ECONOMIC AND SOCIAL RESEARCH FOUNDATION (ESRF)

THE LINKAGE BETWEEN TRADE, DEVELOPMENT AND POVERTY REDUCTION (TDP): A CASE STUDY OF COTTON AND TEXTILE SECTOR IN TANZANIA

George Kabelwa
and
Josaphat Kweka

A Research draft Report Submitted to CUTS-CITEE (India) for the Tanzania TDP Project

June 2006

Table of Contents

LIST OF TABLES AND FIGURES

Tables

Figures

1.0 INTRODUCTION

1.1 Background to Trade and Poverty Linkages

Has the process of trade liberalization caused poverty, or in fact has it contributed to its alleviation? This question has spurred many recent studies in attempt to explore the linkages between trade and poverty (e.g., McCulloch, Winters and Cirera, 2001). Indeed, trade liberalization appears to have ambiguous effects on poverty reduction particularly in the least developed countries (UNCTAD, 2004). Although, there is ample evidence that trade liberalization is key for achieving higher economic growth, and perhaps a necessary condition for poverty reduction, a valid criticism of trade liberalization involves the issue of income distribution. Most trade models demonstrate that trade liberalization causes a redistribution of income between individuals and sectors within the economy. In other words, some individuals and sectors gain from free trade while others lose. Understanding how trade liberalization makes some individuals and sectors lose is therefore very important in designing required policies (such as social safety nets, institutional development, etc.) to help the poor to be in a position to better take advantage of the opportunities and face the challenges of trade liberalization.

1.2 Objective of the Study

The overall objective of this study is to analyze how the distributional impact of trade liberalization has affected some sectors in Tanzania. The focus of the impact will be on the labor market. Specifically, the study investigates how workers, who are at the bottom of a production process have been faring as a result of increasing exposure to international trade (either through exports or by facing imports) and what are the constraints that the sector (including its workers) is facing in order to mitigate adverse effects from increasing exposure to international trade. The case study looks at the impact of international trade as a combined outcome of three forces, namely: (i) the structural effects such as trade barriers, infrastructure, and institutional factors (ii) the labor demand effects, and (iii) the labor supply effects.

The study will identify measures that are being taken for improving skills of labor in order to enhance competitiveness and ensure jobs for workers facing unemployment on account of increasing competition and international trade. It also attempts to determine whether employment opportunities have increased due to an expansionary phase that could be driven by international trade and studies labor's income trend (of the unskilled type in particular) after liberalization, especially in the context of incomes they could have derived from their endowments. It considers whether international trade has provided opportunities for labor to acquire skills that would help them to move up the income ladder, and what affects mobility of labor within a sector. Also challenges that are emerging due to multilateral trading system are considered, including challenges on account of preference erosion, non-tariff barriers. Finally hurdles that have hindered the efforts of labor and enterprise to exploit the benefits associated with international trade (such as lack of complementary social policies, governance problems, etc) are surveyed and recommendations are given.

1.3 Methodology

The study adopts a sector-based approach to the assessment of trade policy and trade liberalization at the national level. The advantage of this approach is that the positive and negative effects of the policy or agreement under consideration may be more easily identifiable as collecting statistical data can prove less difficult and the data itself, more reliable. The disadvantage of this approach is that economy-wide impacts are not immediately identified and that important cross-sector links may not be captured in the process. Among the most important criteria that have been used by this study for selecting the sector include the sectors' contribution to GDP; the share of the sector in total exports and imports of a country; the importance of the sectors in generating income for the poor people; and the employment intensity of the sector: whether it is labor intensive or not, and trends in employment in the sector during the last 10 years or so. In this case, we have selected the cotton and textile sector, as one of the important sectors in the economy and one which has been heavily affected by trade liberalization, as the case study.

Data collection firstly involved in-depth review of secondary information in the form of academic articles, grey material, press coverage and outputs from other applied research processes and government statistics to understand the three effects (i.e., the structural, the labor demand, and the labor supply effects) in the cotton and textile sector. Second, diagnostic interviews were conducted with some key and informed stakeholders in order to understand institutional weaknesses and constraints that the cotton and textile sector is facing in recent times, which are hindering the desired growth of the sector and more importantly affecting the pro-poor aspects of growth including hindering the poor to better integrate with the economy. This included a range of stakeholders such as the textile mills, ginneries, cotton farmers, cotton traders, cooperative unions and societies, the Tanzania Cotton Board (TCB), and the relevant ministries.

1.4 Organization of the Study

After the introduction in Chapter 1, the remainder of this paper is structured as follows: Chapter 2 of the paper presents the contribution of cotton and textile sectors in the economy and the negative performance of the sectors during the trade liberalization period. This discussion is very important in order to understand the implications of the liberalization of the sector on poverty reduction, which then points to the reasons why the sector was selected as the case study. Chapter 3 discusses the impact of trade liberalization on the labor market in the cotton and textile sector. The discussion is divided into the structural, the labor demand, and the labor supply effects of trade liberalization. Since trade liberalization and reforms cannot work as stand-alone policies, Chapter 4 discusses the complimentary policies that can bring about the full benefits resulting from trade liberalization and reforms. The discussion of the complimentary policies is based on the identified constraints that prevent the poor from taking advantage of trade liberalization. In addition, the chapter discusses compensatory policies that can offset the adverse impact of trade liberalization. Chapter 5 presents a summary of key conclusions that can give insights into the linkages between trade and poverty reduction and policy recommendations that take these into account.

2.0 OVERVIEW OF TRADE LIBERALIZATION PERFORMANCE IN COTTON AND TEXTILE SECTOR

The performance of cotton and textile sector has significant implications on poverty reduction. Cotton, which was introduced by the German Settlers around 1904, contributes about 15 percent of foreign exchange earnings and it is the second largest export crop after coffee. About 40 percent of the country's population depends on cotton for their livelihood. The textile sub-sector on the other hand, was deliberately established in early 1970s by the government as part of the industrialization efforts. Through the textile sub-sector the government intended to generate more employment, add value to the cotton based exports, and develop products that could be substituted for textile imports (Ladha, 2000). The textile sector grew from 4 textile mills between 1961 and 1968 to 35 mills by 1980s. The total investment in the sector exceeded US$ 500 million during the 1980s and consequently, the textile sector became the largest employer in the country employing about 37,000 people; the third contributor to the government revenue through various taxes; and the largest exporter of manufactured goods.

Table 1: Contribution of Cotton and Textile Sector to the Tanzanian Economy (Percent)[1]

	GDP		International Trade (Trade in Goods)				Employment (Industry)	
	Cotton	Textile	Cotton		Textile		Cotton	Textile
			Export	Import	Export	Import		
2000	1.8		5.92	0.72	2.55	4.32		13.56
2001	1.8		4.79	0.81	2.64	4.52		12.69
2002	1.8		3.76	0.96	2.33	4.72		12.95
2003	…		4.33	0.43	2.57	4.45		13.20
2004	…		5.98	0.30	2.81	3.30		13.44
Average	**1.8**		**5.41**	**0.67**	**2.71**	**4.28**		**13.17**

Source: Data on employment was computed from URT (2005a) "Economic Survey – 2004", data on international trade was obtained from Tanzania Revenue Authority (TRA), and data on GDP was obtained from NBS (2003), "National Accounts of Tanzania, 1992 – 2002".

Tanzania embarked on major reforms towards market oriented economy since mid 1980s as a result of the Structural Adjustment Programs (SAPs) supported by the World Bank and IMF. As part of these reforms, the country adopted a liberal trade regime. Measures to liberalize trade included, among others, withdrawing the role of the government in production and commercial activities in favor of the private sector, rationalizing import tariffs, dismantling import restrictions, introducing a foreign-exchange market, and improving incentives for export performance. Currently, Tanzania's trade liberalization is shaped by several multilateral and regional trade agreements associated with bodies such as the World Trade Organization (WTO), the Southern African Development Community (SADC), and the East African Community (EAC).

Trade liberalization and reforms in the cotton sub-sector involved three steps. First, cooperative movement reform: This began in 1991 when the government crafted a new Cooperative Society Act

