# ECONOMIC AND SOCIAL RESEARCH FOUNDATION (ESRF)



# MAKING AGRICULTURE IMPACT ON POVERTY IN TANZANIA: THE CASE ON NON-TRADITIONAL EXPORT CROPS

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#### 1.0 INTRODUCTION

#### 1.1 Background Information

Given the predominant role of agriculture in the livelihoods of most Tanzanians, any strategy for slashing poverty and hunger in the country must center on rapid growth in the agricultural sector. Farmers clearly need the government to make investments aimed at increasing agricultural productivity. But these investments could depress commodity prices and farm incomes if they are not linked to market opportunities for farmers. Poorly functioning markets, weak domestic demand, and lack of export possibilities are major constraints on farmers' agricultural growth prospects.

The aim of the seminar is to stimulate dialogue on the best way in which Agriculture could contribute to achievements of the outcomes of MKUKUTA. The intended outcome of the seminar is to go beyond what is known in the non-traditional exports crops to new commodities with high potential in the SADC, EAC, and other markets perhaps even the domestic market.

#### 1.2 Objective of the Paper

The objective of this policy dialogue is to raise public awareness on some of the best ways in which Agriculture can impact on poverty reduction with a view to identifying both new commodities with high potentials as well as market opportunities in the domestic and external markets.

The Purpose of the paper is to stimulate discussion by trying to answer the following questions:

- (i) Is Agricultural sector responding to the development challenges of economic growth and poverty reduction? What are the constraints and what are the possible solutions?
- (ii) What are the best options of non-traditional export crops in Tanzania as regards to available market?
- (iii) How would non-traditional export crops be expanded to include new types of crops so as to increase Agricultural sector's earnings hence achieve the outcome of MKUKUTA?

### 3.0 AGRICULTURAL SECTOR AND CHALLENGES TO ECONOMIC GROWTH AND POVERTY REDUCTION

#### 3.1 The Role of the Agricultural Sector

The agriculture sector plays an important role in the Tanzanian economy and posses the potential to advance the country's objectives of growth and poverty reduction. The performance of the overall Tanzanian economy has been driven by the performance of the agriculture sector, due to its large share in the economy. Agriculture in Tanzania employs the majority of the poor, and has strong consumption linkages with other sectors. In 2004, the sector contributed approximately 51 percent of foreign exchange, 75 percent of total employment and 47 percent of the Gross Domestic Product (GDP). Smallholder farming dominates agricultural production, and a large proportion is for subsistence. Since poverty is predominantly a rural phenomenon, and agriculture is a major economic activity for rural population, it follows that success in poverty Reduction depends critically on performance of the agriculture sector.

One of the pillars for achieving the medium term targets for poverty reduction under the PRS-1 was growth in agriculture of at least 5 percent by 2003. In general, this was achieved in 2001, when agriculture grew by 5.5, while in 2002 the growth slowed slightly to 5 percent, which again was not below the targeted growth. According to the World Bank (URT/WB, 2000), agriculture has to grow by at least 11 per cent in order for the sector to significantly contribute to economic growth and poverty reduction at satisfactory levels. Figure 3.1 below shows the trend of growth in agriculture sector together with the overall GDP growth.

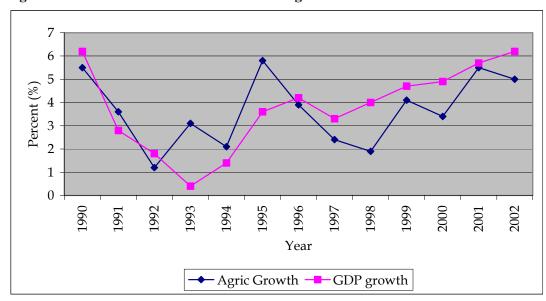


Figure 1: Trends in Annual Growth of Agriculture and Real GDP

Source: Economic Surveys (Various Years)

#### 3.2 Constraints to Agricultural Sector Development

There are a number of constraints affecting the agricultural sector, which include infrastructure constraints, lack of access to support services, continued dependence on rain fed agriculture, restrictive taxation regime, and institutional constraints.

