), the government started to tighten fiscal policy since mid 1995. A tightened fiscal policy aims at raising revenue and reducing spending in selected areas, allowing private service delivery, restructuring government spending so as to increase spending in priority and/or critical areas and enforcing accountability and adherence to financial rules and budgetary ceilings. The Government target is to maintain fiscal deficit before grants fall to below 10 percent of **GDP**

Fiscal policy also focuses on domestic resource mobilisation through tax policy reforms, strengthening tax administration and improving expenditure management. The set targets of revenue collection are expected to come from streamlining income tax, reducing tax exemptions and improving tax administration (particularly customs). On expenditure, the Government projected an improvement from 19.8 percent of GDP in 2002/03 to over 25 percent in 2006/07. This was necessitated by substantial increase in resources required to finance priority spending under the Poverty Reduction Strategy and a higher wage bill resulting from civil service reform.

Other reforms aimed at reducing rent seeking opportunities have been the introduction of Value Added Tax (VAT) and the introduction of tax payer identification numbers (TIN). In an effort to strengthen planning and budgeting process, financial control and accountability and enhance dialogue the Government introduced Public Expenditure Review (PER) process starting 1995/96. The PER process is instrumental for managing public resources and MTEF processes, and for giving policy and strategic guidance. The MTEFs are now covering all central ministries and departments and the performance Management System is gradually being applied to an increasing number of central ministries departments and agencies.

Concurrent with reforms aimed at containing the fiscal gap, the government started monetary and financial sector reforms in early 1990s. The reforms are to facilitate the attainment of macroeconomic stability, support structural adjustment in the real economy and provide effective support to the economy by financial deepening and diversification. The argument underlying the reforms is that with economic liberalization, an autonomous central bank can lead to more predictable monetary and exchange rate policies. Granting greater autonomy to the central bank is one of the important ways a government may use to signal investors that macroeconomic policy would be prudent and sound. Prior to these reforms (before 1993), Tanzania faced challenges of regulating money supply while at the same time pursuing expansionary fiscal policies. Unsustainability of the accommodating monetary policy led to huge inflation rates, high domestic debt and seigniorage tax on the part of Tanzanians.

The Bank of Tanzania (BOT) is committed to a prudent conduct of monetary policy that is capable of maintaining core inflation below 5 percent. The Bank uses indirect instruments to influence the level of money supply. The main instrument is the Open Market Operations (OMO) in which the Central Bank sells or buys Government securities, e.g. Treasury Bills, in order to influence the monetary base. Other indirect instruments include Foreign Exchange Market Operations (FEMO), the Discount Rate, Statutory Minimum Reserves (SMR), and Moral suasion.

Civil Service and Parastatal Sector Reforms

Civil service reforms started with the Civil Service Reform Programme (1993-1998). The reforms were mainly concerned with the rationalisation of government functions including downsizing government functions through disengagement from productive activities. The reforms sought to:

• Create semi autonomous

agencies

- Rationalise employment through improved record management and staff reduction
- Address efficiency and accountability through process re-engineering
- Introduce modern technologies.
- Undertake pay reforms to address pay inadequacy. Pay inadequacy not only led to proliferation of individual allowances but also to laxity and corruption in the public service (Warioba, 1996).

The above measures have led to redefinition of government roles, privatisation or elimination of noncore activities, major retrenchments and promotion of public-private partnerships in service delivery. Furthermore, the civil service has developed a code of conduct, appointments and promotions are more transparent and competitive and wages and benefits are being improved to reduce the need for additional income. Procurement, distribution, revenue collection and customs procedures have been rationalised to improve transparency and accountability in the public sector.

The Public Service Reform Programme (2000-2011) which succeeded the Civil Service Reform Programme in 2000 is being implemented in three phases: i) Installation of Performance Management Systems (2000-2005), ii) Instituting Performance Management Culture (2005-2008) and iii) Instituting Quality Improvement Cycles (2008-2011). Notably, installation of Performance Management Systems in Central Ministries Departments and Agencies is aimed at improving quality, efficiency and effectiveness of service and performance throughout the public service on a continuous and sustainable basis.