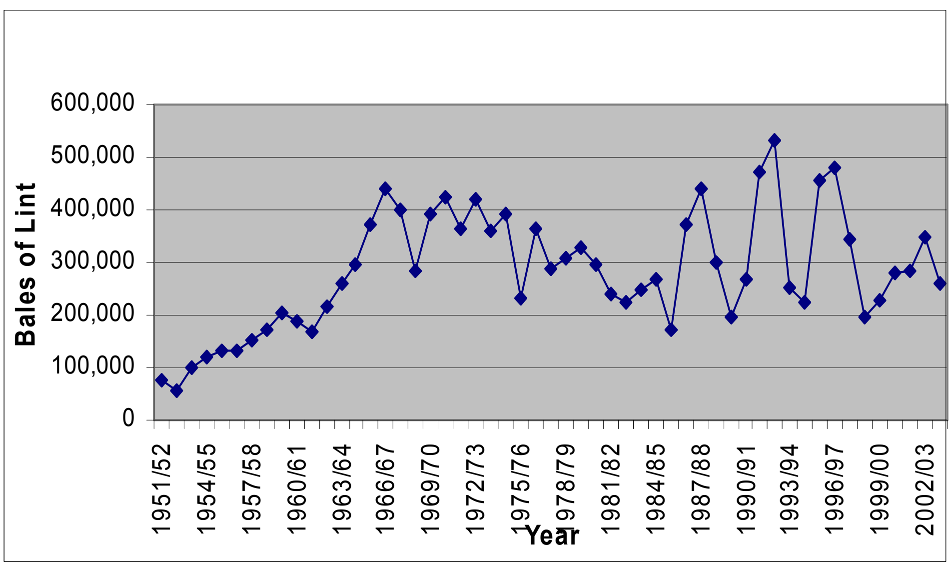
---

1 Additional information will be collected to fill the table.

(Kahkonen and Leathers, 1997). With this Act the cooperative unions had to conform to the international cooperative principles. That is, primary societies were to be formed by farmers, who would then control the cooperative unions through their elected representatives. Second, the gradual relaxation of price controls by the government starting from 1991/92. That is, in 1991/92 the government announced only indicative price for cotton, and during 1992/93, cooperative unions were given the freedom to determine their own producer prices. Third, before 1994, the cotton sector was highly monopolized. Two institutions, the cooperative unions and the Tanzania Cotton Marketing Board (TCMB) handled all the marketing and processing of cotton. From 1994 this monopoly was abolished and TCMB, which was renamed the Tanzania Cotton Lint and Seed Board (TCLSB), had a new role of enforcing marketing regulations. In addition, all price controls were removed and private traders were allowed to set their own producer prices. Note that, the Cotton Industry Act of 2001 provided for the formation of the new Board called the Tanzania Cotton Board (TCB), which replaced the TCLSB.

The impact of trade liberalization and reforms can be found on the production, marketing, pricing, and processing of cotton. Since the beginning of trade liberalization and reforms cotton production has fluctuated a lot (See Figure 1). The main reasons for the fluctuating trend include lack of cotton inputs, and bad weather in the major cotton growing areas. Also, in the absence of additional production incentives in the form of attractive support services, fluctuations in Tanzania have been much more heavily influenced by the world price of lint (Maro and Paulton, 2002)

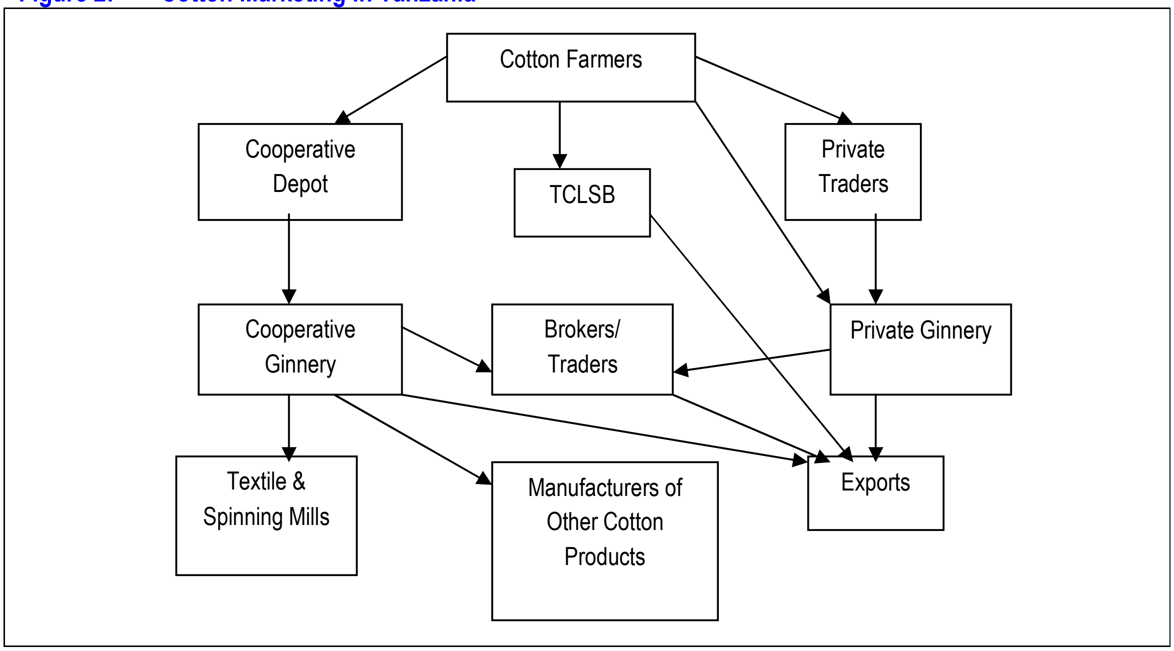
Figure 1: Trend in Tanzania's Cotton Production (1959/60-2002/03)



Source: Tanzania Cotton Lint and Seed Board (TCLSB) and World Bank Commodity Price Data

One important objective of the reform program was to increase the profitability of cash crops by introducing multiple channels for marketing and allowing farmers to receive a higher share of the proceeds from export sales (Kanaan, 2000). As a result, there emerged many marketing channels available to the cotton farmer (See Figure 2). A cotton farmer now has many options of selling his cotton: (i) take the seed cotton to a local cooperative depot of the primary cooperative society and sell it to a cooperative union; (ii) sell the seed cotton at the farm gate or at a nearby buying station to a private trader who assembles cotton from several farmers and then transports it to a private ginnery; (iii) transport and sell the seed cotton directly to a private ginnery; or (iv) sell the seed cotton to TCLSB (Kahkonen and Leathers, 1997).

Figure 2: Cotton Marketing in Tanzania

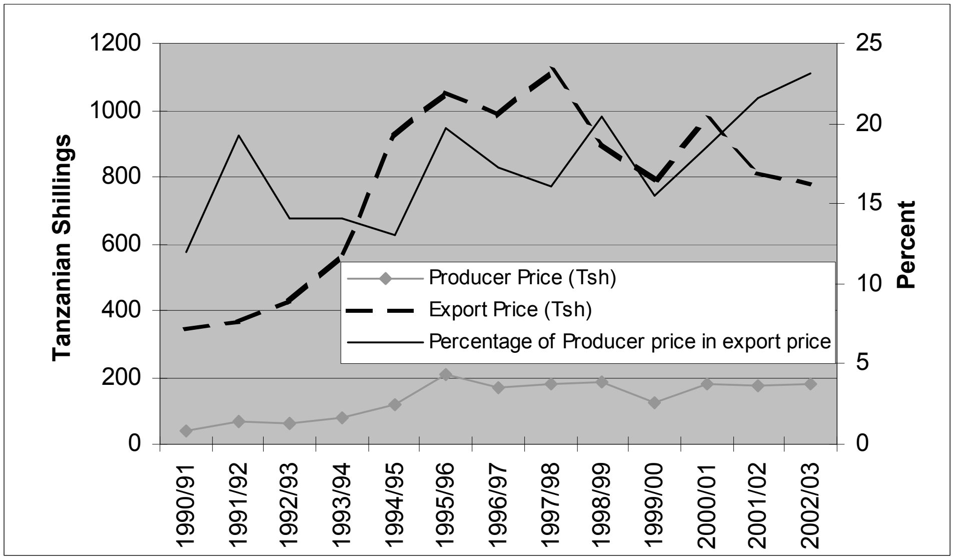


Source: Kahkonen and Leathers, (1997)

The movements of cotton prices in the post-trade liberalization era have also been unfavorable to the farmers. According to Figure 3, since the beginning of trade liberalization in the early 1990s the trend in producer price has remained stable despite the rising costs of essential inputs. This implies that overtime the profitability of the cotton production to the farmers has been declining especially in real terms. It is hard to determine whether this can be attributed directly to liberalisation, however, as external world market conditions have changed substantially over the same time period.

The conclusion that one reaches when analyzing whether producer prices have improved relative to the export price is dependent on whether one looks at the absolute gap between the two prices in shillings or at the producer price as a percentage of the export price. When measured as the difference in shillings, the gap between the producer prices and export prices has been widening (See Figure 3). On the other hand, then one considers the producer price as a percentage of the export price, then the producers seems to have been receiving fairer prices under liberalization. Regardless of what one thinks about the changes since liberalization, however, it is widely agreed that factors such inability to access marketing information are holding down producers prices from what they could be in a more efficient market. Smallholders need exposure to competitive markets and to be organized collectively in cooperatives or farmers associations in order to have the bargaining power necessary to obtain a good price. Therefore some recommendations have been made for the farmers either to start their own associations or to auction their cotton at market places known as “gulios”.

Figure 3: Trends in Producer Price and Export Price



Source: Tanzania Cotton Board

Another impact of trade liberalization involved the entry of the private processing firms. These private firms recorded a large influx at the start of liberalization in 1995, which reduced the remaining cooperatives to a minor role. It is suggested that the high entry might be explained by either donor assistance for ginnery rehabilitation, unduly optimistic expectations of world price trends around the time of liberalization, and undue optimism about the possibility of raising smallholder production levels (Lundbaek, 2002). However, strong competition during seed cotton purchase had negative impacts on both seed cotton and lint quality and on the possibility of delivering inputs to producers on credit (Gibbon, 1999). The few firms that have tried to invest in extension provision have also found that most of the benefits are captured at harvest time by "free-riding" competitors. Thus, after an initial post-liberalization increase, coinciding with the high world lint prices of the mid-1990s, seed cotton production plummeted during 1997–99 (after stagnation in prices). In response, the Tanzania Cotton Board (TCB) convened the first annual stakeholders' conference in 1999 to chart a way forward for the cotton sub-sector. This was followed by TCB-led interventions in seed and pesticide provision and quality control. Production levels have now begun to recover, despite adverse world prices (Poulton et al, 2003).

