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Agricultural Marketing and Supply Chain Management in Tanzania: A Case Study

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ARGICULTURAL MARKETING AND SUPPLY CHAIN MANAGEMENT IN TANZANIA: A CASE STUDY

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ABSTRACT

This study describes the prevailing marketing arrangements in Tanzania at local, regional, national and export markets using Dar es Salaam, Ifakara, and Mtwara as case study examples. The major impediments for trade in Tanzania has been categorised into three groups: 1) Physical infrastructure, 2) know-how and capital, and 3) institutional framework. Insufficient physical infrastructure in terms of roads increases the cost of transportation, works as an informal market barrier, forms a wedge between the supplier price and consumer price, and increases the loss of perishable products. Lack of know-how shows in poor market orientation and business skills, and leads to difficulties in managing and obtaining loans. Furthermore, the current institutional framework is unable to support the formation of strong traders and producers' associations and other representative bodies to enhance capacity building and to bargain for fairer terms of trade. In addition, the lack of market information and the weak legal framework lead to difficulties in negotiating trade agreements and enforcing the existing contracts. Currently the necessary institutional framework has been substituted for by long supply chains of middlemen, and relying on personal relationships between producers, traders and brokers. In order to realise the full potential of agricultural trade as a tool in the fight against poverty, the suggested policy interventions are to prioritise and increase funding for physical infrastructure both from national and international sources; place emphasis on rural non-farm employment and intra-regional trade development (horizontal integration); promote large-scale capacity building in business skills and market orientation; improve equitable access to credit and improve the management of the current schemes; enforce the existing laws and support formalisation of contracts to diminish risks of trading; and finally improve dissemination of market information to allow markets to work efficiently.

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1.0 INTRODUCTION

Tanzania's economy is heavily dependent on agricultural production. In 2003 agriculture accounted for half of the country's GDP, provided 51 percent of foreign exchange and employed 80 percent of the labour force (Agricultural Marketing Policy 2005). Selling agricultural products is the main source of cash income for most rural households. Even though the heavy dependence on agriculture is seen as a hindrance for rapid growth, and structural change is needed in the long run, the dominant role of agriculture is not likely to change in the near future. Thus the government has recently started targeting agricultural reforms as the quickest way to reduce poverty. In late 2001 the government produced the Agricultural Sector Development Strategy (ASDS) that aims to provide the basis for the rural sector of the economy to become an engine of growth, leading to a substantial reduction of poverty. This goal is also discussed in the Poverty Reduction Strategy Paper (PRSP) of 2000, where growth in agriculture was set as one of the pillars for achieving medium term targets for poverty reduction. The focus of the discussion on the agricultural sector as a source of wealth and livelihood has traditionally been on production. However, in recent years looking at agricultural marketing has gained more ground in the debate as farmers have failed to sell their crops or the prices paid have been lower than expected. In order to address the problems with agricultural marketing, the government of Tanzania is currently formulating a new Agricultural Marketing Policy (AMP), which is aimed at addressing problems in agricultural trade and facilitating the use of agricultural marketing as a means to enhance economic growth.

In order to promote agricultural trade and poverty alleviation, it is crucial to understand the hindrances and limitations that stakeholders face today. The government of Tanzania has carried out a substantial programme of trade liberalisation that started in the 1980's and by 1990 virtually all restrictions on the private trade in grains had been removed. During this time, Tanzania has undergone a large-scale renewal of macro policies to enhance the trading environment and the government has streamlined the legal framework to encourage trade and investment. Rapid removal of formal barriers to free trade has left the playing field open for new actors to enter, and old institutions that were previously dominant in the marketing of agricultural products have been forced to change form. However, the effect of the liberalisation at the macro level has not led to significant liberalisation taking place at the micro level. Many of the existing policies are yet to be implemented and even the ones that are in place, lack relevance in the environment in which the small-scale traders operate. The current situation presents prospects but also new difficulties for the market actors to exploit the opportunities that the liberalised markets have to offer. Even though the formal barriers at the national level have been removed, still various structural and informal barriers prevail at the regional and village level leading to ineffective marketing of the agricultural production. The aim of the current research paper is to contribute to the ongoing discussion on formal and informal barriers for trade in Tanzania today, to provide further insights on how the supply chain is functioning at present, and to suggest possible policies to facilitate trade in agricultural crops, which could be used when formalising the strategies for implementing the AMP.

1.1 Agricultural Market Liberalisation

From the beginning of 1980s a series of trade reforms have taken place in Sub-Saharan Africa (SSA) as part of their structural adjustment programmes. These programmes have aimed at boosting economic growth in the area and facilitating trade by decontrolling input and output prices, eliminating regulatory control over input and output marketing, restructuring public enterprises and reducing marketing board activities in pricing and marketing. The expectation was that improving price incentives and liberalising markets would be enough to induce supply response and well functioning markets. As the agricultural sector has a dominant position in the SSA countries, agricultural market reforms have been an important part of the programme, which have aimed at increased incomes, growth, and poverty eradication. However, two decades after the structural adjustment reforms started, the expected outcomes have not materialised, and the countries in SSA are still falling behind from the economic development in other developing countries, not to mention OECD countries. (Kherallah et al. 2000) Jayne et al. (2002) have explored the mechanism of food and input market reforms in several countries in Southern and Eastern Africa arguing that "a major source of controversy stems from assumptions that countries have actually moved to a liberalized market environment" whereas in reality the liberalisation is not fully implemented or is even reversed. Many African governments still intervene with agricultural marketing, and in countries where the government has withdrawn, the private sector has not always been able to replace the role previously occupied by the government. The observed slow and incomplete implementation is a result of among other things poor commitment of the political leadership, fear of disturbing existing client-patron relationships, and concern of losing important source of public revenues (Kherallah et el. 2000).

Still, even though incomplete, market liberalisation has opened up new opportunities for the local entrepreneurs to enter the market, increased competition among traders, and allowed for more cost effective trading and thus lower marketing margins. However, official market liberalisation has not removed informal barriers, such as poor access to credit, insufficient market information, and inability to enforce contracts in impersonal trade, which are still serious impediments for trade. Thus, "the overwhelming evidence in SSA suggests that improving price incentives for farmers was necessary but not sufficient to boost agricultural production" (Kherallah et al. 2000). Even though many Sub-Saharan African countries have liberalised trade during the past decade, research on the impact and true extent of the liberalisation is still ongoing[3].

Also Tanzania's economy has undergone an extensive market liberalisation scheme as a part of its structural adjustment programme since the 1980's. In response to fiscal pressure imposed by the previous state monophony and price control of grain and food markets, the government began a programme of food market liberalisation in 1984. By 1990 most of the restrictions on the private trade in grains had been abolished and the work for streamlining the trade policies continued. Since the start of the liberalisation there have been several studies analysing the impact of the changing trading environment on small-scale farmers. For example Delgado and Minot (2000) have found encouraging

[3] See Kherallah *et al.* (2000) for a synthesis of the research findings so far.

evidence of declining marketing margins for a number of crops in Tanzania after trade liberalisation, and Baulch (2001) argues that the abolition of restrictions on grain movements in Tanzania meant that private traders no longer incurred the substantial costs of evading state restrictions and thus the trading margins have declined.

However, among others, Putterman (1995) raised concern that the withdrawal of the state involvement from agricultural marketing would not automatically lead to improvement in smallholder agriculture and market conditions, which are still heavily characterised by imperfections and informal barriers. Also other case studies have presented evidence of the *de facto* imperfect trade liberalisation in different parts of Tanzania. The problems prevalent in the newly liberalised country were emphasised in a study on Morogoro and Songea districts by Ponte (1998) who concludes that in the liberalised Tanzania "farmers are growing more crops, risking more in marketing them, spending more in cultivating them, and earning less from their sale". These concerns were echoed in another case study on the informal marketing arrangements in Tanzania was done by Shechambo (1993). He describes the rural markets in Lushoto-district in North-East Tanzania and discusses the remaining challenges of marketing agricultural production in a second best environment where transportation costs are high, information scarce, seasonal fluctuations pronounced, and markets are thin. Ashimogo (1995), on the other hand, studied market integration of the maize market in Sumbawanga district concluding that rural markets are rather well integrated with the town market in Sumbawanga, but the degree of integration depends on the accessibility and distance from the central market, and high transfer costs drive the profits down. He also argues that due to frictions in the market, the fluctuation of the supply between the harvest seasons is not balanced by trade flows from other regions, which leads to wide variation in prices as well as food insecurity as farmers are unable to store their own production. On the whole, there seems to be evidence in favour of the overall benefits of formal market liberalisation in Tanzania, but also a growing literature of case studies demonstrating the prevailing impediments for trade. The current study aims at contributing to the analysis by compiling a coherent categorisation of the remaining barriers and discussing possible solutions to them.