#### • Infrastructure Constraints

The country's road network is still poorly developed and inadequately maintained, with severe disruption during the rainy seasons. Much of the rail network also requires rehabilitation which the Tanzania Railway Corporation cannot afford, and locomotives and rolling stock are also often in poor condition. There have also been serious problems in ensuring access to reliable and affordable infrastructure in the country. In particular, the costs (thus affordability rather than availability) of telecommunications, power and water services are major concerns. Energy supply is not reliable and costs are high. This situation undermines investments and the relative competitiveness position of the country. There are indications that with appropriate investments in the context of public-private participation, it is possible to achieve lower costs of energy and other infrastructures services.

#### • Lack of Access to Support Services

The development of competitive markets requires the existence of supporting market institutions and adequate provision of essential public goods and services. The sector requires financial services, technological and information services, marketing services and capacity building through training. Government programmes for the provision of support services in the sector have not been effective and have often run into budgetary constraints. Many of these programmes have been more supply-driven than demand driven. Private provision of support services has not been encouraged and promoted through demand-driven approaches that facilitate the development of markets for private providers of these services.

Availability of formal agricultural credit for production is limited. The main constraint to credit expansion is risk associated with poor credit recovery. Commercial bank lending for agricultural production is extremely limited, and with the collapse of the cooperative unions, farmers find it difficult if not impossible to access some reliable form of formal credit to facilitate purchase of production inputs.

Supportive services such as standardization and quality control have also been associated with controls and inhibition of movement of goods in the country rather than supporting enterprise development. For the export-oriented firms (especially in agro-processing and horticulture) compliance with technical and non-technical standards and norms is of particular concern as it severely constrains export potentials. Further, there is a big gap in the area of provision (both in terms of quality as well as quantity) of such services as accounting, legal advice, investment/business planning, and ICT.

#### • Continued Dependence on Rain fed Agriculture

Over dependence on rain fed agriculture has been a major constraint to sustainable increase in crop production. While there is an abundance of water in rivers and lakes, there is very limited application of irrigated agriculture. Rural areas with long dry seasons, in particular Dodoma, Singida, Shinyanga and some parts of Arusha and Tanga, remain food insecure as long as they continue to depend on rainfed agriculture.

#### • Institutional Constraints

The policy shift of the 1980s which led to withdrawal of public institutions from production, development, processing and marketing of produce and input supply has not led to an efficient development of the agricultural sector. With the take over of the private sector during the transition period a number of inadequacies have emerged including: deterioration in the quality of produce especially for export crops such as coffee and cotton due to inadequate regulation, experience and knowledge; chaotic operation of the market for cash crops as private companies have turned into monopolistic cartels which predetermine prices, forcing farmers to sell produce, particularly cash crops, at very low prices. At times prices are lower than the cost of production. The benefits of competition have therefore, not been realized by the farmers. There is also a general lack of an effective system of management of agriculture at all levels, such that lack of guidelines and supervision leave production activities to the whims of fate.

#### • Restrictive Taxation Regime

The tax regime (referring to levels and multiplicity of taxes) has been identified as a constraint to private sector development. Local taxes, which are being enforced rather arbitrarily, are not harmonized with national level taxes. There has been a concern on the absence of coherent coordinated approach to the harmonization of tax policies and of tax incidence. However, this concern has (to some extent) been addressed particularly with the abolition of the so-called "nuisance taxes" at local government level.

#### 4.0 TRADITIONAL AND NON-TRADITIONAL EXPORT CROPS

#### 4.1 An Overview

Non-traditional export crops are those that are not part of the customary diet of the local population and grown primarily for their high cash value and export potentials<sup>1</sup>. Such crops include fruits, vegetables flowers and so on.