Local Government Reforms

As part of the emerging concerns for good governance as a prerequisite for sound development management, donor agencies are popularising and promoting the devolution of power to sub national

governments (decentralisation). Decentralisation is expected to enhance opportunities for participation by placing more power and resources at a closer and easily influenced level of government. It is viewed as a first step towards creating regular and predictable opportunities for citizen's participation and local authorities' transparency and accountability in service delivery. This is expected to lead to improvement in the quality and availability of services provided by local government authorities.

The most recent decentralisation initiative (since 2000) in Tanzania aims at devolving political, administrative and fiscal powers from the central government to local government authorities. The initiative follows the principle of decentralisation-by-devolution (D-by-D). However, this is being implemented at a rather slow pace and with some difficulty (Egli and Zürcher, 2007).

In the implementation of the Civil Service Reform Programme, issues of decentralisation of governance and reform of Local Government Authorities (LGAs) were covered as components of the programme. However, they were later separated into a reform programme in its own right due to its importance and the complexities involved. The Local Government Reform agenda was started in 1996 with effective implementation commencing in 1999. A ministry for overseeing matters pertaining to the local government reform programme (PMO-RALG) was later established in 1998

Investigation and Anti-Corruption Measures

Investigation and anti-corruption measures are an integral part of ensuring accountability. Corruption in the public or private sectors results in the misuse of scarce resources and greatly affects the entire economy.

In the areas supported by external assistance, corruption can devalue the reputation and efforts of international development agencies. Combating corruption is therefore, a central objective of good

governance.

In the past decade, the Tanzanian government has been committed to fighting corruption. Measures that are being taken to address the issue of corruption include:

- Investigating the root cause and extent of corruption. For example, through the presidential commission (Warioba Commission) against corruption (PCAC), an in-depth diagnostic study on the causes and extent of corruption in Tanzania was carried out in 1996.
- Involving all stakeholders in brainstorming, formulating and proposing the basic structures and content of the strategy, the National Anti Corruption Strategy and Action Plan (NACSAP) to combat corruption in the country.
- Enhancing political will in the fights against corruption.
- Developing sector specific action plans against corruption, setting up of priority areas to attack corruption and institutionalising a coordinating, evaluation and monitoring unit.
- Mainstreaming the fight against corruption with the ongoing reforms in the country.
- Developing and building capacities of institutions (oversight bodies) that are directly charged with the responsibility to combat corruption.

The Prevention of Corruption Bureau (PCB) and the office of the Controller and Auditor General (CAG) were recently restructured and given more powers and autonomy to fight corruption in Tanzania.

Financial Sector Reforms

Since 1986 Tanzania has undertaken financial sector reforms that have resulted in a diverse financial system and significant changes in financial and monetary indicators. The financial system comprises 21 banks, nine non-bank financial institutions, pension funds, two of which invest in financial assets, 14 insurance companies, 63 foreign

exchange bureaus, about 650 savings and credit cooperatives (SACCOs), several other microfinance institutions (MFIs) and a stock exchange. Foreign equity participation accounts for about two-thirds of banking system capitalization and 57 percent of total banking assets are in banks majority owned by foreign banks.

Trade Policies and Institutions The East African Community (EAC)

Reforms of trade policies have taken mainly place in the context of regional agreements, including SADC and EAC. Tanzania is a member of EAC (Kenya, Uganda and Tanzania). There are several existing commitments under the EAC five-year development strategy (2001-2005) that have had impact on the macroeconomic stability. There is a move to establish an East African Community Customs Union. The Customs Union Protocol focuses on the elimination of internal tariffs. application of rules of origin and the establishment of a three band structure of the common external tariff (with a minimum of 0 percent, a middle rate of 10 percent and a maximum rate of 25 percent) in respect of all products imported into East African Community. Tanzania adopted the Common External Tariff (CET) of the East African Community (EAC) in January 2005, lowering its average tariff from 13.8 to 12.3 percent.