1.2 The Scope of the Study

Barriers to agricultural trade and thus a widespread tendency towards subsistence farming in Tanzania is likely to lead to inefficiencies at the macro-level through misallocation of productive resources. Despite this economy-wide inefficiency, at the household level subsistence production for home consumption is chosen "because it is subjectively the best option, given all their constraints" (von Braun 1995). Understanding these constraints is thus an important part of designing welfare improving policies in the country. The aim of this paper is to build a case study that describes the current marketing arrangements for food crops and export crops in three regions in Tanzania: Morogoro, Mtwara and Dar es Salaam. The results are detailed in nature and even though wider implications are discussed, the scope of the study does not allow generalising the results as a complete description of agricultural trade in Tanzania. The strength of the descriptive methodology, on the other hand, is to provide evidence of the micro level impediments for trade as discussed in the introduction, and to give voice to small-scale traders and producers to raise their concerns in the wider policy debate. The focus of the paper is to discuss the welfare impacts of market barriers as well as the potential of agricultural marketing as a tool in the fight against poverty.

The rest of the paper is organised as follows: part two introduces the recent theoretical and empirical literature on informal barriers and transaction costs as well as their impact on poverty in developing countries. Part three examines the methodology used for the current study by introducing the research tools employed in collection of the material, and discusses the geographical scope of the paper. Parts four and five describe the current market arrangements in Tanzania by presenting the different types of markets used (part four) and introducing the supply chain and its main actors at the national market (part five). Part six analyses the markets and trade arrangements, as well as highlighting the main constraints for trade today. Finally part seven concludes and discusses policy recommendations based on the empirical findings.

2.0 INFORMAL BARRIERS FOR TRADE

Even in countries where political reforms have been fully implemented, the neo-classical trade theory of free markets fails to explain the true implication of formal trade liberalisation and functioning of the rules by which trade is organised at markets where the assumptions of perfect information and absence of transaction costs fail. An alternative framework for analysing market transactions is provided by the New Institutional Economics (NIE), where the emphasis of the research is on transaction rather than price (see e.g. Furubotn & Richter 1997 for an overview, and Williamson 1985 for the transaction cost perspective). The NIE is based on the neo-classical paradigm in its underlying assumption of self-interest-seeking individuals attempting to maximise an objective function subject to constraints, but it relaxes some of the debated neo-classical assumptions of perfect information, zero transaction costs and full rationality (Matthews 1986). The NIE assumes that apart from the physical moving of goods from place A to place B, exchange itself is costly in terms of obtaining market information (Geertz 1978, Hoff & Stiglitz 1990, McMillan & Woodruff 1999), negotiating contracts (Williamson 1981), monitoring (Moore & de Bruin 2004), and enforcing the agreed transactions (Besley 1994, Fafchamps 1996, Hendley et al. 2000, Williamson 1983). Most often the cost of exchange varies depending on the personal relationship between the two parties, and thus as the transaction costs are specific to each market actor, there is no single effective price at which exchange occurs (Sadoulet & de Janvry 1995). Each market actor operates according to the specific transaction costs they face, and as the transactions are dependent on personal relationships, the supply chains are usually long. As the number of transactions needed to get the goods from the original seller to the final consumer grow, so do the marketing margins leading to thin or absent markets between sellers and buyers. (Gabre-Madhin 2001)

Thus the theory predicts that as transaction costs increase, trade and welfare decrease. This theoretical finding has been explored and confirmed in empirical studies, producing a wealth of empirical evidence of market imperfections due to informal barriers for trade. These barriers differ depending on the given country context, and for the clarity of the survey, the studies are classified under three broad headings: 1) infrastructure, 2) individual constraints, and 3) institutional framework.

2.1 Infrastructure

Lack of infrastructure and thus high transaction costs is a well-known problem in the developing world and Delgado (1995) argues that especially in Africa market reforms alone are not sufficient as high-transaction costs leave the countries only semi-open. Pedersen (2003) agrees that despite years of development and liberalisation efforts transportation markets are still underdeveloped and present a major constraint for trade in Sub-Saharan Africa. A common argument in favour of infrastructure development is that trade liberalisation policies would yield much greater responses if aided by investments in infrastructure which would, first of all, decrease the transportation costs and, secondly, integrate the currently isolated households (Key et al. 2000, Heltberg and Tarp 2002). It is important to bear in mind, that transaction costs are not merely affecting local trade but also supply and demand of imports and exports (see e.g. Milner et al 2001, Badiane 1998). In many cases the transportation costs actually represent a greater implicit tax to the exporters than explicit distortions (trade policy) at the macro level. In Tanzania a recent study by Kweka (2004) estimated that the effects of transport costs constitute over one third (33%) of total Effective Rate of Protection (ERP) implying that the share of explicit tariff is about 70%. Domestic producers face thus an additional barrier for trade which diminishes the volume of traded goods. Consequently, the recent trade reforms pursued by the Tanzanian government have not been effective in promoting export, although they have led to a notable growth of imports. Thus, the author concludes that trade liberalisation efforts will only be effective when they are supported by efforts to overcome structural bottlenecks related to high transaction costs, distribution channels, and efficient markets (ibid).

2.2 Individual constraints

Furthermore, as emphasised in the theory of the New Institutional Economics, transaction costs are often actor specific, and all producers, traders and buyers make their decisions based on the price and transactions cost that are specific for them instead of reacting to a uniform market price. However, data on social transaction costs and market institutions are specific to each given context and often difficult to measure, and thus very little empirical work has been done to explore the household specific marketing arrangements prevalent in today's semi-open economies. A case study from Madagascar (Barrett 1997) found that the rural marketing chains were defined primarily by social identity, which made the impacts of the trade liberalisation different depending on the population subgroups. A widely discussed theme in the field of individual constraints for trade and moving away from subsistence farming is also households' access to credit and ability to smooth consumption to allow for time lag between production and cash income from selling the produce, as well as improved capacity to bear risk involved in market transaction. Besley (1995) favours the popular argument that even though income might vary radically in time, the consumption could remain smooth if the households could get enough credit against future income. However, in the poor rural areas the supply of formal credit is inadequate due to problems with asymmetric information and contract enforcement. In absence of reliable credit market, producers resort for alternative coping strategies. Farmers differ in their ability to sustain risk and crop choices are related to differences in risk aversion (Binswanger 1980). In the presence of risk in marketing decisions risk adverse families may maintain subsistence production beyond the optimal level in order to keep the risk of market failure low. In other words subsistence farming is used as a substitute for insurance and credit markets. In order to cope with risk in absence of well-functioning credit market diversification of livelihoods has been promoted as a welfare maximising strategy. As argued by Barrett et al. (2001) non-farm activities are gaining more pronounced role in the household economies alongside with traditional subsistence farming. These attractive non-farm opportunities are still usually not available for the more disadvantaged farmers, and thus the ability to spread risk of specialisation in agriculture by adopting complementary income strategies is still limited. However, improving opportunities for non-farm activities go hand in hand with improving access to markets where besides trade in agricultural goods also trade in other goods and services take place. "Removal of constraints to and expansion of possibilities for diversification are desirable policy objectives because they give individuals and households more capabilities to improve livelihood security and to raise living standards" (Ellis 1998).