In the textile sub-sector, as the pre-liberalization government protection and subsidies came to an end because of trade liberalization and reforms, the textile sub-sector inevitably collapsed, leading to massive labor redundancies and unprecedented idle capacities. The textile sub-sector could not survive international competition in the new market oriented economy because of poor management; high operating costs such as high power tariff as well as unfavorable taxation policies; high level of foreign debts and currency devaluation; poor and outdated technology; unfair competition from substandard imports as well as high degree of tax evasion by importers; and negative export incentives (RATES, 2003). Consequently, in 1996, for example, only two industries were operating out of 35 textile mills. These were Friendship Textile Mills and Sunflag Tanzania Limited.

The textile sub-sector is currently at the revival stage after commendable efforts by the government to revive the sub-sector partly through the privatization and investment policies. Most of the new industries are engaged in the production of printed fabrics for the local and regional market, although there are some which have succeeded in exporting yarn and finished garments to Europe (Ladha, 2000). It is reported that over 80 percent of Tanzanian lint is exported directly to regional and international market with less than 20 percent being utilized by the local textile mills -- a long way from the national target of utilization of up to 60 percent. Many textile manufacturers are planning to absorb the targeted extra volume of cotton exported by ginneries through increasing production, installing quality machines and looking for bigger markets.

As noted before, the current Tanzania's trade opportunities under liberalization are largely shaped by several multilateral and regional trade agreements under the WTO, SADC, and EAC. Tanzania has received a lot of trade opportunities especially in the export of her textile products, under these settings. None of these opportunities, however, have been utilized efficiently, mainly due to the lack of capacity such as modern technology in order to meet the required quality standard of the products. For example, Tanzania qualified for the African Growth and Opportunity Act (AGOA) in February 2002 to export wearing apparel to the vast US market duty and quota free. However, only Sunflag Tanzania Limited has been actively taking advantage of AGOA by exporting apparel to the US market. Other major textile firms such as New Mwanza Textiles and New Musoma Textiles have the local market as their key target with AGOA as only a long-term goal. This is mainly because they lack the capital investment required to attain high quality textiles and apparels (RATES, 2003).

As regards European market, the Cotonou Agreement signed between the European Union and the African, Caribbean, and Pacific (ACP) group has the objective of enabling the ACP member states including Tanzania to enter into Economic Partnership Agreements (EPAs) with the European Union (EU) either individually or collectively taking into consideration the integration process already in existence. This arrangement also opens potential markets for Tanzanian cotton.

It should be noted however, that with the end of the Multifiber Arrangement (MFA) on 1st January 2005 (As set out in the WTO's Agreement on Textiles and Clothing (ATC)) which establishes quotas on different categories of apparel and textile exports to the US and the EU there are new challenges to textile and apparel trade globally and particularly to developing countries like Tanzania. Analysis of the US market in apparel categories shows that China boosted its market share in apparel and textile trade from 9 percent in 2001 to 65 percent as of March 2004 (GAFTT, 2004). This implies that the prospects of Tanzania to take more advantage of the US market are in jeopardy. In addition, the cheap textiles and clothing imports from China that are flooding the Tanzania's domestic market, can seriously injure the clothing and textile sub-sector and result in loss of precious productive capacity, factory closures and retrenchments.

With the end of MFA in mind, the Tanzanian government has attempted to make several efforts to take advantage of the regional market. As a result of these efforts, recently the country was given preferential trade opportunity to enlarge her market for clothing and textiles in the Southern African Customs Union (SACU) region under the relaxed rules of origin. Apart from Tanzania, other SADC members that receive this preferential trade opportunity include Malawi, Mozambique and Zambia. In addition, in June 2005 Tanzania, together with other 14 countries from the three regional blocs of SADC, EAC and the Common Market of Eastern and Southern African (COMESA), participated in the formation of the African Cotton and Textile Industry Federation (ACTIF). The aim of the ACTIF is to be a nationally, regionally, and internationally recognized trade body established by the cotton, textile and apparel sectors that provides effective regional representation at international forums. ACTIF is dedicated to the specific concerns of the industry and promotes improved competitiveness in both the regional and global market. ACTIF is currently working on modalities for undertaking its obligations.

3.0 INTERNATIONAL TRADE AND LABOUR MARKET IN COTTON AND TEXTILE SECTORS IN TANZANIA

3.1 Theoretical Review and Background to Labor Market in Tanzania

The labor market is one of the key channels through which international trade can impact on the poor population (Winters, 2001; Winters, McCulloch and McKay, 2004)[2]. With international trade, increased access to overseas markets and increases in the prices paid for exports of labor intensive goods are expected, and these, in turn, are expected to increase the demand for unskilled labor in poor countries where comparative advantage lies on unskilled labor. And this is likely to have positive effects on poverty reduction, through increased employment, or increased wages, or both. Whether it is wages or employment which is affected depends on two theories: the trade theory which assumes inelastic factor supply, and the development theory, which assumes infinitely elastic factor supply (Winters, 2001). The trade theory, as expressed by the Stolper-Samuelson theorem, is centered on the effects on real wages of the unskilled workers. That is, exporting of the labor intensive goods is expected to increase the real wages of the unskilled workers because of inelastic supply of labor (Bhagwati and Srinivassan, 2000; and Conway, 2004). Development theory on the other hand advocates that international trade only raises the level of employment because of infinitely elastic labor supply. In this case, poverty is reduced if the additional workers can now receive higher wages than they received in their former employments.

In Tanzania both cotton and textile manufacturing have employed large amounts of labour. Cotton has been one of the main cash crops for more than 400,000 small-scale farmers, most of whom live in the most populous regions of Mwanza, Singida, Kagera, Kigoma and Shinyanga (USAID, 2004). During the 1980s, the textile sub-sector was the largest employer in the country, employing about 37,000 people. The employment effects of the liberalization of the cotton and textile sector in Tanzania are therefore very important for poverty reduction.

Note that in Tanzania wages are low and unemployment is prevalent. For example, the unemployment rate[3] has increased by about one and a half percentage points over the ten year period to 2.3 million (1.3 million women and 1.0 men), equivalent to 12.9 percent of the labor force by 2000/01 (URT, 2005b). According to the Integrated Labor Force Survey (2000/01), employment-to-population ratio (the proportion of the target population that is employed) was 76 percent nationally. The ratio was lower in urban areas (58 percent) than in rural areas (81 percent). Unemployment was worse among the youth, including the educated youth. As regards wages, the legal minimum wage for employment in the formal sector of about USD 53 (Tsh 48,000) per month, even when supplemented with various benefits such as housing, transport allowances, and food subsidies has not always been sufficient to provide a decent

---

[2] McCulloch et al (2001) identifies three channels by which trade policy change might affect poor individuals and households, namely those of enterprise (through profits, wages and employment), distribution (the transmission of changes in border prices to consumers), and government (in which trade reform affects government revenues and thus the scope for pro poor expenditure.

[3] Unemployment rate is measured using labour force framework embedded in the ILO definition of employment, unemployment and inactivity.

standard of living for a worker and family, and workers depended on their extended family or on a second or third job[4]. Note, however, that formal salary/wage employment constitutes a small proportion of total employment in Tanzania.

Labor Unions are also very weak in Tanzania. There are two labor unions in Tanzania, both of which date back to the socialist times where all firms were legally obligated to register a branch. Although the union laws, like most labor legislation have not been changed for over 20 years, union activity has been very low as the unions find themselves struggling to find their place in the new economy. Although still a legal requirement, some firms continue to operate without union registration without any problems. Others that have union registration generally do not encounter any significant problems and find the union organizations to be quite helpful in assisting in labor issues. General strikes and labor unrest in Tanzania are almost non-existent and there have been very few cases in the post privatization area. There is also a membership organization called the Association of Tanzanian Employers (ATE) which most companies are members of and assist in dialoguing with government and Unions on various labor issues and legislation (Ladha, 2000). Note that the first phase of Labor Law Reform – addressing employment relations, collective labor relations, dispute resolutions, and labor market institutions was approved by Parliament in April, 2004.

In this Chapter, we therefore discuss the labor market effects (structural effects, labor demand effects, and labor supply effects) of the trade liberalization in cotton and textile sector.