<sup>&</sup>lt;sup>1</sup> J.Janick and A.Whipkey (eds) 2002. Trends in new crops and new uses. (ASHS, Alexandria V.A)

On the other hand traditional export crops are such as coffee, cotton, sisal, tobacco, raw cashew nuts and so on. These traditional crops have been the main source of Tanzania foreign exchange earnings contributing up to 60 percent of total export volume<sup>2</sup>

In recent years prices for traditional agricultural export crops in the World market has dropped tremendously, for example coffee (Arabica) prices dropped from US Dollar 4.10 per kilogram in 1997 to US Dollar 1.9 per kilogram in 2000<sup>3</sup>. Deterioration in World consumption prospects, gloomy commodity market, competition from synthetic fibber (for sisal) and deterioration of quality of export commodities accounted for the unfavourable price movements of these traditional exports<sup>4</sup>. The fall in prices of traditional export crops is said to be one of the factors that has cause the contribution of export earning by agriculture sector to fall from 50 percent in the mid 1990 to 23 percent in the year 2002.

Though the Government has been advocating diversification of agriculture into non-farm activities in rural areas to address problems in the agriculture sector, it is reported that this effort has not been successful because the activities are small in scale and often taken as a coping strategy. It requires efforts to impart organizational and entrepreneurial skills to rural inhabitants to turn non-farm activities in to viable sources of livelihoods<sup>5</sup>.

The market for non-traditional crops on the other hand is said to have increased in the World market especially in Europe, and some developing countries particularly from Africa have benefited a lot from this market.

Given the existing potential market of the non-traditional cash crops, and the various frameworks in place such as NEPAD SADC, and the East African community, it is obvious that Agriculture sector has a potential to continue contributing a large share of the GDP hence impact positively on Poverty reduction.

#### 4.2 The Role of Traditional and Non-traditional Export Crops

Over the past two decades, Africa has lost ground in the global marketplace for its agricultural exports. Despite modest gains in the 1990s, the region's share of total world agricultural exports has fallen from about 6 percent in the 1970s to 3 percent today.

Tanzania is still heavily dependent on traditional export crops, with cashew nut, coffee, cotton, sisal, tea, and tobacco currently accounting for 21% percent of Tanzania's total

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<sup>&</sup>lt;sup>2</sup> Bank of Tanzania 1999 Economic Bulletin for the quarter ending June 1999: 90 pp

<sup>&</sup>lt;sup>3</sup> Bank of Tanzania 2000 Economic Bulletin for the quarter ending mach 2001: 91 pp

<sup>&</sup>lt;sup>4</sup> Mlula Allan S. 2003 "Cross Boarder Trade in Northern Tanzania, The Effect of Market exchange arrangement, and institutions on Values of Non Traditional export crops.

<sup>&</sup>lt;sup>5</sup> NSGRP VPO Jan 2005

agricultural exports (BOT, 2003). Due to downward trends in world prices, increased production of traditional export crops has not translated into much growth in farm incomes. The challenge posed by weak world demand is compounded by competition from many exporters in Asia and Latin America who have improved product differentiation and quality, features that rich importing countries increasingly demand.

Although the potential gains from traditional export crops are still high for some countries, the region wide gain in expected to be small. Based on a model of the global economy, an IFPRI analysis shows that even if Africa's traditional exports regained ground and returned to their historic highs in terms of world market share-equivalent to growing at a rate of about 6% annually per capita real agricultural income for all of Africa would grow by only an additional 0.3-0.4% per year. The gain would be even smaller if world prices for these commodities continue to fall, as is likely. The small income effect from more rapid growth in traditional export crops is due in part to these crops' small share of Africa's total agricultural GDP and their weak linkages to the rest of the domestic economy.

The most promising prospects for increasing income from traditional exports lie in exploiting opportunities for product differentiation (for example, by the type of branding that has popularized specialty coffees). Many countries could also secure higher prices by raising the average quality of the products they export, establishing grading systems, and segregating different qualities for export. Moreover, improvements in access to markets, inputs, and credits could, combined with low labor costs, enable farmers to better compete with other countries in international markets for traditional exports crops.