2.3 Institutional framework

Finally, economic growth needs stable political and economic institutions that provide low cost of transacting in impersonal markets (North 1989). A common phenomenon found in several developing countries is the long supply chains caused by the personalised nature of trade and actor specific transaction costs. One way to mediate trade between unknown parties in absence of a regulatory framework is the use of middlemen. A recent study by Gabre-Madhin (2001) describes the supply chain in the Ethiopian grain market where brokers and middlemen play an important role in trade facilitation and lowering the transaction costs between unknown parties. The extensive supply chains and the use of brokers are not unique for Sub-Saharan Africa, but similar findings have been observed earlier e.g. in India (Lele 1971) and Peru (Scott 1985). The weak market institutions and long supply chains may lead to a large wedge between the price paid by the consumer and the price received by the producer. For example, Huang et al. (2002) analysed the real transaction costs in China by collecting empirical data from the market actors. They uncovered various domestic distortions prevailing in the Chinese markets and calculated new estimates for the nominal protection rates after interviewing traders, producers and buyers. The results show a significant difference between the official estimates and the real circumstances in the field. The idea of measuring true trade protection as it is perceived by the producer is further developed in Milner and Morrissey (1999) where alternative methods for measuring trade protection are presented. A further point to note on the institutional framework for trade is that constructing binding trade agreements and enforcing the established contracts are part of transaction costs faced by the market actors. Decreasing other transaction costs e.g. by providing better access to markets might not lead to expected trade outcomes unless trade has been made possible by established rules for transactions. Lack of established rules obeyed by both parties leads to increased costs of transactions and thus works as a barrier for trade. This point has been highlighted in Winter-Nelson and Temu (2002) in their case study of the Tanzanian coffee market. The overall impact of the coffee market liberalisation was still that the marketing margins dropped substantially after liberalization resulting in a large change in the producer prices. Also in another article by the same authors it is argued that the liberalisation of the coffee market in Tanzania has been a success leading to increasing producer prices, declining marketing margins and continued provisions of marketing services (Temu et al. 2001).

3.0 METHODOLOGY

3.1 Research methods used

The material for analysing the existing informal barriers in Tanzania today was collected during field work in March and April in 2005. The field work was carried out in collaboration with the Economic and Social Research Foundation (ESRF) in Dar es Salaam. Three primary research methods were used to collect information, namely: 1) a survey for retailers and buyers at the markets, 2) focus group interviews for all groups along the supply chain, and 3) key informant interviews for the relevant decision-makers and academics. The survey was designed to identify the way in which trade is carried out in Tanzania, to give an indication of how trade is related to the welfare status of the respondents, and to pin down the common characteristics of, and obstacles faced by, the market participants. The survey questionnaire is presented in appendix 5. The strength of carrying out a survey is that it collects quantifiable information that allows drawing more general conclusions than individual interviews; it avoids the bias of asking different questions from different people by using the same formulation for all the respondents; and it can be designed in advance to cover the desired areas of interest.

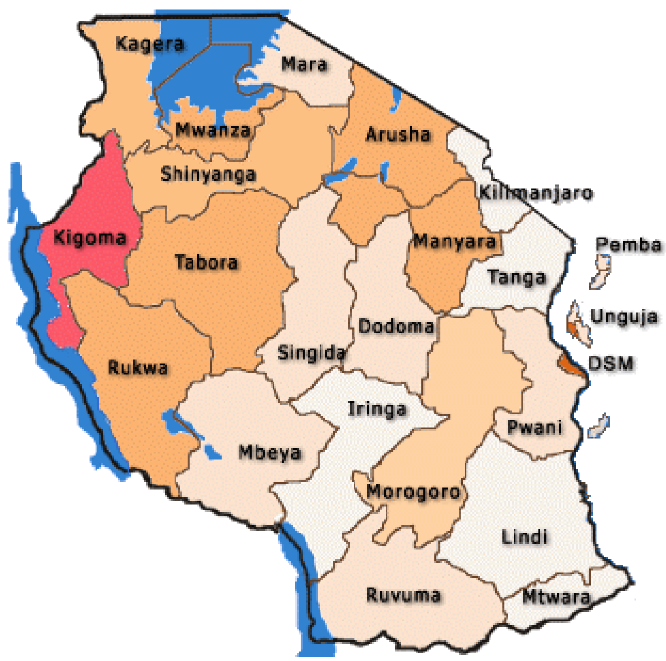
However, even though a survey is able to provide quantitative information on trade and poverty, the pre-specified form of the questions sets the agenda for the interview and thus the ability to capture underlying determinants of trade and poverty is diminished. Furthermore, the survey was only able to cover retailers and buyers at the market, but the barriers for trade expand much further on the supply chain. Some parts of the chain were dominated by a small group of traders for whom a survey would not have been an appropriate tool. Thus, besides the survey, focus group interviews were carried out to incorporate the perspective of all the stakeholders in the supply chain from the producer to the final consumer. These focus group discussions involved large-scale traders, wholesalers, brokers, transportation workers, and other relevant groups discussed in detail in appendix 6. These interviews provided rich qualitative information on the specific trade arrangements relevant to the market and group of traders the respondents belonged to. Group interviews also allowed other traders to complement each other and give further clarification on the issues discussed. A group can also be seen as an obstacle for sharing private information, but this is unlikely to be a serious limitation in this study as the nature of the questions was not personal, and most of the answers were common knowledge to all the traders at the market.

Finally, key informant interviews with relevant individuals, such as the managers of the markets, government officials, and academics have provided insights into the analysis. Even though they represent one person's view on matters, the people selected for the interviews were more knowledgeable on the policy issues than normal traders. They also represented an institution that is relevant for the traders and that allowed them to clarify the background and the political reasoning behind the rules and regulations. All individuals who were asked to participate in this study also agreed to do so. A complete list of individuals and institutions consulted for the study is presented in Appendix I. The results presented in this paper are based on analysing the information collected using all three methods, which complement each other and allowed the drawing of tentative conclusions on the trade barriers in Tanzania. However, as outlined above, due to the limited scope of the survey, and the qualitative nature of the other data used, these results should not be seen as representative for the whole country nor should they be assumed to capture all elements that might impact trade even in areas researched.

3.2 Geographical scope of the study

The regions selected for the study were chosen by target sampling to represent food crop surplus area (Morogoro), export crop producing area (Mtwara), and the main consumer markets (Dar es Salaam).

Picture 1: Regional Map of Tanzania



Source: 2002 Population Census.

As the emphasis of the research is to investigate poverty implications of trade facilitation, two poverty stricken areas were chosen for the study, which were then contrasted with the most affluent area in the country, i.e. Dar es Salaam. The regions also differ in terms of accessibility, road network density, and population demographics, as shown in table 1. (The study covered all the different districts in Dar es Salaam. For detailed characteristics of the specific districts covered in Morogoro (Ifakara) and Mtwara (Mtwara), see Appendix 4).

Table 1: Sample statistics of the case study regions

	Morogoro	Mtwara	Dar es Salaam
Income per capita (T.Shs)	171,530	221,378	512,710
Population density per km^2	25	68	1793
Trunk and regional roads (km)	3,742	5,596	596.23
All other roads (km)	1,520	1,173	1,447
Total road density (km/km^2)	0.05	0.34	.80

Districts covered in Morogoro were selected as a representative of a land-locked food crop producing areas, which are not easily accessible. The area is fertile and suited mixed cultivation. The most common crops are rice and maize but also coconuts and cashew nuts are grown. Morogoro region also produces 70 percent of the total sugar production in the country (NBS 2002). Ifakara town is a regional market centre located in the Southern part of Morogoro region, which served as a base for the case study. There is a river close to the Ifakara centre and fishing is an important source of livelihood. The road to the city centre is in bad condition; during the rainy season it and the feeder roads to the market become inaccessible. On the whole, the road network density in the area is lower than the national average (NBS 2002). Products arriving at the market may be rotten due to delays in transport on the poor roads. As the city centre is in a valley, heavy rains can result in extensive flooding covering wide areas of land and cultivation. There is a rail track to Ifakara which can be used for transporting agricultural products but due to the cost of shipping products on the train and highly irregular time table of the train, most products are transported by road.