The lowering of the maximum tariff of the CET from the current 25 percent to 20 percent, as expected to happen in 5 years in accordance with the Customs Union Protocol, should help correct some of the dispersion of protection.

On the export side, the main issue on the export side pertains to export taxes. International experience has shown that export taxes and bans have generally failed to achieve industrial development objectives, led to informal trade, and frequently hurt small-holders who receive lower prices as a result.

Tanzania joined the EAC customs union in January 2005. This entails making extra efforts to realign EAC agreements with those required under SADC. Moreover, the implementation of the EAC Investment Strategy which places high priority on infrastructure development, should foster macroeconomic stability in the country. In particular, efforts that are underway to implement an EAC Power Master Plan and Road Network Project should improve these countries' infrastructure with positive impact on macroeconomic stability.

New Partnership for African Development (NEPAD)

Tanzania is among African Union (AU) members that are committed to NEPAD's resolve to eliminate poverty and boost economic development on the continent. In addition,

Tanzania is among the 15 African Union members that have signed the memorandum of understanding which opens up the country for assessment by the NEPAD Africa Peer Review Mechanism (APRM). The peer review mechanism is supposed to ensure transparency, good governance, respect of human rights and economic efficiency all with high impact on macroeconomic stability.

African Growth and Opportunity Act (AGOA)

AGOA is a programme approved by the American Congress in 2000 to grant Sub-Saharan African countries an opportunity to access the US market on duty and quota free basis.

Although Tanzania has not yet taken up the opportunity conferred by AGOA (partly due to supply side constraints), efforts are underway to rectify this situation. Measures that have been taken include keeping stakeholders informed on AGOA, provision of incentives to investors intending to produce for AGOA and the establishment of Export Processing Zones (EPZ) to encourage production for the export market, including AGOA.

These measures have important bearing on macroeconomic stability, especially on the country's balance of trade as they take off.

Infrastructure: Energy and Transport Sub Sectors

The establishment of the executive a gency TANROADS with responsibility for the trunk road network has been a major step forward for the transport sector. However, a clear separation of responsibility between the Ministry of Infrastructure Development, TANROADS and districts has not yet been implemented.

This hampers effective road maintenance and development activities. The current formulation of a new Road Act provides an opportunity to establish a more appropriate policy and institutional framework and provide the basis for accelerated infrastructure development.

Detailed work on the restructuring of the power sector has been carried out but the implementation of the restructuring has been delayed.

Private Sector Development

Public Institutions Interface with the Private Sector is yet to be appreciated. Excessive red tape and government interference in private sector activities are one of the main constraints to private sector development in Tanzania. The government has started reviewing regulations focusing on removing obstacles and re-organizing government priorities. In practical terms this calls for:

- Harmonizing local government taxation to remove excessive tax burden on private enterprise
- Streamlining of work permit procedures
- Reviewing and amending licensing legislation to reduce the cost of business establishment and continuation
- Reviewing and revising exportimport procedures to reduce time costs and corruptionrelated costs
- Designing and implementing a program for enhancing access to commercial courts by SMEs.
 Tanzania has reformed the legal framework for regulatory institutions that are currently being established.

Labour Market Policy Framework

The National Employment Policy unveiled in April 1997 is Tanzania's labour market policy. Its main task is to facilitate wage and non-wage employment of the labour-force. Out of a total population of about 34 million people, 14 million constitute the labour force of ages 15-64 years. Over 30 percent of the labour force is either unemployed or underemployed. The Poverty and Human Development Report (2003) confirmed that there are about 700,000 new job seekers annually in Tanzania, but the economy can only generate about 40,000 new jobs.