3.2 Structural Effects

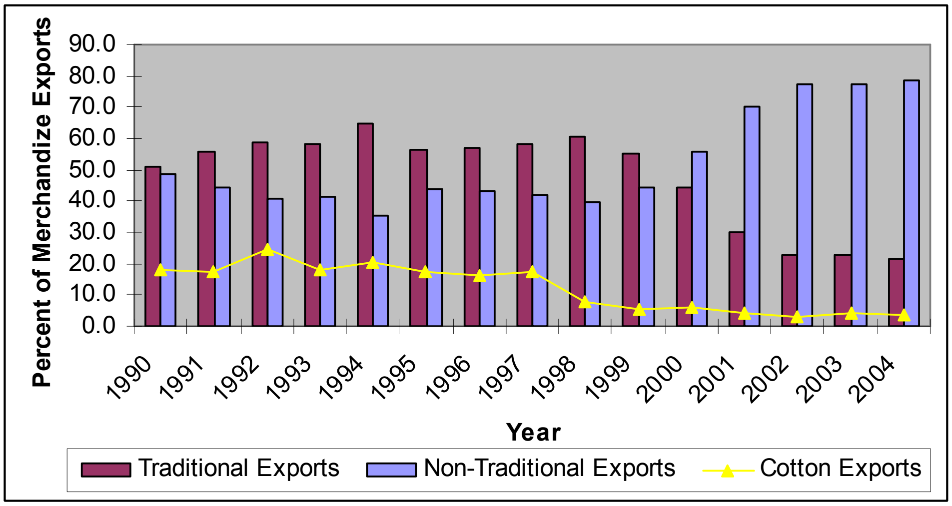
Trade liberalization could lead to changes in the composition of a country's economy, as it specializes in the production of goods or services where it has comparative advantage. One of the structural effects of trade liberalization on Tanzania as a whole, has been a significant shift in export structure from the dependence of traditional exports such as coffee, cotton, tea, and tobacco towards non-traditional exports such as minerals, manufactured and fish and fish products (See Figure 4). For example, cotton exports which initially increased from 74.6 USD million in 1990 to 130.4 USD million in 1997, declined to 47.2 USD million in 2004. Though it could be possible that some of this decline is due to switching to other crops, the decline in traditional agricultural crop exports, in light of the fact that agriculture generates 70 percent of employment and that 90 percent of the poor reside in the rural areas, is a concern when considering the employment effects of trade liberalization.

Note that before trade liberalization the government policies were in favor of traditional exporters. Exporters of non-traditional exports during the pre-liberalization period had to surrender most of their foreign exchange earnings and had to cope with a cumbersome and non-transparent system of export permits compared to those of traditional exports. Since the mid 1980s restrictions on the exports of non-traditional crops were relaxed, as exporters were allowed to retain an increasing share of their export proceeds to finance their import requirements (Kanaan, 2000).

---

[4] Country Reports on Human Rights Practices - 2003 Released by the Bureau of Democracy, Human Rights, and Labor February 25, 2004

Figure 4: Traditional and Non-Traditional (in percent)



Source: World Bank, Country Economic Memorandum (CEM), 2005

Shift of employment from the formal sector to the informal sector is another important structural effect. While trade liberalization has often had a negative effect on urban wage employment, as former import substituting industries and export processing industries become unable to compete, trade liberalization is often associated with a booming informal sector (UNCTAD, 2004). In Tanzania the informal sector is now the largest sector employing 55 percent of total persons in employment, followed by private (including formal) sector taking 29 percent and the rest in the remaining sectors. Informal sector employment has expanded and more households both in urban and rural areas are undertaking informal sector activities. According to the Integrated Labor Force Survey, 2001 one in three households has an informal sector activity compared to one in four ten years ago. About 61 percent of urban and 25 percent of rural households operate these activities. In the textile sub-sector for example, the rapid influx of cheap imports such as the second hand clothes opened new economic opportunities for the urban poor and vitalized a small-scale informal commercial sector called "Machinga" Ogawa (2004). These retail traders also generate huge profits due to the fact that they operate informally and hence do not fall into the tax net.

A final important structural effect is the institutional effect which involves the shift from investment driven by the public sector to the one driven by the private sector. This was associated with an increase in the number of private buyers from 10 during 1993/94 season to 26 in 2003/04 season. In addition, private companies have installed 22 ginneries increasing the number from 33 in 1994 to around 60 in 2002. Table 2 below demonstrates the diminishing role of Cooperative Unions in handling the cotton crop. In 1994/95 Cooperative Unions purchased about 84 percent of all seed cotton and the TCLSB handled about 6 percent of the crop, while the private sector handled only 10 percent of total output. Cooperatives by 2002, were purchasing less than 10 percent of the crop while the private sector were handling more than 90 percent. Indeed, if it were not for Ministry of Finance guarantee enabling a number of cooperatives unions to obtain finance from the CRDB bank, the share of the seed cotton harvest handled by cooperatives might have been even smaller (Maro and Paulton, 2002).

Table 2: Market Shares Among Different Buyers

Season	Coops	%	Private	%	TCLSB	%	Total
1994/95	103,981	84	12,342	10	7,340	6	123,663
1995/96	162,161	66	77,298	31	6,455	3	245,914
1996/97	150,254	60	87,114	35	12,076	5	249,444
1997/98	90,174	43	116,505	56	1,075	1	207,754
1998/99	35,149	33	71,598	67	-	-	106,747
1999/00	41,138	41	59,422	59	-	-	100,560
2000/01	8,948	7	114,610	93	-	-	123,558
2001/02	12,572	8	135,608	92	-	-	148,180

Source: Maro and Paulton, (2002)

3.3 Labor Demand Effects

The labor demand effects can influence the trend and pattern of employment growth. In addition, the labor demand effects can result from costs of production including labor costs. The analysis of labor demand effects focuses the textile industries, the cotton processing industries (ginneries), and the medium scale farmers because the nature of their operations requires labor input. Evidence available in the formal statistical sources shows that in the textile sector, trade liberalization in Tanzania was associated with marked decrease in the formal employment. According to Table 3 below, wage employment in the textile sector decreased from an average of 26.6 percent of the total manufacturing employment between 1991 and 1994 down to an average of 13.1 percent between 2001 and 2004. This trend, however does not necessary reflect the decline in the demand for labor but probably it reflects the collapse of the textile sector which came with the trade liberalization. However, one striking feature of the trend in wage employment is the change in pattern between permanent employment and temporary employment. While the share of permanent employment declined from and average of 98.2 percent between 1991 and 1994 to an average of 10.1 percent between 2001 and 2004, the temporary employment share increased from an average of 1.8 percent to 89.9 percent in the respective periods.

This change in pattern of employment is not by accident, but it reflects the motive of the government behind the development of the textile sub-sector in the country – that is, of employment generation. Therefore during the pre-liberalization period, the government ensured permanent employment for the textile workers. With liberalization, the private sector in the textile industry gained much flexibility in recruiting and offloading workers, as its main objective is profit making. In some cases this behavior has been costly. For example in 2004, three textile mills namely, NIDA, Karibu, Sunguratex were shut down temporarily due to labor unrest. Note that trade liberalization forces existing firms as well as new entrants to restructure, focus on their core competencies and bring in technological changes. This, as in the Tanzania's textile sub-sector, has led to a situation in which existing employees who cannot be retrained are declared surplus through voluntary retirement.

Table 3: Trend and Pattern of Employment in the Textile Sector between 1991/4 and 2001/04

	Permanent Employment		Temporary Employment		Total Textile Employment	Total Manufacturing Employment	Share of Textile Employment in Manufacturing
	Number	Percent	Number	Percent			
1991	30624	98.5	461	1.5	31085	124002	25.1
1992	34322	98.3	581	1.7	34903	128967	27.1
1993	34358	97.9	644	1.8	35085	129456	27.1
1994	34394	98.0	713	2.0	35107	129984	27.0
Average	**33425**	**98.2**	**600**	**1.8**	**34045**	**128102**	**26.6**
2001	930	10.7	7769	89.3	8699	68570	12.7
2002	911	10.3	7932	89.7	8843	68296	12.9
2003	892	9.9	8098	90.1	8990	68120	13.2
2004	874	9.6	8268	90.4	9142	68045	13.4
Average	**902**	**10.1**	**8017**	**89.9**	**8919**	**68258**	**13.1**

Source: URT (2005a) "Economic Survey – 2004" for data from 2001 to 2004 and URT (1996) "Economic Survey – 1995" for data from 1991 to 1994

As it was argued before that the decrease in employment may reflect the closing down of textile companies rather than the decrease in demand for labor, this study here attempts to estimate the change in the demand for labor in the textile sub-sector by making use of the employment elasticity. Employment elasticity measures the percentage employment growth resulting from unit percentage output growth. One study on the Tanzania's manufacturing sector by Wangwe et al (2000) came out with an estimate of about 0.55 for the output-employment relationship in the post-adjustment period (i.e., 1988-1998). In this study as in Table 4, we compare two sub-periods, i.e., 1991-94 and 2001-04. Note that data during each sub-period are quite reliable because they take into account the two Labor Force Surveys conducted in 1990/91 and 2000/01, respectively. According to Table 4 below employment elasticity in the textile manufacturing sector declined drastically from 3.2 in the 1991/94 down to 0.05 in 2001/04. This implies textile industries during the post-liberalization period have become less labor-intensive.

Table 4: Textile Manufacturing Employment Elasticities

	1991	1992	1993	1994	2001	2002	2003	2004
Real Textile Output Growth	-0.7	16.5	-17.6	-14.9	14.6	26.1	9.8	-5.0
Textile Employment Growth	-8.6	12.3	0.5	0.1	4.3	1.7	1.7	1.7
Employment Elasticity	11.9	0.7	0.0	0.0	0.3	0.1	0.2	-0.3
Average Employment Elasticity	3.2				0.05			

Source: Economic Survey (2004) for data from 2001 to 2004 and Economic Survey (1995) for data from 1991 to 1994

In the cotton processing industries (i.e., the cotton ginneries), the nature of employment is generally short-term and a large part of employment is casual. Employment includes among others, engineers, technicians, shift in-charges, trade agents, drivers, turn-boys, and casual labors. Most of the skilled workers are offered 3-month contracts, whereas most of the unskilled workers are offered casual employment. The casual labor normally operates in three shifts. In the surveyed companies, employment in each shift ranges from 25 to 100 workers.