Mtwara, on the other hand, was selected as a representative of export crop producing area with a major harbour but poor quality of road network. Mtwara region is dominated by the production of cashew nuts, and the area accounts for 60 percent of the national cashew nut production (Tanzanian Cashew Nut Board). The dry soil is well suited for cashew nut production and cashews are produced by both large-scale farmers as well as the small-scale farmers accounting for 80 percent for the population in the region (District council). Besides cashew, cassava is widely grown as a food crop which can also be sold at the local market in case of acute shortage of cash. The agricultural trade of food crops in the region is dominated by the cashew nut harvest season, not the harvest for food crops as is the case in Ifakara. During the cashew season there is a lot of money in circulation in the area, which boosts trade of food crops and other products. As Mtwara specialises in cashew production, the trade volumes of food crops are largely dependent on the purchasing power of the customers, which declines rapidly right after the cashew nut harvest. Cashews are harvested in the dry season from October up to January. The traders come to collect the cashew nuts from buying centres (cooperative societies) where they have been collected ready for export. The domestic market for cashews is very small and cashews are purely cultivated to be sold for cash. Mtwara region has only one rainy season from January until April. Frequent traffic of heavy cashew trucks followed by the rainy season is damaging for the road network in the area. Most of the roads in the area are not paved and 35 percent of the regional roads are in poor condition (TANROADS). There have been no major improvements in the road network in recent years but maintenance has concentrated on spot repairs on most heavily damaged areas. There are plans to rehabilitate the trunk road from Mtwara to Dar es Salaam, but currently due to the poor condition of the road, most products are transported from Dar es Salaam by ship.

Finally Dar es Salaam was included in the study as the main market in the country representing the large-scale national trade. After the formal liberalisation of the agricultural trade, quantity of food marketed in Dar es Salaam has increased rapidly: 13% of marketed surplus of maize, 70% percent of rice, and 95% of beans are sold in Dar es Salaam (Maro 1999). The city also serves as the central hub for all transport connections by road, rail and sea. The city is also the most affluent area in the country that imports most of its food from other regions in the country. Dar es Salaam market is the main destination of agricultural production in Tanzania, and it serves also consumers in other regions: rice from Ifakara to Mtwara passes through Dar es Salaam as there are no roads from Ifakara to Mtwara. The region hosts most of the transportation and export companies as well as main banks which highlights its importance as the centre of trade in the country. Dar es Salaam offers also wage employment for many, which creates a large market and makes it attractive destination for agricultural producers.

4.0 MARKET STRUCTURE FOR AGRICULTURAL PRODUCTS

In order to improve the marketing arrangements for agricultural products, one needs to understand the channels that are currently used for trade. In fact, the majority of small-scale agricultural producers are consuming their production to large extent within the household. The remaining surplus production can be sold either to the local markets or to national markets depending on the products and producer's access to the market. Four types of markets can be characterised as the main fora for transaction: the local village markets, regional markets, national markets, and export markets.

4.1 Local Village Markets

Local markets are small and cater for a limited number of near-by households. The markets are informal and emerge at cross-roads or small concentrations of households to facilitate the exchange of products among local farmers using commonly money as a means of exchange. The traders at the markets are farmers themselves with well-established small circles of customers. The access to the local market is easy but the supply at the market is very limited and fluctuates according to the season. Thus these local markets cannot be relied upon to guarantee food security during shortage of food in the local area. These markets are not connected to the national markets and little attempt is made to engage with the larger markets in the region. Local traders are most often women or children of the household who collect the products from local producers and sell them to their established circle of customers while exchanging the news with the neighbours and watching the small children. Even though larger markets would be accessible to these traders, social benefits at the local market outweigh the modest economic benefit of engaging with the regional market.

Even though better storage facilities for perishable products and larger working capital for expanding the business at the local market are in high demand, the cool storage needed for the goods would be a sizable investment with high running costs in areas where most households do not have access to main grid electricity and power cuts are common. Also the expansion of business with increased capital is unlikely to succeed as the customer base at the local market is fixed and unless other sources of cash income are present in a village, a very limited amount of money gained from selling agricultural products to neighbouring households circulates. More viable ways of supporting the local traders might lie in generating alternative sources of non-farm income, which in many of the villages are close to non-existent and/or encouraging traders' involvement at larger markets. An example of a successful strategy of exploiting market opportunities is presented in Box 1, where the experience of a women's group in Ifakara is presented.

Box 1: Ifakara Women's Group Expanding Trade

An example of a viable way to involve local traders into the larger market is shown by a group of 11 women in Ifakara. To complement each member's individual farming income, the group rented one acre of land together where they cultivate vegetables to be sold at the district market. The rent of the plot is covered by the group membership fees of 1000 shillings and each member is also responsible of investing 10,000 shillings into the group savings account. One of the group members produces the seeds, which are ranked to be among the highest quality in the area. Every other day one of the group members cycles to the Ifakara market to sell the products for approximately 5000 shillings. The money is deposited in the bank as the group is saving in order to expand their business. The plan is to raise enough capital to demonstrate ability to save and attract sponsors for a fish pond. Fish would provide income even when the agricultural products are scarce. Fish can be sold fresh and the remaining catch can be smoked for easy storing in absence of cool storage and sold later. The group is motivated and determined to work for expansion. The group has succeeded in generating income and savings to the group members who may not have been in a position to save and expand on individual basis.

Source: Interview with Ifakara women's group representative, March 2005.

4.2 Regional Markets

Regional markets are located in the centre of the region (Mtwara) or in larger district capitals (like Ifakara in Morogoro) providing a variety of food products as well as other non-food items, such as spare parts, second-hand clothes and electrical appliances. These markets are often the largest markets available to the consumers and what the regional markets do not supply, the consumers go without. The supply at the regional market is more reliable than at the local markets even though temporary shortage of goods may arise during the year. The producers may come to the markets to sell their products but most often the trade is run by professional traders who collect the products from the local farmers (either at the farm gate or at the market) and who come to the market every day of the week. The markets are well organised and regulated, and the traders must often register to be granted permission to trade at the market. There is also a daily fee of a couple of hundred shillings[4] to be paid to the respective market organisation for cleaning and security. Traders in regional markets commonly collect goods from a large geographic area including other regional markets, local small- and large-scale producers, as well as collection points in food surplus areas. The traders at the markets can be classified into large, medium and small-scale traders depending on the size of the business.

The large-scale traders sell several products including staple grains and vegetables from different regions. They are able to travel far to get the products and may hire other people or family members to attend the business while they go to buy the products. These traders are based at the regional market but they can occasionally also ship products to and from Dar es Salaam. Their turnover varies from 30,000 shillings to 100,000 shillings per day. The large-scale traders buy from known producers and are often able to get credit from the producers based on their long-term working relationship. A major asset for these traders is the acquired knowledge of the business and established links to the local customers.

[4] 1 US dollar is equivalent to 1,117 Tanzanian shillings (May 2005)

They are unlikely to move from the regional market into the national markets even for marginally higher profit as they are committed to serving the existing base of customers. This commitment is usually social rather than economic, and the loyalty to friends and relatives in the region is driving the behaviour over short-term opportunistic profits available in other markets. On the other hand, traders can also be assured of an established base of customers for their products, and thereby enjoy diminished risk of trading. The traders also commonly grant credit to their customers based on long-term trade relationships. The main constraints for these traders are the poor infrastructure which makes the transportation of the products from different regions and remote producers difficult, and the lack of capital to expand the business or to engage in storing the products when the price is low so as to sell when the price is high. These traders are still relatively well-off and able to save in order to expand their business.

Medium-scale traders buy their products mainly from the local producers and trade quite a limited number of goods. Their turnover is around 20,000 shillings per day, and they also commonly get credit from the producers as well as give credit to their customers if they know each other well. Medium-scale traders are aware of the opportunities of trading with other regions but are unable exploit these opportunities due to lack of capital. Their working capital is enough to run the business and make a living at the regional market but not to finance the transport cost or the purchase of large quantities of goods at once from other regions. Many of the medium-scale traders would like to change into grain trade as the products are easy to store and highly valued. However, medium-scale traders do not have sufficient capital to enter grain trade where large quantities are traded at once, and the aspiration for grain trade seems more prestige-driven than market demand driven. Medium-scale traders are thus more likely to trade with perishable and inferior goods, facing the risk of loss which they are poorly equipped to bear. They are also more vulnerable to price fluctuation than the large-scale traders due to the nature of the goods and lack of capital to absorb minor decrease in revenue. The business knowledge of the medium-scale traders is weaker than the large-scale traders', and they are often unable to carry out bookkeeping, calculate profits or identify costs.