The labour policy has several strategies for reducing unemployment, increasing per capita incomes of employees and facilitating the eradication of poverty. Among these are:

- Modernising industry and trade to increase its capacity for wage employment from the current (2004) level of 17% to 25% by 2007. This is to be achieved through emphasis on the use of science and technology, promoting industrial development and creating a more conducive environment for attracting private investment in industry and trade.
- Modernising agriculture through the use of appropriate technologies in order to increase the productivity of its labour force. Currently, agriculture employs nearly 80% of the country's labour force.
- To provide training and retraining of the labour force in order to improve its productivity and its competitiveness regionally and globally. In this regard, the country's education system from primary to tertiary levels is to be re-structured and made more relevant to solve domestic development problems and be more prepared for the challenges entailed by globalisation.
- To encourage self-employment in both rural and urban areas through facilitation of access to credit, business development and removal of bottlenecks

- especially those related to licensing and taxation.
- To promote youth and other disadvantaged labour force (women, persons with disabilities) through strengthening vocational training, expanding services for commercial training and creating a special fund for the purposes of covering costs and providing loans for self-employment activities.
- To provide technical skills and counselling to retrenched employees so that they can be reemployed elsewhere or become self-employed.

The labour policy recognises the important contribution of foreign experts in building the capacity of Tanzanians in fostering the development process. Investors can now employ five experts without permit. Additional employment of experts requires approval by the Ministry of Home Affairs or the Ministry of Labour and Youth Development. Where the skills required are available locally, priority is accorded to the local staff. In order to reduce 'brain drain' the civil service wages are to be made more attractive and competitive under the on-going civil service reform programme.

In terms of implementation of the policy, a National Employment Council (NEC) has been established under the chairmanship of the Office of the Vice President. The Ministry of Labour and Youth Development is responsible for co-ordination and facilitation aimed at creating a better environment for implementation of the labour policy. The Government has reviewed labour laws to ensure that they are more responsive to private sector needs and offer appropriate incentives for investors to create more jobs in the economy. The new labour laws are in place already. The labour law reform was carried out with developmental objectives in mind. The reform sought to generally put in place policies and laws and regulatory structures that can promote good governance, poverty reduction, sound labour

relations, labour productivity, job creation and employment promotion.

Macro policy changes and the environment macroeconomic performance

Judging from the various development strategies and policies Tanzania has implemented since independence, the country has been committed to fighting poverty and improving the well-being of her people. The economic performance was satisfactory during the first five years of independence in terms of both economic growth as well as meeting the basic needs of its citizens (see Limbu and Mashindano, 2001). Afterwards the country's economic management entailed some evident weaknesses which led to the late 1970s and early 1980s economic crisis.

Despite evident weaknesses, Tanzania has progressed significantly in re-establishing macroeconomic stability with a steady GDP growth, falling inflation, falling interest rates, a stable exchange rate and falling government deficits (Kweka 2006). The average real GDP growth for example shows an upward trend from 3 percent in 1977 to 6.9 percent in 2005 before making a moderate decline to 6.5 percent in 2006 (See Figure 1).

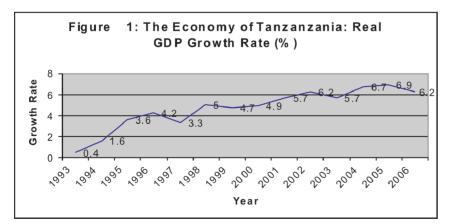
crisis that is currently sweeping the world. The impressive macroeconomic records and performance have led to an increase in the amount of aid and the number of donors operating in the country. Tanzania is among the major aid recipient in Africa. As pointed out earlier, to a larger extent this was possible due to the policies and development agenda pursued in the country.

SADC Macroeconomic Convergence Programme

The performance of Macroeconomic Indicators in Tanzania have been assessed using the SADC macroeconomic convergence programme where all the member countries are required to meet the targets set for 2008, 2012 and 2018. The main targets for macroeconomic convergence have been presented in Table 9 and Table 10 for reference.

Tanzania's macroeconomic stability indicators are within SADC target stability programme for inflation, budget deficit and current account deficit

Public debt is higher than target value and real growth is below target value (See Appendix 2). Other important indicators not included in the SADC MOU such as real growth and investment show improvement. However, the performance is far below that required to meet



Sound macro economic management has successfully brought down inflation from 35 percent in 1994 to approximately 4 percent in January 2005. The recent rise to about 9 percent is attributed to prolonged drought and the oil

Tanzania's Development Vision 2025 or Millennium Development Goals 2015 for accelerated development and poverty alleviation.