Note that in both the textile and cotton processing industries labor demand is very much influenced by labor costs. Labor taxes comprise a large proportion of these labor costs. For example, the average payroll taxes add up to almost 17 percent of salary. Employers have to pay 10 percent contribution of salary on behalf of the employee for the pension fund. Employers must also pay VETA (Vocational and Training) Levy of 3 percent, and a Housing Levy of 4 percent on gross salaries while the Employee must contribute a further 10 percent to the pension fund and pay his own income tax (PAYE) which is currently 12.5 percent for the average income earner (of 70 USD per month). The top rate of income tax is 30 percent and is for those earning more than 500 USD per month.

Most companies (especially those that have very seasonal labor demand) tend to employ a part of their workers on temporary or casual contracts in order to avoid the high taxes and to enable them to have flexibility during slow periods. The Law demands that "casual" labor be employed on a daily basis. It is very common for companies to engage workers on short-term contracts (up to 3 months). However, the Law further states that if a worker is engaged consecutively for more than 3 months or if a worker works more than 288 days within 12 calendar months of joining, then the worker is considered to be a permanent employee. Permanent workers can be terminated by giving one month's written notice or cash in lieu of notice. Terminating workers is not usually a problem provided that the correct procedures are followed. Workers are also entitled to holiday pay of 28 days for every year worked (Ladha, 2000).

At the bottom of the cotton chain are the cotton farmers. Employment data on cotton farming is very difficult to obtain. However, many cotton farmers are engaged in seasonal employment and own just small size farms. Only medium sized farms of around 40 hectares exist and there are virtually no large-scale farms. The owners of the medium-scale farms are involved in the demand for labor as cotton farming is a very tedious undertaking. Labor is associated with such activities as ploughing, weeding, and harvesting. Most large farmers use tractors in which they hire at the rate of about Tsh 30,000 (USD 24.6)[5] per hectare for ploughing. Other charges include harvesting which costs Tsh 10,000 (USD 8.2) per hectare and harvesting which costs Tsh 200 (US Cent 16) per "debe"[6]. The medium scale farmers usually hire local dance group members for weeding as well as harvesting.

It should be noted that the demand for labor is a derived demand. Producers achieve a return from selling their output and employ labor as one input in the production process. A producer's desire to increase output is therefore the most important source of the demand for labor (Wangwe, et al, 2000). There are many determinants of output growth such as macroeconomic environment, government policy, quality of infrastructure, access to utilities (power, water, communication) and financial services. Producers also need markets for their output. However for the case of Tanzania, as discussed in the

[5] USD 1 was equivalent to Tsh 1,218.3 as of 30th April, 2006.

[6] One "debe" is equivalent to a 20 litre bucket of water.

previous chapter there are many market opportunities both domestically and internationally. The problem is to build the capacity of the cotton and textile stakeholders in order to take advantage of the opportunities. Therefore a necessary condition for increasing output is to increase the quantity and/or productivity of inputs.

Both the textiles and the cotton processing industries are constrained by unreliable power supply and frequent breakdown as a result of outdated machines. On top of that, spare parts have been costly. Perhaps as a result of these factors, productivity has also been low. For example, in most ginneries productivity stands at only 2 bales per 8-hour shift. The products produced include lint (i.e., the higher quality AR and the less quality BR), seeds, oil, cotton cake for cattle and cotton husk for animals. However, the most important input is the cotton itself. Therefore the issue of quality and productivity of cotton is very important. Most ginnery owners, comprising the main cotton exporters feel that in order for them to become successful, they are responsible to assist the cotton farmers in raising productivity.

Several measures are now being taken in order to improve the productivity. The TCB, which is responsible for regulating cotton business, by enforcing law (quality, rights and property), and promoting cotton, has made commendable efforts to raise productivity by educating cotton farmers through seminars, cinema and demonstration plots. However, some surveyed farmers complain that experts from the TCB never reach cotton farmers in the grassroots. In most cases the farmers themselves have to diagnose their problems and visit the TCB experts themselves. The current practice is that the experts visit the farmers two week before every beginning of the cotton season. These experts are supposed to come from Zonal Headquarter and Ukiliguru Research Center. Currently the productivity stands at 200 to 300 kilograms per hectare, while the potential productivity is estimated at 900 to 1200 kilogram per hectare.

TCB is also working closely with several stakeholders to raise the productivity of cotton. One of these stakeholders is the Cotton Development Fund (CDF). The CDF is formed by the ginneries owners and some cotton buyers. The ginnery owners and cotton buyers contribute some money to the fund (about Tsh 14000 (USD 11.5) to 18000 (USD 14.8) per bale) in order, among others, to make sure that the cotton farmers get seeds, pesticides and fertilizers. CDF has managed to establish several farming input schemes. Some of these schemes include the tractor scheme and the input voucher scheme. With the tractor scheme each village gets about three tractors for free to assist in the farming activities. Farmers only pay for the operating costs, such as fuel. As regards the input voucher scheme, farmers are deducted about Tsh 15 (US Cent 1.2) for every kilogram of cotton they sell, and this amount is recorded in a “passbook”.

In general, the CDF has performed well and has boosted production. However, some of the surveyed ginnery owners and cotton buyers who contribute to the fund complain about financial mismanagement. In addition, many cotton farmers surveyed are suspicious of administrative corruption in the distribution of cotton inputs by the Village Extension Officers (VEO). Many cotton farmers complain that they do not get the farming inputs according to what they have contributed in the “passbook”. Sometimes farming inputs distributed by the VEO appear to have higher prices than those quoted in the neighboring farming input shops. Note that 1 liter of pesticide costs about Tsh 10,000 (USD 8.2) while 1 kilogram of seeds costs about Tsh 100 (US Cent 8.2).

3.4 Labor Supply Effects

The main determinant of labor supply in the cotton and textile sector in Tanzania is wage or non-wage labor income. People decide whether to supply their labor in wage employment depending mainly on wages offered relative to income they receive in the non-wage employment. Note, however, that cotton growing activities are seasonal. Therefore, after the cotton growing season ends many people become unemployed and would prefer to supply their labor to the cotton processing or textile industries in the form of wage employment.

Wages depend on the national minimum wage scale. Workers' salaries differ depending on education and experience. The trend in labor income in the textile sub-sector shows a decline relative to other manufacturing sectors despite the absolute increase (See Table 5). Note that most textile industries employ about 1200 permanent and casual workers, out of which 30 to 40 percent are permanent employees.

Table 5: Trend and Pattern of Labor Income in the Textile Sector between 1991/94 and 2001/04

	Salaries		Other Payments		Total Textile Labor Income	Total Manufacturing Labor Income	Share of Textile Labor Income in Manufacturing
	Million Tanzanian Shillings	Percent	Million Tanzanian Shillings	Percent			
1991	2279	72.0	887	28.0	3166	15218	2.3
1992	2507	66.9	1242	33.1	3749	18316	1.8
1993	2638	62.0	1614	38.0	4252	21093	1.5
1994	3164	62.0	1937	38.0	5101	25307	1.2
Average	**2647.0**	**65.7**	**1420.0**	**34.3**	**4067.0**	**19983.5**	**1.7**
2001	3344	84.8	601	15.2	3945	69811	2.1
2002	4300	86.9	651	13.1	4951	75680	1.8
2003	7626	91.5	705	8.5	6213	82512	1.5
2004	9700	92.7	763	7.3	7798	90478	1.2
Average	**6242.5**	**89.0**	**680.0**	**11.0**	**5726.8**	**79620.3**	**1.6**

Source: URT (2005a) "Economic Survey – 2004" for data from 2001 to 2004 and URT (1996) "Economic Survey – 1995" for data from 1991 to 1994

In the cotton processing industries (i.e., the cotton ginneries), wages also depend on the level of education and experience. The average wages in the surveyed companies for engineers, shift in-charges, and technicians averaged about Tsh 380,000 (USD 350) , Tsh 120,000 (USD 100) and 90,000 (USD 80) per month respectively, while the average wage for casual labor stood at about Tsh 1,100

(USD 1.5) per 8-hour shift. Women who constitute the poorest section of the population in the cotton growing regions are normally employed as casual laborers (usually constitute about 25 percent of casual labor) and due to the low wages they do not benefit from wage employment.

As regards non-wage employment, most of the smallholder cotton farmers supply their labor in either farm or off-farm informal activities. In the farm activities, earnings depend on both the production and transaction costs on one hand and the export price on the other. In relation to the cost of production, cotton farmers have been profitable as they have been able to retain more than a half of the producer price. In 2004, for example, the producer price was Tsh 300 (US Cent 24.6) and the cost of production was estimated at Tsh 170 (US Cent 14). Transaction costs have also decreased because of trade liberalization. Unlike during the pre-liberalization period, nowadays farmers are paid instantly as purchasing on credit is not allowed. In addition, the removal of agricultural price controls and the liberalization of marketing arrangements significantly shifted agricultural income from marketing boards to the small farmers. As discussed previously the producer's share of the export price has increased, though the gap between the two in nominal shillings terms has widened. Increases in the producers share are beneficial to labour supply and production and should be supported by policies supporting organization of farmers and establishment of central markets.