Small-scale traders are rarely traders by choice. They are mostly working for survival in the absence of other sources of livelihood, as demonstrated in a case study in Box 2. They have very little or no land of their own and they collect the products for selling by foot, hired bicycles, or buy them from the larger traders at the same market only to be sold with a small margin. The products sold are often easily perishable (usually cassava leaves and pumpkin leaves traded by women and bananas traded by men). Their turnover is up to 5000 shillings per day and they have little or no plans or possibilities to expand the business. Many of the small-scale traders wish for a means of transportation so that they too could buy the products directly from the producers and thus make larger profit. Most of them would take a loan if available, not to improve the existing business but to enable them to escape from it. Small-scale traders suffer from poor food security and are often also otherwise disadvantaged e.g. being very old or having lost a bread winner in the household. They can rarely afford to give credit to their customers as their capital is just enough to buy the daily goods to be sold, and they have difficulties in getting credit from the producers as their problems of paying back are known.

Box 2: Trading as the last means of survival

An old lady unable to know her own age is trading bananas at the Ifakara market. She is living with two elderly family members and her handicapped brother is the head of the household. She comes to the market every day and often stays with her friends as she moves slowly and it takes her five hours to reach the market from her house. She does not own any land nor is she able to rent and cultivate any. She has started trading in her old days as means to support herself. She buys the bananas from the other traders at the market and sells 600-700 shillings worth of goods daily. She had been given exemption from the rent at the market due to her old age and poor standard of living. Even though she spends all her earnings on food, she is often forced to skip meals due to lack of income. She has no means or plans to expand her business.

Source: Own interview at the Ifakara market, March 2005.

4.3 National Market

The national market, as defined in this study, collects products from all regions to be sold in Dar es Salaam. Even though the national market, in a broader sense, can refer to trade between the regional markets, the poor infrastructure between the regional markets is currently limiting such transactions. Most products are traded via Dar es Salaam even though they would be consumed in other regions, which emphasises the importance of Dar es Salaam as the main market and allows the narrower definition of the national market to be used. The national market is dominated by large-scale actors working with smaller-scale trade facilitators. The market can be characterised by a large number of small-scale producers and local traders, a few large-scale traders who are able to finance transport and marketing costs, and again a large number of small-scale retailers and final customers. Due to the bottle neck of capital required to buy and transport large quantities of goods, the national market is more limited in access than the local and regional markets. At the same time it is also larger in volume and provides producers with cash income and opportunities for traders to expand their business. Still, the link from the national market of food crops to the international market of processed food products needs developing to ensure the dynamic nature of the market, and possibilities for expansion in the future.

4.4 Export Market

The export market for cash crops in this study refers to marketing of non-traditional crops like cashews and coffee, which have a very limited domestic market. Even though cross boarder trade of traditional crops like maize to the neighbouring countries in East African Community (EAC) and Southern African Development Community (SADC) is an important source of livelihood for households living close to the boarder, and this trade has implications to poverty and food security in the boarder regions, traditional exports constitute a small amount of total export earnings in the country. Thus, this study concentrates on the main export items and the special features related to their marketing. At present the export market for cash crops as defined above is rather isolated from the national market for food crops. The crops sold to the export market have often only a limited domestic market and thus the goods are traded through different channels than the domestically consumed goods. The export trade is dominated by large-scale traders as is the national market, with the distinction that at the export market the traders are usually foreign dealing with unconstrained supply of capital and considerable market power to affect prices. There are relatively few Tanzanian traders engaged in export trade: foreign buyers collect large quantities of goods from established buying centres and transport them to the boarder ready to be shipped out of the country. Tanzania exports mainly unprocessed agricultural products and little value added from retail and wholesale services or processing stays in the country.

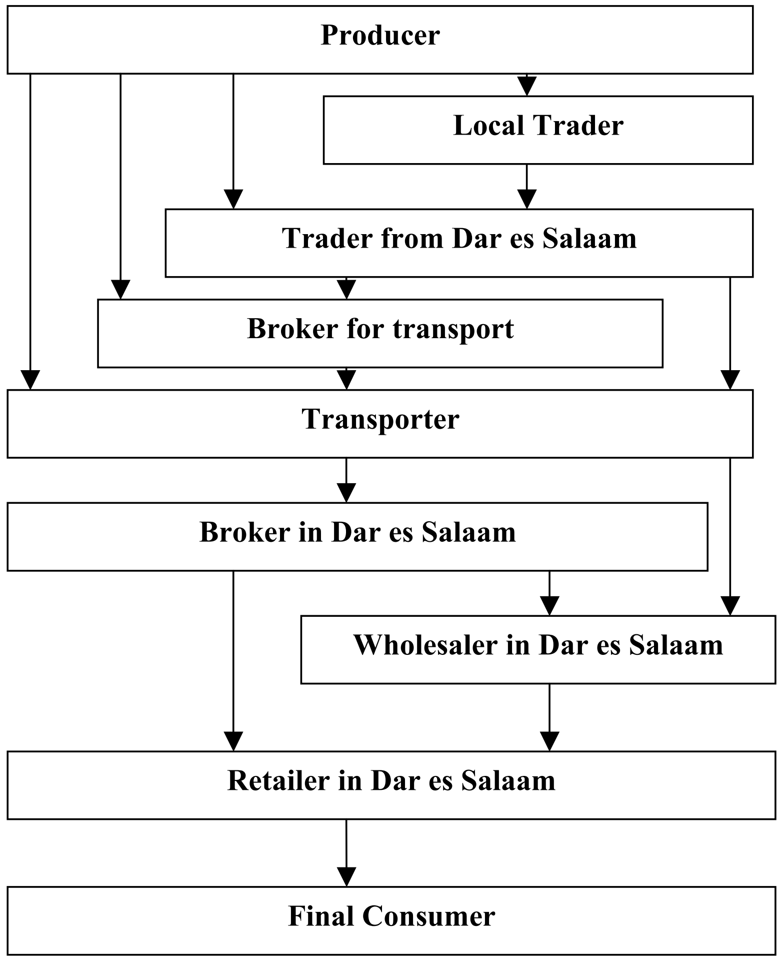
5.0 SUPPLY CHAIN OF AGRICULTURAL PRODUCTS IN TANZANIA

Besides understanding the structure of the markets in Tanzania, also the mechanism in which the goods are transferred from the producer to the final consumer is important in identifying the impediments that the stakeholders face today. Getting the products from the producer to the local village market does not require a sophisticated marketing mechanism to work, but in order to get the products from rural Ifakara into the hands of the final consumer in Dar es Salaam or into the export market in India, many middlemen are required to facilitate trade and match the potential buyers and sellers to each other. Each of the market actors plays a unique role in trade facilitation and is also constrained by a unique set of market impediments. Thus, understanding the supply chain for the large marketing channels, i.e. national and export markets, becomes invaluable in designing policy instruments to enhance trade in Tanzania.

5.1 National Market

Even at the national level, trade in Tanzania is mostly based on long-term personal relationships, which is seen as the only functional way for trading in absence of adequate market information and weak legal framework for enforcing contracts between strangers. Thus the supply chain from the producer to the final consumer is long and can take many forms along the way. Figure 1 presents the stakeholders in different parts of the supply chain for main staples (maize, rice and beans). Even though households in rural areas consume a range of other food staples, such as cassava, tubers and legumes, these are less popular in the urban areas where the consumers' taste is different. These products are bulky and have low price per kilo, which makes the transportation relatively costly and limits the marketing of the products to the local areas. Although these non-cereal food staples are an important part of ensuring food security in the rural areas and the major crops traded at the village and regional markets, they rarely enter into the national market due to high transportation costs and low demand in urban areas. Thus the analysis of the national markets is concentrated on the example of cereals.

Figure 1: Supply Chain of Agricultural Products from Regions into Dar es Salaam Market[5]



Source: Own illustration based on interviews with representatives of all the market actors described.