Inflation

SADC macroeconomic convergence for inflation is to achieve a single digit level by 2008. Tanzania has sustained this level of convergence since 1999 (see Appendix 2).

Budget Deficit as a Ratio of GDP

The SADC macroeconomic convergence programme proposes a fiscal deficit to GDP ratio target of less than 5.0% to be attained between 2004 and 2008. As Appendix 2 indicates, fiscal deficit is within the SADC convergence programme if donor grants are included. However, exclusion of donor grants worsens fiscal deficit, which rises from 8.1% of GDP in 2003 to 9.9% in 2004. Greater mobilisation of domestic resources including reforming the tax policy and administration are essential if Tanzania is to attain convergence by 2008.

Ratio of Public and Publicly Guaranteed Debt to GDP

SADC macroeconomic convergence for public and publicly guaranteed debt is 60% of GDP. Tanzania's 2004 level for this variable was 81.4% of GDP (Appendix 1). Even after taking into account full debt relief under the Enhanced HIPC Initiative, Tanzania has a considerable task of achieving convergence in the future. However, external debt sustainability analysis conducted by the IMF at the HIPC Completion Point shows that Tanzania's external debt is sustainable in the medium term.

Current Account as a Percentage of GDP

SADC macroeconomic convergence target for this variable is set at a single digit level of 3% to 9% of GDP. Tanzania's balance of payments on current account for 2004 was 5.3% of GDP, which is within target stability programme. The deficit has improved from about 11.0% of GDP in 1998 to 5.3% in 2004. This is partly due to better performance in attracting foreign direct investment and improved exports related to minerals and non-traditional exports.

Table 9: Key Macroeconomic Convergence Stability Targets

Numeric Values of Target Indicators	2008	2012	2018
Core inflation	9%	5%	3%
Budget deficit as a percentage of GDP	5%	3%	1%
External debt as a percentage of GDP	60%	60%	60%
Current account deficit as a percentage of GDP	9%	9%	3%
Growth rate	7%	7%	7%
External reserves (import cover in months)	3	6	6
Central bank credit to Government	10%	5%	5%
Domestic savings	25%	30%	35%

Source: Mashindano et al. (2007)

Table 10: Other macroeconomic targets and variables

Indicator	Target
Central bank credit to Government	Less than 10% of previous year's tax revenue by
	2008 and less than 5% by 2015
Increase in domestic investment level	At least 30%
Gradual interconnection of payments and clearing	
system in SADC	By 2008
Finalise the legal and regulatory framework for dual	
And cross listing of the regional stock exchange	By 2008
Liberalise exchange controls	
Liberalisation of Current account transactions between Member States	By 2006 and the capital account by 2010

Source: Mashindano et al (2007)

Other Macroeconomic Indicators

Other macroeconomic indicators not included in the SADC Memorandum of Understanding (MOU) include economic growth rates, foreign exchange reserves, central bank credit to Government, domestic savings rates and domestic investment rates. These indicators are briefly explained.

Economic Growth Rates

Millennium Development Goal target for real growth is 7% to enable countries reduce poverty. Tanzania's Vision 2025 targets growth between 8-10% to achieve its development goals, including progressive reduction in poverty.

As Appendix 2 indicates, real growth improved from 5.7% in 2003 to 6.7% in 2004. Tanzania is posed to achieve its growth targets if further improvements are made in macroeconomic management and attracting greater developmental-oriented foreign direct investment.

• Foreign Exchange Reserves

Tanzania has progressively improved its foreign exchange reserves from about 2.4 months of imports in 1996 to nearly 8 months of imports in 2004. The good performance is attributed to improvements in the overall balance of payments. All main accounts improved during this period (current account, capital and financial accounts). If that level of reserves is maintained, these are considered adequate to cover Tanzania's requirements for imports of goods and services.