The other important determinant of labor supply in Tanzania is land ownership (Mduma and Wobst, 2005). Land is very limited in the cotton growing regions and many farmers own small sized farms. Therefore due to the need to smoothen their labor income many smallholder cotton farmers encounter two key options: Either to increase productivity; or use some of their time in off-farm activities. Productivity remains extremely low in Tanzania partly due to lack of credit financing for input procurement following the collapse of transactions previously handled by the Regional Co-operative Unions. Because of low productivity in the cotton farms, many cotton farmers have resorted to increasing the quantity of their cotton at the expense of the quality of cotton by taking advantages of the weaknesses in the liberal market system.

According to the International Textile Manufacturers Federation (2001) Tanzanian cotton lint was among the worst contaminated "national origins" in the world. Gibbon (1999) notes a number of reasons for a decline in the quality of Tanzanian lint since liberalization. These included the mixing of previously zoned seed varieties, the collapse of grading procedures at the time of primary purchase and a decline in insecticide use. Behind these lay a lack of resources for monitoring and enforcement on the part of the TCB and the fact that numerous buyers needed to acquire seed cotton to fulfill forward supply contracts and pay outstanding loans. Before trade liberalization Tanzania's cotton was being bought at a premium. But now it is bought at a discount of about 6 US cents per kilogram.

Maintaining high-quality standards for cotton lint requires effective quality control procedures throughout the supply chain. Here there is a conflict between the TCB and the cotton farmers who most of whom are illiterate or ignorant. In addition, private players' malpractices have aggravated the situation. Private traders have been employing some exploitative practices (e.g., cheating by not using proper weighing scales), while farmers have generally responded poorly in terms of observing the quality of their cotton.

For example, cotton farmers would wet or soil the cotton in order to increase its weight. The immediate losers in the process are the ginneries who incur maintenance costs as a result of processing the deliberately spoiled cotton. Currently TCB has contracted a private firm (namely, the Baltonic) to undertake data monitoring and quality control activities at all operational ginneries.

Besides increasing productivity, a cotton farmer has an option of being engaged in off-farm activities. Note that the movement of labor from agriculture (to off-farm employment and urban areas) is one of the stylized facts of economic development. There has been slow but significant labor mobility in the cotton growing areas. Some surveyed stakeholders argue that the dependency on cotton for livelihood is now diminishing. Therefore many cotton farmers now undertake other activities. Some of the other activities that they undertake include paddy farming, livestock husbandry on cattle, goats, sheep, and small businesses such as watch repair, etc. According to Mduma and Wobst, (2005), there have been some policy conflicts in relation to promoting the on-farm activities and the off-farm ones in Tanzania. For example, while the National Employment Policy (URT, 1998) encourages the development of rural off-farm employment, the Ministry of agriculture in its Agricultural Sector Development Strategy (ASDS) considers off-farm employment as a competitor for limited rural labor supply. The ministry further argues rural-urban migration reduces the agricultural labor force (URT, 2001)

4.0 THE COMPLIMENTARY AND COMPENSATORY POLICIES TO TRADE LIBERALIZATION IN THE COTTON AND TEXTILE SECTOR

Trade liberalization and reforms cannot work and have never worked as stand-alone policies or measures. In other words undertaking trade reforms and developing trade policies in isolation without the presence of mutually supportive policies will not bring about the full benefits resulting from liberalization. The impact of trade liberalization and reforms will depend on the policy environment and the complimentary policies shaping the situation of countries entering the trade liberalization (Siphana, 2003). An unfortunate, but consistent feature of trade liberalization, however, is that not everyone is automatically better off afterwards, at least in the short-term. There are losers as well as gainers from trade liberalization. Compensatory policies are therefore very crucial in order to directly offset the adverse impact of trade liberalization (Winters, 2002). Compensatory policies come in a variety of institutional forms that range from broad policies affecting large groups of individuals who share general attributes, such as pensions and unemployment compensation, to narrowly targeted programs that benefit only small segments of the economy, such as individual, industries or firms.

4.1 Complimentary Policies

As mentioned earlier, trade liberalization and reforms cannot succeed in promoting growth in isolation from other policies and reforms. Complementary policies enhance the flexibility of markets, which reduces the costs of adjustment and facilitate the creation of markets that will benefit the poor. Therefore, despite the trade liberalization and reforms in the cotton and textile sector, other policy improvements are required in order for the sector to reap the full benefits of trade liberalization. The degree to which developing countries and poor groups within them gain or lose from liberalization depends crucially upon a range of policies with regard to service delivery, infrastructure provision and the regulation of financial markets (Conway, 2004). According to Winters (2002), the key complimentary policies include infrastructure support, development of markets, fiscal incentives and removal of rigidities in the labor market. In this chapter, we find that the shortage in the implementation of these policies has also affected the cotton and textile sector in Tanzania.

Better and cheap infrastructure including roads, ports, air transport, cold storage, and railways are very important in order to give the poor better access to the principal markets for their products and let them benefit from opportunities that might develop as a result of trade liberalization. Improvement of infrastructure including reduction of delays, and simplification of procedures reduces internal and external transport costs and therefore intensifies globalization. Infrastructural problems in the cotton and textile sector in Tanzania are very critical (Baffes, 2002). Uncertainties, theft and delays in the cotton and textiles transportation have been very common. For example, the main problems facing the cotton farmers and buyers include poor cotton storage facilities, and poor roads. In Mwanza, for example, farmers are forced to use ox-driven carts to transport their cotton because of poor road conditions. Because of poor cotton storage facilities, farmers are forced to rent cotton storage facilities from Nyanza Cooperative Union where they are charged a minimum of Tsh 50,000 (USD 41). Ex-ginnery purchasing by the cotton processing industries is always done in order to avoid transport costs. Other major infrastructural problems especially in the textile and cotton processing industries include unreliable power supply accompanied by high tariffs.

The government has made commendable efforts to improve the country's road infrastructure. The formation of the Road Fund Board and the executive agency TANROADS for the trunk and regional road network has been a major step forward. However, efforts to improve rural road network have been less impressive. In most cases the government has been relying on community-based initiatives for small-scale labor based construction. Unfortunately, a lack of capacity at the local government level impedes these efforts. According to the National Strategy for Growth and Poverty Reduction (NSGPR), the government plans to repair 15,000 km of rural roads annually by 2010 from 4,500 km in 2003. The government is also looking for a way to reduce the high power tariff, which is severely hampering the manufacturing sector, textile inclusive. The declining labor intensity of textiles shows that manufacturers consider greater use of machinery than in the past to be the best mode of production, further increasing the need for a stable electricity supply. Detailed work on the restructuring of the power sector has been carried out but the implementation of the restructuring has been delayed partly as a consequence in international energy market.

Policies encouraging the development of markets are very important. One such policy is the deregulation and the removal of monopolies (such as state trading monopolies) that could adversely affect the poor or prevent them from receiving the benefits of trade liberalization. Perhaps more important, however, for the poor are the technical assistance, extension services in agriculture, and training in up-to-date business practices that they may need to receive if they are to take advantage of new market opportunities. Developing credit markets is also an important way of facilitating the provision of important inputs to encourage market activities.

Availability of credit in the cotton and textile sector in Tanzania has been a big problem especially to the ginneries. Many ginneries run by the cooperative societies have problems with finances. Normally they get funds from the commercial banks, mainly the CRDB. However, this credit has not been adequate. As regards cotton farmers, financially, they are at a bad state as they do not receive any credit to purchase farming inputs. Extension services also favors people living in urban areas more than those in rural, where the majority are poor. For example, in Mwanza urban areas a tractor can be rented at Tsh 15000 (USD 12.3), while in rural areas it is rented at Tsh 30,000 (USD 24.6). In addition, administrative corruption has been mentioned as one of the main problems in the distribution of farming inputs.

In the National Strategy of Growth and Poverty Reduction (NSGPR) the government has designed important policies to ensure the development of market for the agriculture sector as well as the rural sector. Some of these policies include increasing training and awareness creation on safe utilization and storage of agro-chemicals (including agriculture and livestock inputs, e.g. cattle dips), and the use of integrated pest control, eco-agricultural techniques, and traditional knowledge; improving human resources capacity and efficiency in agricultural services delivery; strengthening the capacity for timely control of crop pests and disease outbreaks; improving the access to support services with particular focus on research and extension meeting the needs of farmers; and increasing communication and collaboration in delivery of extension services. As regards the market for micro-credits, the government's policy is to increase access to rural micro financial services for subsistence farmers, particularly targeting youth and women; and promote off farm activities with particular focus on supporting establishment of agro-processing SMEs, and the promotion of community based savings and credit schemes such as Savings and Credit Cooperative Societies (SACCOS) and revolving funds.