The producer can sell her products either to the local traders, to the buyer coming from Dar es Salaam, or she can hire a truck to take the products directly to Dar es Salaam. Local traders act as facilitators between many local producers and a few Dar es Salaam buyers. As trade even today is very much based on personal relationships, traders are reluctant to do business with unknown partners. Thus brokers are needed in several parts of the supply chain to transfer information of the quantities and prices supplied and demanded, and acting as guarantors of the two parties for a small commission. Local traders collect the products from local producers by driving into a village announcing the daily price for which they are willing to buy the goods and then collecting the products of different producers into easily collectable deliveries by a local trunk road waiting for a large-scale buyer. The collection of the goods can also be done by the Dar es Salaam buyer in case he knows the local producers and the local traders have not been able to buy the products already. Once the products have been bought (either from the producer or from the local traders for small commission), transportation to Dar es Salaam is arranged. Very few traders own their own means of transport but it is considered to be more

[5] See a short description of each market actor in appendix 6A.

cost-effective to hire a lorry only once the goods are bought and ready to be shipped. Transporters are working independently and brokers are often needed to match the producers or traders needing transport to the drivers waiting for goods to be transported. The transporters take the goods to Dar es Salaam to a known buyer or to a broker who pays the transporters for their services. Brokers in Dar es Salaam are working for a commission and facilitate rapid dissemination of large quantities of products arriving to Dar es Salaam at once. Brokers sell the products to wholesalers or directly to retailers coming from different markets in Dar es Salaam. The consumer finally buys the goods at her local market from her local trader. However, as the path of the supply chain is not uniform, neither is the role of the different stakeholders in the chain: the same people often fulfil the role of a broker, wholesaler and a retailer simultaneously.

Long supply chains are costly in terms of time and money. In the Tanzanian context, the frequent use of brokers is often the only viable way to trade in absence of enforceable and foreseeable contracts. The use of brokers to reduce transaction costs has also been found in the country context of Ethiopia (Gabre-Madhin 2001). The commission charged by each of the market actors in the chain varies according to the personal relationship between the traders, time of the year, type of good, and competition at the market. Thus the exact description of the marketing margins varies with each transaction, but table 3 presents examples of trading margins in the national supply chain emphasising the market power enjoyed by each stakeholder, and also the higher marketing margin needed to induce trade of easily perishable goods.

Table 3: Examples of marketing margins along the national supply chain

Marketing margins charged by different traders:	
Local traders/brokers of rice in Ifakara	50-100 shillings per kilo (10-20%)
Regional traders in Mtwara	10-20 shillings per kilo (2-4%)
Brokers of transport	10 % of the transport fee (or flat fee of USD 100 for shipments abroad)
Large-scale traders	20,000 shillings per trip to buy goods from the regions
Broker for green bananas at Ubungo	200-500 shillings per bunch depending on the price (7-11%)
Onion brokers at Kariakoo	2000 shillings per bag (4%)
Grain wholesaler at Kariakoo	10-15 000 shillings daily
Rice wholesaler at Tandale market	40+ shillings per kilo depending on the quality (8%+)
Potato retailer at Kinondoni market in Dar	90 shillings per kilo (36%)
Orange retailers at Tandale market in Dar	10-35 shillings per orange (20-70%)
Banana retailer at Ilala market in Dar	1500 shillings per basket of 200 bananas (15%)
Tanzanian export agent for cashew nuts	25 shillings per kilo (3%)
Indian export agent for cashew nuts	30-40 shillings per kilo (4-5%)
Subagents for the exporter of cashew nuts	5 shillings per kilo (1%)

Source: Own calculation based on interviews at different markets.

5.2 Export Market: The case of cashew nuts

Some agricultural products in Tanzania are sold mainly at the local market (cassava) or the national market (paddy) whereas other products (cashew nuts, cocoa, coffee, tea, cotton, tobacco, sisal) are mainly targeted for export. Due to the clear segregation of the consumer base the supply of exported goods is not merely an extension of the national supply chain but it is operated through a separate marketing channel run by different actors. Here the supply chain for cashew nuts is analysed as an example of an export crop that has practically no domestic market and is thus purely cultivated for exports. Allowing for some adjustments in marketing arrangements (such as the coffee auctions in Northern Tanzania) this analysis in its general form can be applied to other export crops as well.

Even though a thorough analysis of the historic development of the cashew market is beyond the scope of this study, a short overview of the past is necessary in order to understand the present situation. Cashew nut was commercially introduced in Tanzania in the 1930s and has grown into an important export cash crop. Though the overall trend has been increasing, there have been serious fluctuations in the quantities produced in different years ranging from 145,000 tons in 1973-74 to 16,500 tons in 1986-87 due to increased incidence of crop disease, and forced relocation of cashew farmers into *ujamaa* villages which, due to increased transport costs, led to abandoning cashew trees in the bush (Mwase 1998). The marketing of cashew nuts was previously controlled by the Tanzanian Cashew nut Marketing Board, which operated as the only legal buyer of the crop until the early 1990s when the marketing of cashews were among the first fully liberalised cash crops in the country. Prior to liberalisation, marketing boards sought price and income stabilisation through so-called agricultural development funds, but poor and inadequate marketing, transport and storage channels and facilities, as well as exploitation by middlemen characterised the trade (ibid). The trade liberalisation has radically changed the role of different actors in the supply chain. Even though the price stabilisation policies have been removed, the government still plays an active role in cashew trade as a regulatory body, and participates in the price negotiations with the buyers. In the beginning of the cashew season, price negotiations are held in which the exporters, Cashew nut Board of Tanzania (CBT) (former Marketing Board), farmers' associations, chamber of commerce, ministry of agriculture, and cooperative unions meet to negotiate an indicative price for the season. This indicative price is aimed at giving the lowest price for which the farmers are willing to sell their products, and the final price is to be negotiated on case by case basis. In practice, however, the indicative price is most often exactly the price that is paid at the market. The price negotiations are based on the current price at the kernel market and the price of raw cashews in other producing countries. Even though these world market prices act as the starting point for the negotiations, buyers with more experience in bargaining and more knowledge on the market are able to exercise considerable market power over the producers, who are still learning the art of bargaining in the free market environment. This situation applies to other crops as well and the learning process of adopting in the new ways of marketing is still ongoing. Still, on the whole, farm gate prices for cashew nuts have been on the increase in real terms since the market was liberalised (ibid).

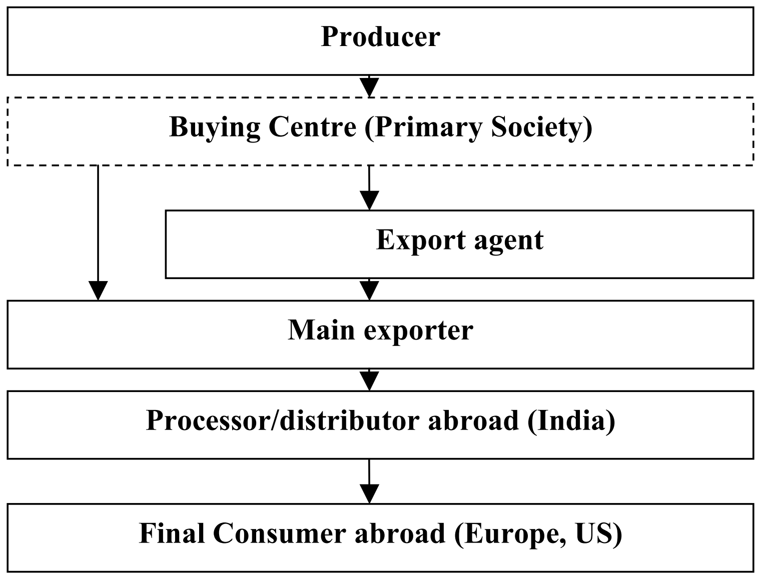
In addition to the cumbersome price negotiations, different taxes and fees form a wedge between the buyer and the seller. Even though the national export taxes have recently been streamlined and finally removed in line with the WTO rules and trade policy in other cashew nut exporting countries in Sub-Saharan Africa, several local council levies are still collected on cashew nut sales. These levies are collected for various development funds, such as school funds, desk funds, sport levies and the like (Mwase 1998). Even though they may be an important source of funding for local projects, they create a cumbersome trade policy compared with a scenario with one unified levy collection point.