The general forecast is somewhat brighter in the non-traditional export sector, where market opportunities offer prospects for significant growth. Newer, niche markets (fresh vegetables, cut flowers, and fish, for instance) may have the highest growth potential because they face fewer demand constraints in both the short and the medium term. For example, in the European market, imports of fresh and chilled leguminous vegetables rose by more than 130 percent between 1989 and 1997, with almost three-quarters of the imports coming from Sub-Saharan Africa. However, niche markets tend to be highly competitive and specialized, with rigorous quality standards. In addition, they account for a small share of total agricultural export and agricultural GDP in most countries.

A few countries – Ghana, Cote d'Ivoire, Kenya, and Zambia among them – have achieved notable success in increasing these types of exports. Fruit and vegetable exports from Kenya have increased fourfold in constant dollar terms since 1974, and horticulture has become one of the largest sources of foreign exchange earnings. Fruit and vegetable exports from Cote d'Ivoire grew at an annual rate of 4.4. Percent through the 1990s, and in Zambia exports of

fresh vegetables and cut flowers rose from \$6 million in 1994 to more than \$33 million in 2001, now accounting for almost 40% of total agricultural exports. Moreover, the bulk of these exports are grown on smallholder farms.

Although favorable geography and climate have played a major role in the expansion of horticultural production, market, policy, and institutional conditions are critical in realizing such growth. Replicating these gains with other commodities and in other countries will require appropriate investments and policies, including improvements in transportation infrastructure, limitations on direct government intervention in markets, incentives for private and international investment, and development of international commercial links. However, it is important to have a diversified regional strategy for nontraditional export development. If many countries focus on the same export opportunities, prices could easily fall, leading to disappointing results for all.

It would be unrealistic to look to these specialized exports for dramatic income growth. An IFPRI analysis projects that even with an optimistic region wide annual growth rate of 6 percent per year for nontraditional exports, the gains in per capita incomes would not be that great. Per capita agricultural real income for all of Africa would grow by only 0.2-0.3 percent per year more than in the baseline scenario. Again, because of the small initial value of these exports, even rapid growth would not translate into significant economic leverage within the next 10 to 15 years.

Table 1: Size of Sub-Saharan Africa's Agricultural Markets

Market	East Africa	Southern	West	Total
		Africa	Africa	SSA
	Billion US\$			
Traditional exports to non-Africa	2.2	2.4	5.0	8.6
Nontraditional exports to non-Africa	1.3	2.8	2.0	6.1
Other exports to non-Africa	0.5	0.7	0.7	1.0
Intra-African trade	0.4	1.1	0.4	1.9
Domestic markets for food staples	17.6	12.1	20.1	49.7

**Sources:** Trade figures are from UN COMTRADE, 2002, and are 1996-2000 averages; domestic-market figures are for 2000 from FAOSTAT, 2003. Domestic demand includes the value of own consumption.

#### 5.0. DOMESTIC AND INTRA-REGIONAL FOOD MARKETS

Domestic and intraregional food markets are another potential source of demand for agricultural products. As Table 1 shows, the current value of Africa's domestic demand for

food staples is about US\$ 50 billion per year, and this figure is projected to almost double by 2015. Only part of this output is actually sold (the rest is consumed on farm), but it still represents a large and growing market that ought to offer real income opportunities. Since Africa currently imports 25% of grain products such as maize, rice, and wheat domestic production could potentially displace some imports.

Despite the promise offered by the production of food staples for domestic and regional markets, economy-wide simulations suggest that without increased demand induced by growth in other agricultural and nonagricultural sectors, even modest growth in grain productivity could depress domestic grain prices, given prevailing agricultural trade policies around the world and poorly functioning markets within Africa. This decrease in prices would benefit consumers and poor people in the region, but it would slow growth in agricultural income. Less than one-third of grain products can reach commercial markets, and linkages between grain and livestock production are extremely weak in most African countries. More promising scenarios would arise if African farmers were given better access to markets and if the productivity of the livestock and grain sectors could be increased in tandem. In the latter case, there would be an increase in the consumption of livestock products as well as grains, and an increase in the derived demand for feed grains. Agricultural income would then grow even while grain and livestock prices fell, leading to gain for both farmers and consumers.