• Central Bank Credit to Government

Increasing external financing of the Government budget has enabled Tanzania to avoid recourse to domestic bank borrowing to finance its deficit. As Appendix 2 indicates, the net Bank of Tanzania credit to the Government has been maintained at less than 0.7% since 1997. The IMF Article IV Consultation Report for 2004 observes that the low net

domestic financing is appropriate "in light of the comfortable domestic debt position".

• Domestic Savings Rates

The SADC RISDP has set domestic savings rates numerical target values of 25% of GDP by 2008, 30% by 2012 and 35% by 2018. As shown on Table 9, Tanzania's 2004 domestic savings rate was only 16.7% of GDP - about 8.3% below the 2008 target. The data for savings is obtained from World Bank reports and therefore comparable with other SADC countries because of the similar methodology used.

• Domestic Investment Rates

The SADC RISDP considers an investment to GDP ratio of at least 30% to be essential for achieving desired growth and attaining Millennium Goals of reducing poverty by half by 2015. As Appendix 2 shows, Tanzania's 2004 investment rate was only 19.9% of GDP about half of what is required under RISDP. The data is obtained from World Bank reports that are comparable with other SADC countries. The low investment rate is not consistent with levels required to reduce poverty and calls for Tanzania to improve further not only macroeconomic stability but also put in place a better environment for attracting greater foreign direct investment

Trade Liberalization, Fiscal and Monetary Policies

Tanzania is one of the Sub Saharan countries which face a serious problem of deforestation and forest degradation (URT 1998c, URT 202c). Literature reveals a number of causes of deforestation in the country. The effects of deforestation include alteration of the ecology of the area, loss of timber and other non-wood forest products, degradation of the natural environment and water shortages. Human activities are the root cause

of deforestation in the country. These activities include timber logging; pit sawing, charcoal burning, firewood and pole collection, harvesting of non-timber forest products such as honey and animals, cultivation and grazing in the forest lands (Kahyarara, 2008). Kahyarara (2002) summarizes the activities into two forms of utilization: i) utilization by local communities largely for subsistence purposes, and ii) utilization by outsiders mainly for commercial purposes. Easy access to the forest reserves in the country enables traders and farmers to unlawfully cut down trees. Migration of people from other ethnic groups increased demand for farmland, unclear (undefined) forest entry and exit points, poverty, poor farming practices, population growth are some of the driving forces for deforestation frequently cited in the literature (for example, Mashindano 1998; Kahyarara et al 2001; Kahyarara 2008). Establishment of settlements in forest lands, forest fires and outbreaks of pests and diseases also cause deforestation.

On the other hand Kulindwa et al. (2001), ESRF (2005), URT (2005b) argue that to a larger extent deforestation and forest degradation are related to policy changes in the country. The macro and sectoral policy changes in Tanzania have influenced deforestation and the quality of forest reserves. Macro and sectoral policies such as fiscal and monetary policy reforms have attracted more players in the trade industry. Trade liberalization which entails adjustment of policy instruments such as taxation, interest rates, domestic export prices and devaluation has stimulated production and exports of forest products. The forest sector has been liberalized along with other economic sectors. The public, natural resources experts, government leaders and politicians have recently raised concern over uncontrolled utilization of the forest resources in the country. The benefits envisaged from the trade liberalization policy measures seem to be reversed by the consequences of uncontrolled utilization of forest resources. Environmental impacts

of trade liberalization to the forest sector include increased rate of forest product extraction that accelerates deforestation. Increased deforestation due to timber logging, forest fires and fuel wood and pole collection has already resulted into adverse impacts in the country

CONCLUSION

According to the projections based on the 2000/01 Household Budget Survey, Tanzania is endowed with a variety of natural resources most of which have not been exploited fully. The natural resources include wildlife, minerals, water bodies, fish, land and forests. The potential and opportunities of these resources have not yet benefited the Tanzanian people despite the fact that massive exploitation is taking place. For instance, more than 30 foreign large scale companies are engaged in the mining sector. In fisheries, statistics show that more than 150 big foreign ships are harvesting fish in territorial water of Tanzania. Most of these ships undertake fishing illegally. Likewise, in the forest sector massive harvesting of the forest products particularly timber is taking place illegally.