Tanzania is the world's fourth largest producer of cashews after Vietnam, India and Brazil. Despite the possibilities the world market for processed cashew nuts has to offer, virtually all cashews produced in Tanzania are sold raw to India where they are processed and sold onwards to the world kernel market. Tanzania provides 40 percent of the raw cashew nuts processed in the Indian factories. The world kernel market requires a reliable supply of large quantities, which the Indian processors are able to meet given regular supply of raw nuts. Cashew nuts used to be processed also in Tanzania by the marketing board, but after liberalisation the processing activities were run down as the marketing board who used to do the processing was no longer acting as a buyer of the crops; processing capacity was not utilised due to a fall in the production of raw cashews and thus large orders could not be met; and farmers were seeking higher prices for their products from export markets instead of selling them to local processors. Also the inferior technique used by the Tanzania processors combined with irregular quality of the raw cashew nuts led to problems with marketing as the competitors in India were more productive in their manual processing, which is less sensitive to the quality of the raw nut than the industrial processing is. The processors were also faced with declining production and thus lack of inputs. In conjunction with problems in production, increasing cost of fuel and poor transport infrastructure in Tanzania escalated the difficulties faced by the domestic processors leading to gradual closure of all processing factories in Tanzania.

However, the previous failure of the processing industry should not be seen as a constraint for the current entrepreneurs as the demand for kernels at the world market is high. The entry requirement for the market, however, is sufficient ability to supply high quality nuts in large quantities. In order to fulfil these requirements, the production of cashew nuts should stay at high levels and preferably increase. Very recently new private Tanzanian buyers have bought the old factories and are in the process of upgrading them to start processing during the next harvest season. This is likely to increase competition for raw cashew nuts as the Indian processing industry is relying on secured inputs from familiar suppliers. To ensure this, the country has set up an import support fund to support importation of the raw materials and to protect such a large employer in the area (Kaleshu 2000). The producers of cashew nuts can thus enjoy a secured market with scope for expansion for their products as long as a reliable supply can be ensured.

The supply chain for cashew nuts (figure 2) is currently dominated by a limited number of large-scale actors, who operate under a different regime than the national traders. The vast majority of exporters are Indians and they are not limited in capital as are the Tanzanian traders who must depend on domestic sources of finance. They are in a position to dominate the market and they are protecting this arrangement against potential entrants. The supply chain for export crops is usually shorter than at the national market with larger trading margins.

Figure 2: The supply chain of cashew nuts from the producer to the world market[6].



Source: Own illustration based on interviews with the relevant market participants.

The supply chain for cashew nuts starts from the producer who is selling her products through a primary cooperative. These primary cooperatives were formerly buying the crops for the government to sell onwards, but after the liberalisation the role of the cooperatives have changed into mere collection centres. These cooperatives collect the nuts from their members on behalf of the buyer and administer a levy issued by the district council. The exporters often use agents who negotiate the final price with the sellers/cooperatives and place orders at primary cooperatives located at village level. The agents transport the goods from the cooperative societies to the harbour, where the main exporter claims the goods and transports them onwards to their customers abroad. The world market for cashew nuts is larger than what is currently exploited by the Tanzanian exports. India is the dominating buyer of raw cashew nuts but processed cashews are consumed in Europe, US, Asia and in smaller quantities also in East African Community and SADC countries.

The supply chain of export crops is dominated by foreign actors who are transporting the unprocessed goods quickly and effectively to the harbour and out of the country. Very little value added actually stays in Tanzania. Box 3 presents a functional although small-scale strategy for adding value to the export crops. However, large-scale export of processed cashews still requires development of the processing industry, as the quantities traded at the world market are large and the business relationships are based on reliable supply, which Tanzanian producers have so far been unable to meet.

[6] See a short description of each market actor in appendix 6B.

Box 3: Adding Value to the Export Crops – Women's Initiative to Process Cashew nuts

Currently most of the cashew nuts produced in Tanzania are exported unprocessed. A women's group called Kitangari Tulinge Women's Development Association (KITUWODEA) has started adding value to the nuts produced in the area by processing them into roasted kernels ready to be sold. The association has currently 55 members divided into 5-persons working groups. Each group is able to produce 15 kilos of processed nuts daily, which are currently marketed at the local markets and public events. The money gained is mostly distributed among the group members but some of it is kept for common projects of the association. KITUWODEA has so far built three houses for their widowed members, sent some of their children to higher education and assisted in other development efforts in the community with the cash earned from processing. The association is also building a small factory to be able to expand their business. Currently, the quality of hand-processed nuts is inferior to the industrial processors and the packaging material is not air tight resulting in shorter shelf-life of the goods. Building a small factory and investing in processing equipment are part of the association's strategy to commercialise its activities. Even though the domestic market for cashew nuts is very limited and fragile, and a small factory is unable to meet the orders coming from the world market, exporting cashews to the East African Union could possibly offer prospects for expansion, if the quality of the nuts can be guaranteed.

Source: Own interview with the KITUWODEA representatives in Mtwara, April 2005.

6.0 MAIN CONSTRAINTS FOR TRADE IN TANZANIA TODAY

All groups of stakeholders along the supply chains described were interviewed for this study. Even though each group expressed concern for a wide range of problems affecting their business, broader categories of arguments can be identified echoing the main findings from the literature presented in section 3. Each of these themes are analysed in the Tanzanian country context giving examples of how they impact trade at different parts of the supply chain. Based on the findings in this study, the main impediments for trade in Tanzania are: 1) inadequate physical infrastructure; 2) lack of know-how and capital; and 3) weak institutional framework (see table 4).

Table 4: Main constraints for trade in Tanzania today

INADEQUATE PHYSICAL INFRASTRUCTURE	• Poor road infrastructure
	  o Increased cost of transportation
	  o Works as a market barrier
	  o Delays in transport
	  o Decreased size and profitability of the market
	• Inadequate storage
	  o Loss of perishable goods
	  o Increased risk for traders
	• Poor market infrastructure
	  o Health problems for traders and consumers

LACK OF KNOW-HOW AND CAPITAL	• Lack of market orientation (producers)
	• Lack of business skills (traders)
	• Difficulties in managing and obtaining loans to increase working capital
	  o Micro credit schemes poorly run or under-funded
	  o Problems with repayment and high interest rates
	  o Difficulty in expanding business due to lack of capital
	=> Risk aversion

WEAK INSTITUTIONAL FRAMEWORK	• Weak institutions to represent farmers at the free market
	• Poor institutional capacity to foster organisation of farmers and traders
	• Weak legal framework to enforce contracts
	  o Long supply chains between known parties
	  o Increased cost of trading
	  o Lack of standard measurement and quality
	• Lack of market information
	• Corruption

6.1 Inadequate Physical Infrastructure

6.1.1 Road infrastructure

Even though the main trunk roads between the major cities are often in a good condition, these roads are scarce, and in fact only five percent of the road network is bituminised (National Transport Policy 2003). The poor condition of the transport network affects disproportionally the rural women and children, who are responsible for a large proportion of the transport burden but have limited access to transport aids (Runyoro & Mwankusye 1997). Most cities and regional markets cannot be reached by a good road throughout the year which bids up the cost of transport to these areas creating an additional market barrier the producers in the area need to face if they wish to sell their products to the national market. Recent studies done in Tanzania have shown that investing in infrastructure would generate substantial direct savings in terms of lower vehicle operating costs. An economic assessment of regional roads in Coast Region concluded that with a discount rate of 12 percent, the evaluated road projects had high Economic Internal Rate of Return (EIRR) varying between 13 to 23 percent (TANROADS 2003a). This was achieved without exogenous benefits, such as reduction in accidents, increases in agricultural production and other social benefits. Besides trade facilitation, investing in roads would also have larger economy-wide effects as it would encourage investment, include currently isolated productive areas in the economy and facilitate people's access to social services and networks (Mwingira 2002). The total magnitude of the loss to the Tanzanian economy due to bad roads is estimated to be nine percent of GDP (Haule 2002).

As noted by Kruger *et al.* (2002) "you pay for good roads whether you have them or not". Due to largely varying condition of the road network, the ongoing market price for transportation is often higher than the official estimates which are based solely on the distance. Still, the cost of transport is at a competitive level and the prices are common knowledge for the local transporters and traders, who all quoted same prices for transport. The total transport fee depends on the distance, condition of the road, and possibility of getting something to ship back from Dar es Salaam. Also the price of fuel has risen in recent years and the fuel price actually faced by the transporters depends on the time of the year as well as the location within the country. The more remote the location, the more expensive the fuel is. The impact of these non-distance related determinants of the transportation costs is given by the fees of transport to Iringa and Mtwara. The distance from Dar es Salaam to Iringa is 501 kilometres and the transportation fee is 200,000 shillings per truck whereas the distance to Mtwara is 565 kilometres but the cost of transport is 800,000 shillings due to poor condition of the road. The full list of current transportation fees is presented in table 5 (see appendix 2 for the transportation costs to the neighbouring countries).