One way to increase its competitiveness would be to invest in infrastructure and market development to reduce transport and marketing costs. This would reduce costs for a broad range of commodities, promoting trade and reducing domestic prices — with follow-on demand effects. A model simulation indicates that the combined impact of simultaneously reducing marketing margins and improving productivity across traditional and nontraditional export crops and the grain and livestock subsectors appears to hold the most promise for generating growth in income and food consumption. Per capita agricultural income would grow at 1.4 percent annually, twice the cumulative growth rate generated by targeting each individual agricultural sector separately.

Another way to accelerate growth in domestic demand for foods is by increasing incomes in the non-agricultural sector. Agricultural growth is one avenue for raising nonagricultural incomes because when agricultural incomes increase, rural people have more resources to spend on nonfoods. A second major avenue for increasing demand is through investments that increase productivity in the nonagricultural sector itself. If productivity increases in both the agricultural and nonagricultural sectors demand for agricultural output can increase much more rapidly.

Stimulating intraregional trade can also help agricultural growth. Intraregional trade is currently small – officially only about \$2.0 billion per year, but there may be at least an equal amount of unrecorded trade. There are significant differences in resource endowments among African countries. Countries with abundant land and scarce labor adjoin others with abundant labor and scarce land, providing the potential for mutually beneficial trade. The greatest potential growth in intraregional trade lies with food staples. For example, consumers have a strong preference for white over yellow maize, yet most trade is in yellow maize and comes from outside Africa. Poor infrastructure and institutional barriers are among the major constraints preventing Africa countries from exploiting their comparative advantages better.

In addition to domestic demand for staple foods, demand for a diverse range of food products will continue to grow rapidly in Africa's large metropolitan areas. An urbanized population tends to consume more fish and meat, vegetable and animal oil and fats, fresh fruits and vegetables, and prepared foods, offering African farmers important new opportunities for diversification into high value products for domestic and regional markets. Trade of this type already accounts for 42 percent of the total value of agricultural products traded across borders in the region. Informal cross-border trade occurs as well, so these figures may actually underestimate intraregional commerce. African farmers are well positioned to capture substantial shares of these growing markets, as illustrated by the recent rapid rise of periurban dairy farming in some East African countries. But competition from high-quality imports, growing market chain integration, and the emergence of supermarkets all place a premium on quality and cost considerations, which can be challenging for many small farmers to meet.

## 6.0 STRATEGIES TO EXPAND NON-TRADITIONAL EXPORT CROPS AND ACHIEVE THE OUTCOMES OF MKUKUTA

Tanzania has the natural resource endowment to support the expansion of non-traditional export crops. There is enormous untapped potential and failure to realize this potential is an opportunity cost. Given the limited financial resources available to the government, it is important that the specific policy instruments and strategies are well focused and effective. They must also be consistent with overall government economic policy and strategies. Since Tanzania has made a firm commitment to follow a market-oriented path of development, the government should not directly intervene in markets but rather concentrate on developing an infrastructure, which encourages private sector market activity and growth. Specific strategies, which could enhance the expansion of non-traditional export crops so as to increase earnings hence achieve the outcomes of MKUKUTA include;

#### • Infrastructure Development

Public sector investments in infrastructure (electric power, highways, irrigation) are crucial. These strategic investments will remove impediments to the emergence or development of non-traditional crops. For example, investments in the production and distribution of electricity made it possible to increase the use of irrigation, and the construction of irrigation infrastructure making it possible to introduce and expand new crops that could not be cultivated under the pre-existing climatic conditions. In addition, public investments in infrastructure has a greater impact in areas with fewer initial competitive advantages, resulting from such factors as their greater distance from markets and less favorable climatic conditions for agriculture.

#### • Technological Development

Public research should play a vital role in identifying new products with the potential to be exported and adapted to the natural resource conditions in each case, in identifying varieties appropriate to specific conditions, and in studying production issues such as potential yield, response to irrigation, water usage, and potential diseases and pests. In each case, the results of public research will serve to attract private investment, lowering perceived risks and the cost of beginning new activities. The public sector should play a more active role in research in areas, which have been identified as having economic and productive potential, but which have not attracted the interest of the private sector due to a lack of information.