The growing rate of exploitation of natural resources taking place in Tanzania is a response of economic agents and actors to the ongoing macroeconomic policy reforms and sectoral policy changes. As stated earlier, most of the forest products from Tanzania are exported to China, UAE and India. However, other destinations which also take significant share include Taiwan, Thailand, South Africa, Kenya, Europe (Germany, United Kingdom, and Italy) and USA.

Massive losses of revenue due to illegal logging are a huge lost opportunity for economic growth and self-reliance in Tanzania. Unrealised revenues are an evident threat to the sustainability of the forest resource and therefore sustainable development. Generally, poor governance, corrupt practices and low capacity to monitor logging have contributed to the losses.

On the other hand, a notable

achievement has been made in terms of awareness creation and promotion of participatory forest management through Local Government Reform Programme (LGRP) and Forest Management Programmes, The general public is more aware today on their rights and obligations over their resource base than it used to be two decades back. Participatory Forest Management (PFM) uptake however is still very low.

RECOMMENDATIONS

In spite of negative impacts associated with implementation of macro and sectoral policies on deforestation, appropriate policy reforms can be made to minimize the impacts. Although trade liberalization policies in the forest sector have paved way for the establishment of a level ground play market, liberalization forces cannot guarantee sustainability in the forest sector.

Inevitably, immediate firm and strategic interventions are required to address the ailing conditions and malpractices in the forest sector. There is need to mobilize efforts to address forestry governance targeting transparency and accountability at all levels and all the activities in the sector. The issue of property rights, resource ownership and licensing procedure need to be clarified to adequately inform the respective personnel and the public at large.

Since the PFM uptake is still very low, efforts should be scaled up to promote Participatory Forest Management (PFM) through Community Based Forest Management (CBFM) and Joint Forest Management (JFM). For this to happen the Local Government Authorities (LGAs) must be empowered in terms of financial resources and competent human resources.

Resources need to strategically be scaled up towards capacity building of the Local Government Authorities to facilitate the ongoing decentralization process. At present, the LGas mandate to initiate and therefore implement its plans and strategies is limited. For example,

the LGAs have limited power over companies investing in forestry largely because they are not part of the approval process, and therefore investors feel they don't have any obligation to the local authorities. All the major decisions are made by the Central Government. The gap between local authorities and investors has tended to deny the latter the power to monitor and control the forest activities.

Similarly, the local authorities are

not aware of the revenue collections from hunting blocks which are operating in their jurisdictions, because they don't have any mechanism in place to monitor such collections. LGAs need to demand more autonomy to be able to execute investment promotional duty a dequately. The current institutional framework for the forest sector encourages duplication of efforts and potential conflicts among key players. The institutional

problems have significantly contributed to the problems observed in the sector. While in most cases the responsibility is referred to the central government, there are other institutions mainly the local government which also has interest in the forest sector but with varying objectives and restricted mandate. This institutional structure makes monitoring of the sector difficult especially when it comes to sustainable forest management.

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Appendix 1:

Consultations

Sn	Name	Title	Institution
1	Dr Godius Kahyarara	Senior Lecture	Economics Department, University of Dar-es-Salaam
2	Mr Festo Maro	Research Assistant	Economic and Social Research Foundation (ESRF)
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5	Mr Geoffrey Kirenga	Director of Crops	Ministry of Agriculture, Food Security and Cooperatives
6	Mr James Lugaganya	Asst Director	Ministry of Tourism and Natural Resources
7	Mr Willy J. Mzavas	Regional Wildlife Officer	Shinyanga Region
8	Dr Primi Mmasi	Associate Researcher	Economic and Social Research Foundation (ESRF)
9	Mr Nassoro Hussein	Lecturer	Institute of Finance Management
10	Dr Fanuel Shechambo	Senior Research Fellow	Institute of Resource Assessment, University of Dar -es- Salaam