Fiscal incentives are also very important if trade is to work for the poor. Taxation of the rural economy must be based on incentive enhancing interventions. The main challenge is however, that tax incentives have to be financed by the government revenues. While the government is considering raising the revenue many cotton and textile stakeholders are complaining about the higher taxes and levies. In addition, some private players have devised several means of evading taxes such as data (e.g., sales or output) underreporting. Some of the surveyed companies feel that tax evasion together with tax relief to some of the companies brings about unfair competition. There has been a number of fiscal incentives for investment in the textile industry, such as tax holiday on importation of textile machinery, spare parts and chemicals for the newly revived textile mills. In a bid to boost the performance of the textile sector, the Government of Tanzania has also established the Export Processing Zones EPZs, which provide very steep tax breaks to exporting firms which are located inside. The main hindrances faced by textile sector to benefiting from this initiative include the failure to export, infrastructural problems and cost factors to compete with the world market. Already three factories earmarked for EPZs have been registered. They are Urafiki Textile Mill, Ubungo Millennium, and the NIDA's factory, which is located at Tabata, also in Dar es Salaam.

Rigidities in the labor market can also make it difficult for the poor to move into other occupations, take advantage of new market opportunities and to minimize the costs of trade liberalization. Conversely, worker training and other forms of assistance can also help the poor who lose jobs in sectors that suffer from trade liberalization to find jobs in sectors that benefit from it. In the rural household, it is encouraging to note that households have been diversifying their economic activities. Although income from agriculture is dominant, some 40 percent of rural household income originates from off-farm employment. Opportunities for expanding and diversifying rural incomes from natural resources are not realized in part due to bureaucratic and legal hurdles. The proportion of rural households who derive incomes from more than three sources is 65 percent. The trend is already towards increasing employment in non-farm activities in the rural areas. Only that it is happening too slowly and without coordination and support. This trend can be reinforced through more deliberate policy interventions. On- and off- farm earnings need support from both a strong agricultural sector and other rural sectors including forestry, wildlife, fisheries and tourism (URT, 2005b).

4.2 Compensatory Policies

Even the best-designed trade liberalization and reform will create winners and losers. In order to mitigate the possible adverse effects of transitory, short-term adjustment costs on the poor, developing countries like Tanzania need to have well-functioning social safety nets to ease the tension between implementing trade reforms and alleviating poverty. They also need to quantify the budgetary costs of offsetting some of these adverse effects—this can be done in the context of the participatory process of the poverty reduction strategy papers for countries that have IMF- and World Bank-supported programs (Bannister and Thugge, 2001).

In Tanzania the National Strategy for Growth and Poverty Reduction (NSGRP) clearly identifies some intervention measures for people who have been affected by trade liberalization in terms of retraining and assistance in finding new employment. However, these interventions are general and not specific to the cotton and textile sector. In addition, due to inadequacy of budgetary resources, the government has targeted only the most vulnerable groups of population for social safety nets. These vulnerable groups include among other, children, orphans, people with disabilities, the elderly, people living with HIV/AIDS, and women.

There have been some specific measures to deal with employment problems resulting from trade liberalization both in the rural and urban areas. It should be noted that trade liberalization in the cotton and textile sector has reallocated labor from rural agriculture activities to rural off-farm activities or, through labor migration, to urban petty-trading activities. In addition, in urban areas many people who lost jobs as a result of trade liberalization and reforms formed Small and Medium Scale Enterprises (SMEs) both formal and informal. Most of petty traders in urban areas are youth aged 20 to 29 years. It is estimated that 92 percent of these have primary level education but no formal skills training. Those who formed SMEs in urban areas and those who joined smaller-scale non-farm activities in rural areas both require policy attention. They all lack adequate finance and technical and managerial skills, infrastructure, market information and contacts with external markets. Small businesses also face unfriendly and variable administrative impediments to business licensing. A credible, enabling policy environment is needed to enable the informal businesses to formalize their enterprises and improve their entrepreneurship skills. This requires a change in attitudes of the bureaucracy toward private sector development.

Several policy measures (not specific to the cotton and textile sector) are in place in order to provide new employment opportunities for the people who are unemployed as a result of trade liberalization and reforms in both rural and urban areas. Through these actions, the government plans to reduce unemployment from 12.9 percent in 2000/01 to 6.9 percent by 2010. These measures include implementing investment strategies that promote employment creation and promote self employment; creating employment in communities through community based construction and maintenance of rural roads; increasing public investment to influence the pattern of employment creation towards poverty reduction, and promoting private sector investment in "lead" sectors including, agriculture, tourism, mining and manufacturing; strengthening institutional and human capacity for efficient coordination of employment services delivery countrywide; continuing implementation of demand-driven skills development program for promoting self–employment and productivity; and developing affirmative actions to create employment opportunities for youth, women, and people with disabilities (URT, 2005b).

5.0 CONCLUSION

The Tanzania's cotton and textile sector underwent major reforms and liberalization measures during the 1990s. These reforms were part of the major reforms towards market oriented economy which were embarked on in the mid 1980s as a result of the Structural Adjustment Programs (SAPs) supported by the World Bank and IMF. Reforms in the cotton and textile sector included among others, withdrawing the role of the government in production and commercial activities in favor of the private sector, removing of price controls, rationalizing import tariffs, dismantling import restrictions, and improving incentives to export performance. As a result of these reforms many textile industries were closed down in the early 1990s because of failure to compete with cheap textile imports while the cotton sub-sector has been highly exposed to difficulties including, adverse weather and low world prices of cotton and lack of farming inputs. This has resulted a highly into fluctuating production performance.

This paper has examined the effects of trade liberalization on employment and wages in cotton and textile sector in Tanzania. The key questions investigated were: whether a sector has taken measures for improving skills of labor to enhance competitiveness; steps being taken by the governments to ensure jobs of workers facing unemployment on account of increasing competition and international trade; whether employment opportunities have increased due to a possible expansionary phase that could be as a result of globalization with international trade being a driver; whether there is any change in the pattern of labor's income trend (of the unskilled type in particular) after liberalization; whether international trade has provided opportunities for labor to acquire skills that would help them to move up the income ladder; whether international trade has affected the mobility of labor within a sector; whether there are any challenges that are emerging due to multilateral trading system; and whether thee are any hurdles that have not helped the labor and enterprise exploit the benefits associated with international trade.

The study found that the cotton and textile sector has become less labor intensive probably as a result of the rising labor costs, decreasing cost of capital, and possibly also increasing availability of skilled labor in Tanzania. With the presence of weak labor unions, labor insecurities have grown as employers have increased their preference to short-term contract and casual labor. While there has been massive unemployment in the cotton and textile industry, new jobs in the informal sector have been created partly as a result of cheap textile imports. Wage employment in the cotton and textile processing industries has not been rewarding as wages have remained rather constant. In the non-wage employment, and cotton farming in particular, the incomes received by farmers have not improved. In order to improve their incomes, farmers have been trying to increase the sales of their cotton by resorting to more quantity and less quality. However, relative to the export price, farmers have been receiving fairer prices of their cotton, despite the fact that they still lack adequate information about world cotton price movements. The study also found that complimentary policies on infrastructural development, fiscal support, credit markets development, and human capacity building are important if trade has to produce better results on poverty reduction in the sector.

In conclusion, the study recommends three areas for policy intervention in order for the cotton and textile sector to benefit from international trade. These are (i) human and physical capital formation, (ii) strengthening of regulatory institutions, and (iii) effective implementation of various policies which are present.

As regards lack of human and physical capacity, it was observed that many cotton farmers have little education. This has resulted into poor farming practices which led to low productivity and quality. In addition, many cotton farmers are not capable of accessing marketing information. As a result, they can be subjected to exploitation by the cotton exporters and fail to benefit from international trade. On the physical side of capital most cotton farmers own small sized pieces of land which hamper the effort to undertake large scale commercial farming activities. As far as the industries (i.e., textile and ginneries) are concerned, they lack capital to acquire modern machines in order to produce quality products required in the international market.

Weakness of institutions is another set of factors identified in this study that hinders the poor from taking advantage of international trade. As mentioned earlier, labor regulations have been found to be weak. As a result, textile and cotton processing industries' owners prefer to employ both skilled and unskilled workers at a short-term basis (i.e., three-month contract and casual labor, respectively). This has increased job insecurity. The cotton regulatory authority and other related institutions have also failed to monitor the issue of quality and productivity. Reasons offered have included insufficient staff and other resources. The cotton farmers, who are largely poor, have therefore suffered from this lack of extension services. Even when these institutions are capable of delivering the intended services, administrative corruption comes into play. Inefficiencies in tax administration and ability to identify stakeholder who are truly in need of tax incentives has also been a problem adversely impacting particularly the ginneries and textile industries owners. These have generally resulted into unfair competition.

Last but not least is the problem in the implementation of policies. Tanzania has designed very good policies in order to make the cotton and textile sector a success. Almost all the policies focusing on poverty reduction are in place. However, there have been many problems in terms of implementation. These problems include policy prioritization, decisions on the pace of policy implementation, and policy conflicts. For example, as regards policy prioritization, this study (and the poverty policy) showed that the construction of rural roads is very crucial for poverty reduction. However the government has mainly focused on the construction of trunk and regional roads and has left the construction of rural roads as a community responsibility. Some of the policy implementations are undertaken at a very slower pace. This problem however could also be a result of the slower pace characterizing the international trade negotiations as the country tries to harmonize her policies. Policy conflicts have also been identified as key sources of the ineffective implementation of policies. For example, differences between ministry of agriculture and other government policies on the promotion of farm vis-à-vis off- farm activities.

REFERENCES

Baffes, J., (2002), "Tanzania's Cotton Sector: Constraints and Challenges in a Global Environment", *Africa Region Working Paper Series* No. 42, December 2002.