#### • Support for Irrigation

A low proportion of the arable area is currently irrigated. The government needs to pursue strategies for optimising use of existing water, development of strategic large-scale irrigation systems and enhanced exploitation of ground water. Because of the high investment costs, options for designing win-win partnerships with private firms in the construction of major dams and associated irrigation works need to considered.

#### • Availability of Credit for Investment

Long-term credit is crucially important in the development of non-traditional agricultural exports. The adverse impact of liberalization of the rural economy has been the reduction of the already limited sources of credit in rural areas. It is therefore, important to develop an appropriate legal framework for rural financial institutions aimed at creating incentives and regulations, which will ensure a national network capable of providing the services required.

#### • WTO Negotiations

Agriculture continues to be one of the main issues in the WTO negotiations. The failure of the Cancun meeting was partly due to disagreement on the agenda on agriculture. In Tanzania, the agricultural sector remains the linchpin of livelihood not only in terms of supplying local markets, but also and importantly because a large proportion of the population depends on agriculture to survive. The WTO negotiations focus on development of world trade has not always taken these wider dimensions into account. For a country like

Tanzania the main issue in the negotiations should include non-traditional export crops priorities.

#### 7.0 THE WAY FORWARD

If Tanzania is to break out of the vicious cycle of hunger and poverty, it needs to increase agricultural productivity. The Government must increase her investments in agriculture and technology development and dissemination. However, in today's more integrated world economy, success in productivity-based agricultural growth crucially depends on the expansion of market opportunities. Improving the competitiveness of Tanzania's agricultural products in international, regional, and domestic markets is the key to expanding market opportunities. While production-side investments that improve productivity and product quality can definitely increase Tanzania's competitiveness, poorly functioning domestic and regional markets and costly transport systems add enormously to farmers' costs and squeeze them and traders out of their domestic and regional markets. Despite low productivity, the producer costs of many Tanzania's agricultural products are among the lowest in the world, primarily because of low labor costs and minimal use of purchased inputs. However, this cost advantage is lost in the marketplace. It is not uncommon for farmers to receive only 10 to 20 percent of the market value of the products they sell, with the remaining 80 to 90 percent being lost to transportation and marketing costs.

Although Tanzania has undertaken market reforms in recent years, these reforms are not sufficient to generate greater supply response and competitiveness. Market liberalization may have removed price distortions, reduced marketing margins, and improved market integration, but the agricultural market in Tanzania remain underdeveloped, and most small-scale farmers, especially those living away from roads and markets, have not benefited much from the reforms.

What is needed now is increased market development. High transaction costs and limited development of private trade have kept many small-scale producers to subsistence modes of farming. Agricultural markets continue to be characterized by limited and asymmetric markets information, lack of coordination, inadequate markets for storage and finance, lack of contractual arrangements to transfer risk, lack of smallholder market power, and increased market risk for producers. In domestic and regional markets for staple foods, the role of market institutions in supporting exchange is especially weak, and public policies do little to help informal trade and small-scale traders.

Tanzania must design appropriate market development policies to address these issues. Priority should be given to promoting more formal trading through the creation of institutions to set and enforce grades and standards, provide market information, and enforce contracts. In the case of horticulture there is need to promote formation of self-help growers' organizations that could enable small farmers enter into contractual arrangements that provide more reliable market outlets and to obtain extension advice and seed on credit. The government's encouragement of the development of a wide range of private marketing institutions, local producer associations, and self-help groups is important for farmers seeking market access, including access to credit and other financial services, transport, refrigeration, and storage. Such institutional development, however, does not necessarily fully depend on government; the private sector and nongovernmental organizations can also make important contributions.

Growing competition in export and domestic markets requires that farmers meet more stringent demands for grades and standards. Moreover, farmers also need instruments to help them manage price and market risks, such as efficient, targeted safety-net programs and market-based risk-management vehicles-weather insurance, for instance, and futures price contracts. At the same time, if farmers are to become better integrated into today's increasingly competitive markets, they must have technologies to help them reduce production costs and improve quality, post harvest storage, and processing.

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