Appendix 2:

Tanzania Trends in Selected Macroeconomic Indicators, 1996 2004

	1996	1997	1998	1999	2000	2001	2002	2003	2004
Real GDP Growth - %1	4.2	3.3	4.0	4.7	4.9	5.7	6.2	5.7	6.7
GNI per capita (US \$ 2002 prices) ¹	160	160	190	210	240	270	286	300	300
Inflation - annual average - %2	21.0	16.1	12.9	7.8	6.0	5.2	4.5	4.4	4.2 ¹
Exchange Rate (Tshs/USD) annual average ²	580.0	612.1	664.7	744.8	808.4	876.4	966.6	1038.6	1098.6
Merchandise Exports (mil. US\$) FOB ²	763.8	752.6	588.5	543.3	663.3	776.4	902.5	1142.4	1325.2
Merchandise Imports (mil. US\$) FOB ²	1212.6	1148.0	1382.2	1415.4	1367.6	1560.3	1511.3	1973.0	2280.8
Export/Import ratio (Goods) - %	63.0	65.6	42.6	39.7	49.6	52.0	58.7	57.9	58.1
Current Account Balance (mil. USD) ³	-265.1	-403.4	-905.4	-829.5	-498.6	-480.0	-251.1	-337.2	-538.4
Current Account Balance % of GDP (incl. Transfers) ³	-7.2	-7.1	-11.0	-10.0	-5.8	-5.0	-4.7	-4.8	-5.3
Domestic Investment/GDP ratio - %2	16.5	14.7	16.0	15.4	17.6	17.0	18.9	18.5	21.0
Domestic Savings/GDP ratio -%2	4.6	5.4	1.5	2.8	9.2	8.8	12.9	9.7	9.8
Foreign Direct Investment (FDI) - mil. USD ²	148.5	157.8	172.2	516.7	463.4	327.2	240.4	247.8	260.2
Foreign Reserves (months of imports) ²	2.4	3.8	3.0	4.1	5.6	6.3	8.3	8.9	7.6
Govt. Domestic Revenue (% of GDP) ⁴	13.5	12.6	12.5	11.3	12.2	12.1	12.8	13.4	13.8
Total Govt. Expenditure ² (% of GDP) ⁴	17.3	17.4	17.6	18.3	20.6	19.1	23.4	24.9	26.6
Bank of Tanzania credit to Government (net, % of GDP)	1.85	-0.62	0.48	0.02	0.11	-0.25	-0.69	-0.11	-0.41
Fiscal Balance (before grants) - % of GDP ³	1.3	-1.7	-2.3	-2.3	-5.7	-4.6	-4.9	-8.1	-9.9 ³
Fiscal Balance (after grants) - % of GDP ³	3.3	0.2	0.8	-1.6	-1.2	-1.1	-0.5	-1.6	-3.44
Growth of Money Supply (M2) - %2	11.6	11.0	11.1	15.0	12.5	12.3	13.0	14.2	19.2
Average Deposit rate - % ²	11.0	10.0	7.9	7.1	4.2	3.5	3.1	2.4	2.5
Average Lending rate - % ²	26.5	24.0	24.5	22.1	19.6	16.4	15. 7	14	14.4
Disbursed External Debt (mil. USD) ³	6600.3	6435.8	6580.3	6538.3	6312.2	6559.7	6413.4	6730.8	6,99.6
Total External Debt (mil. USD) ⁵³	7578.5	7384.6	7669.7	7624.8	7482.1	7464.0	7268.17	7890.7	9,219.3
Total External Debt (% of GDP) ⁶	98.5	88.1	88.8	84.5	79.4	78.6	76.4	82.3	81.4

Source: 1National Bureau of Statistics; President's Office Planning and Privatisation
2Central Bank of Tanzania (BOT)
3IMF Article IV Consultations mission reports; World Bank Country Assistance Strategy FY2001-2003
4Ministry of Finance

Notes: Starting from 2004, inflation is based on 2001 constant prices. Total external debt includes interest on disbursed debt

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