Bannister, G.J., and K. Thugge, (2001), "International Trade and Poverty Alleviation", *Finance and Development, A quarterly Magazine of the IMF*, Vol. 38, No. 4., December 2001.

Bhagwati, J., and T. N. Srinivassan (2000), "Trade and Poverty in the Poor Countries".

Conway, T. (2004), "Trade Liberalization and Poverty Reduction", *Doha Development Agenda Impacts on Trade and Poverty*, Overseas Development Institute (ODI) October 2004.

GAFTT (2004), Official Website of Global Alliance for Fair Textile Trade www.fairtextiletrade.org.

Gibbon, P. (1999), "Free Competition Without Sustainable Development? Tanzanian Cotton Sector Liberalization 1994/95 to 1997/98", *Journal of Development Studies*, 36(1), 128-150.

International Textile Manufacturers Federation (2001), *Survey of Cotton Lint Contamination.*

Kanaan, O (2000), "Tanzania's Experience with Trade Liberalization", *Finance and Development*, June 2000.

Ladha, H. (2000), "Profile of Tanzania Textile Sector", Prepared for UNIDO, October, 2000.

Lundbaek, J. (2002), "Privatization of the Cotton Sector in Uganda: Market Failure and Institutional Mechanisms to Overcome It", Department of Economics and Natural Resources, Copenhagen, Royal Veterinary and Agricultural University.

Maro, W., and C. Paulton, (2002), "Competition and Coordination in Cotton Market System in Southern and Eastern Africa", System Overview Report for Tanzania, Department for International Development (DFID), September, 2002.

McCulloch, N., Winters, L. A., and X. Cirera, (2001), *Trade Liberalization and Poverty: A Handbook*, London, Center for Economic Policy Research.

Mduma, J.K., and P. Wobst, (2005), "Determinants of Rural Labor Market Participation in Tanzania", *African Studies Quarterly*, Vol. 8, Issue 2, Spring 2005.

NBS (2002), *The Integrated Labor Force Survey, 2000/01*, Tanzania National Bureau of Statistics, Dar es Salaam.

NBS, (2003), *National Accounts of Tanzania 1992 – 2002*, National Bureau of Statistics, National Accounts Department, The President's Office Planning and Privatization, The United Republic of Tanzania, Dar es Salaam, July 2003.

Ogawa, S. (2002), "The Solidarity and Norms of the Economic Activities of Urban Small-Scale Traders: With Special Reference to the Credit Transaction of the Second Hand Clothing Trade in the Local-Mega City, Mwanza, Tanzania".

Poulton, C., Gibbon, P., Hanyani-Mlambo, B., Maro, W., Larsen, M. N., Osorio, A., Tschirley, D., and B. Zulu (2003), "Competition and Coordination in Liberalized African Cotton Market Systems", Department for International Development (DFID).

RATES (2003), "Cotton – Textile – Apparel: Value Chain Report Tanzania", Regional Agricultural Trade Expansion Support, 2003.

Siphana, S. (2003) "Mainstreaming Trade for Poverty Alleviation: A Cambodian Experience", *Development Outreach*, World Bank Institute, July 2003.

UNCTAD (2004), *The Least Developed Countries Report – Linking International Trade with Poverty Reduction*, New York: United Nations.

URT (1995) *Economic Survey 1995*, *The national Bureau of Statistics*, The United Republic of Tanzania, Dar es Salaam, June 1995.

URT (1998), *National Employment Policy*, Ministry of Labor and Youth Development (MLYD), The United Republic of Tanzania, Dar es Salaam.

URT (2001), *Agriculture Sector Development Strategy (ASDS)*, Ministry of Agriculture, The United Republic of Tanzania, Dar es Salaam.

URT, (2005a), *Economic Survey 2004*, President's Office Planning and Privatization, The United Republic of Tanzania, Dar es Salaam, June 2005.

URT, (2005b), *National Strategy for Growth and Reduction of Poverty (NSGRP)*, The United Republic of Tanzania, Vice President's Office, Dar es Salaam, April 2005.

USAID (2004), "Tanzania Agricultural Sector Assessment", Dar es Salaam, Tanzania.

Kahkonen, S., and H. Leathers, (1997), "Is There Life After Liberalization: Transaction Costs Analysis of Maize and Cotton Marketing in Zambia and Tanzania", Prepared for U.S. Agency for International Development, December, 1997.

Wangwe, S. M., Hobbs, G. T. and H. G. Lawuo, (2000), “Investment for Poverty Reducing Employment in Tanzania: The Conceptual Context”, *Tanzania Political Economy Series 3*.

Winters L. A., (2001), “Trade and Poverty: Is there a Connection?” in Trade, Income Disparity and Poverty, Lausanne, WTO.

Winters, L. A. (2002), "Trade Liberalization for Poverty alleviation” Program for the Study of International Organizations (PSIO) Occasional Paper, WTO Series Number 10.

Winters, L. A., N. McCulloch and A. McKay (2004). “Trade Liberalization and Poverty: The Evidence So Far”. *Journal of Economic Literature* 42: 72-115.

APPENDICES

Appendix I: Comparison of the Performance of Cotton Sectors in Six African Countries, 2001-2002

Country	First Year of Liberalization	Estimated number of seed cotton production	Number of buying companies in first year of liberalization	Number of buying companies in 2001-02 marketing season[a]	Percentage share of market of top three buyers (CR3) 2001-02[b]	Percentage increase in seed cotton production since liberalization (%)[c]	Estimated average seed cotton yield 1998-2002 (kg/ha)	Mean seed cotton price 1998-2002 (US$ per kg)[d]
Ghana	1985	50,000	2	12	88	3,831	600	0.17
Mozambique	1989	230,000	3	15	50+	671	390	0.16
Tanzania	1994	300,000+	28	30	25	-32	421	0.22
Uganda	1994	300,000+	<15	27	50-60 (CR5)	167	310	0.22
Zambia	1995	80,000	2	6	90	119	568	0.22
Zimbabwe	1995	250,000+	1	5	95	130	752	0.25

Source: Adopted from Poulton, et al (2003)

[a] Buyers in Tanzania include both cooperative unions and private buyers. Number of buying companies quoted for Zambia is number of ginners only.

[b] CR3 figure for Tanzania is an estimate based on active ginning capacity.

[c] ''Percentage increase in seed cotton production since liberalization'' is calculated as the increase in mean seed cotton production for the 1998–2002 harvest seasons over that achieved in the five seasons prior to liberalization.

[d] The seed cotton price for Zimbabwe in 2001 and 2002 is based on a ''blended'' exchange rate (US$1¼Z$172 for 2001 and US$1¼Z$516 for 2002). Cotton exporters had to sell 40% of their exports at the official exchange rate (US$1¼Z$55), but could then sell the remainder using the parallel exchange rate. Price calculations for Uganda are based on 1998–2001 and for Ghana on 1999–2002. Quoted Tanzanian prices are seasonal ''medians.''

Appendix II: Distribution of Employed Persons by Industry and Status of Employment (Standard Definition) 2000/01

Industry	Current Status of Employment					Total
	Paid Employee	Self employed with employee	Self employed without employee	Unpaid family helper (non-agric)	On own farm or shamba	
Cattle, Beef & Dairy & Small Animals	43,962	0	498	598	733,960	779,018
Crop growing	74,304	0	4,860	463	12,888,131	12,967,758
Agricultural & Forest Services	19,659	0	3,852	1,100	0	24,611
Fishing	38,707	0	5,568	983	72,863	118,121
Mining & Quarrying	6,034	64	22,247	878	0	29,223
Grain Mill Products & Food canning	46,932	1,602	20,368	4,661	0	73,563
Manufacture of Wearing Apparel, Spinning, Weaving & Finishing	14,807	4,020	57,725	1,815	0	78,367
Furniture making & Manuf. Of Non-Metallic Mineral Products	33,048	9,496	47,551	3,423	0	93,518
Electricity & Water	14,491	0	207	0	0	14,698
Construction	55,413	24,792	66,943	4,543	0	151,691
Retail Trade-Agric. Products, Meat, Charcoal & Chicken	26,495	23,788	302,279	19,015	0	371,577
Retail Trade-Processed food (Mandazi, Scones etc)	6,039	7,146	187,235	24,027	0	224,447
Retail Trade-Clothing, Textiles & Footwear	8,541	5,259	75,422	6,657	0	95,879
Stationery, Photograph & General Retail	53,021	31,469	226,966	28,753	0	340,209
Restaurants & Hotel	58,100	29,939	122,969	19,849	0	230,857
Transport & Telecommunication	91,988	5,655	13,053	875	547	112,118
Finance, Insurance & Business Services	23,730	1,095	704	971	0	26,500
Public Administration	88,496	0	0	0	0	88,496
Non-Profit Making Public Institution	5,641	0	0	574	0	6,215
Social & Community Services	113,726	3,253	20,416	1,983	0	139,378
Education Services	185,507	2,048	6,617	983	0	195,155
Repair of MV, Footwear & Other Repair Services	29,138	8,370	39,380	1,991	0	78,879
Domestic Services	77,322	0	766	522,779	0	600,867
Other Personal Services	44,397	2,316	26,485	464	0	73,662
Total	1,159,496	160,313	1,252,111	647,385	13,695,500	16,914,805

Source: Integrated Labor Force Survey, 2000/01 – Analytical Report