Table 5: Transportation costs from Dar es Salaam to all regions in Tanzania (per 10 tons in Tanzanian shillings)

Dar es Salaam – Mwanza	1164 km	1,200,000 TSH
Dar es Salaam – Iringa	501 km	200,000 TSH
Dar es Salaam – Mbeya	851 km	450,000 TSH
Dar es Salaam – Dodoma	479 km	250,000 TSH
Dar es Salaam – Mtwara	565 km	800,000 TSH
Dar es Salaam – Singida	709 km	500,000 TSH
Dar es Salaam – Rukwa/Sumbawanga	1203 km	1,300,000 – 1,400,000 TSH
Dar es Salaam – Lindi	562 km	600,000 TSH
Dar es Salaam – Arusha	647 km	450,000 TSH
Dar es Salaam – Kilimanjaro/Moshi	562 km	300,000 TSH
Dar es Salaam – Morogoro	196 km	150,000 TSH
Dar es Salaam – Mara	1369 km	1,300,000 TSH
Dar es Salaam – Tanga	354 km	200,000 – 250,000 TSH
Dar es Salaam – Manyara	440 km*	500,000 TSH
Dar es Salaam – Ruvuma/Songea	992 km	700,000 TSH
Dar es Salaam – Kigoma	1442 km	1,200,000 TSH
Dar es Salaam – Tabora	1039 km	800,000 TSH
Dar es Salaam – Pwani	68 km	80,000 TSH
Dar es Salaam – Kagera	1425 km	1,600,000 TSH
Dar es Salaam – Shinyanga	1001 km	800,000 TSH*

Source: Own interviews with the transporters and the traders, March-April 2005.

* Estimated from the other figures.

In addition to higher transportation costs, poor infrastructure also limits the size of the market and blocks inter-regional trade between the non-capital regions, which might provide a viable source of customers for easily perishable goods in remote areas. Currently horizontal integration at the markets is underdeveloped as the benefits from trade between regional markets other than Dar es Salaam are eaten up by the high transportation costs. Besides the trade between the larger markets, i.e. interregional trade, access to regional markets from the small village level markets, i.e. intraregional trade, is dependent on feeder roads, which in their current state are in poor condition. Poor road conditions can sometimes stop the trucks completely in rural regions and the risk of getting stuck is reflected in seasonal fluctuation of the transport prices to remote locations. Also perishable goods suffer from delays in transport, which may make agricultural products from remote locations untradable altogether. Poor feeder roads block consumers and producers from accessing the regional and national markets leaving them with very little choice but to rely on subsistence farming. "The Integrated Roads Project (IRP) currently being undertaken in Tanzania exemplifies the potential successes of transport interventions combined with non-transport interventions whilst reducing the risk of dependency through community participation and empowerment. The Village Travel and Transport Programme (VTTP) as part of the IRP, being carried out in the Morogoro region of Tanzania. (…) signifies what can be achieved using a grass roots approach and ensuring that the poorest and most vulnerable in society are consulted effectively." (Davis 2000) Also other recent studies done in Tanzania have shown that improving roads provide wide ranging welfare benefits in forms of more reliable supply at the market, decreased marketing margins, and better choice of livelihood strategy (Gajewski *et al.* 2002, Lyatuu *et al.* 2000, TANROADS 2003b).

6.1.2 Storage and market infrastructure

Good access to a reliable and fast transportation network is vital for marketing of perishable goods in absence of appropriate storage facilities. Cold chains for perishable products do not exist even between or at larger markets (with exception of limited cool storage for fish at Kariakoo market). In tropical climate most products get easily rotten, and delays in transport and marketing present a considerable risk for the traders, one which they are often unable to bear due to limited working capital. Not only traders but also the producers are constrained by lack of storage facilities and thus products are often sold directly from the field as the producer postpones harvesting until the buyer is known. The high probability for the goods getting rotten is during delayed transportation or in absence of adequate storage facilities means that the traders are faced with substantial losses in their trade, which is reflected in high marketing margins for perishable products. The goods are currently stored at the markets in baskets or bags on the ground. Inadequate storage facilities and lack of capital also hinders the traders from benefiting from time arbitrage when the prices go up: products may get rotten before they are sold on to the retailers and final customers.

Poor storage does not only lead to the goods getting easily rotten but also presents a health risk to the traders and the final consumers. Even the main markets in the country are not provided with adequate supply of water, toilet facilities, or electricity despite the commitment of the government to provide such services when the division of market rent was agreed (10% stays at the market to cover the running expenses, 90% goes to the government). As traders spend years in the unhygienic conditions, especially in Dar es Salaam the health problems were a common concern among the traders. Not only does the poor hygiene affect the traders but also the final consumers at large, and acts as a constraint for market expansion. The dirtiness of the market place was also mentioned as the main constraint facing consumers using the markets in Dar es Salaam: goods are often lying on the ground and the smell of rotten food does not encourage new consumers to enter. Even though the traders know that they are losing customers due to poor hygiene, there is very little they can do as there is often no water or toilets available even in the main markets and the market buildings are in inferior condition. Besides the inability to improve the health standards, also the lack of knowledge of health hazards contribute to the condition of the markets today.

6.2 Lack of Know-how and Capital

6.2.1 Market orientation and Business skills

Despite the fact that most of the traders interviewed for this study had been in business for years, the level of knowledge in basic business skills was very low and the businesses were rarely growing. Especially in rural areas the traders are unable to distinguish between revenue and profit, and thus sometimes end up eating their own working capital while thinking that they are running a profitable business. Rotten goods or the time it takes to collect the goods were most often not seen as a cost at all, and thus keeping track of incomes and outgoings becomes difficult. Lack of entrepreneurial skills is also a constraint for the farmer, who has traditionally been producing the same crops and starts finding the markets for them only at the time for harvesting. When the market demand is low and prices fall, the government is often called to come to rescue. Better understanding of the roles of the government and market would help to avoid large dissatisfaction among the producers: it is not a market failure nor the fault of the government if urban consumers do not wish to purchase cassava for a high price. The way forward is not likely to be support for the farmer to keep on producing the traditional crops but to move on to more profitable markets. Training in business skills could facilitate the farmers in coming more market-oriented and changing production patterns to follow the market requirements in order to materialise larger profits from agricultural production and further education in innovative farming and marketing skills are indeed in high demand among the farmers. However, sometimes the choice of livelihood strategy does not depend on lack of knowledge but lack of risk bearing capacity to change behaviour when the gains are unknown. Thus the extension services should be accompanied by improvement of social safety nets, credit services, and help to diversify livelihood strategies to counterbalance the risk of adopting a new crop.

6.2.2 Capital constraint

Lack of business skills can also act as a barrier for expanding the business especially when it comes to managing and obtaining loans, which are used to increase the working capital. Applying for a loan and acquiring collateral for it is still too difficult a project for many to handle. Even though the new Land Law as been introduced, using land as collateral is rarely an option as smallholder farmers rarely have the legal right to ownership of the land they cultivate. Liquidity constraint affects farmers' production adversely as they rarely have money or are able to borrow money to purchase the necessary farming inputs, such as seeds and pesticides, on time which leads to poor harvest and even more difficulties to buy the inputs next year. Formal credit institutions are not present in rural areas and informal lending from neighbours is constrained due to the fact that the whole village needs the inputs at the same time when all the households are short of cash. On the other hand, lack of credit forms a market barrier for the producers as they rarely have the capital to pay for the transportation and marketing of the goods at larger markets, and thus they have little option but to sell the products to traders coming to the farms. Only rarely the producers who live close to a road share a small truck with 10-15 other producers in the village and drive their products to the market where the products are sold at wholesale basis. Lack of capital and access to credit is not only a constraint for the small-scale producers and traders but also the large market actors. The large-scale producers are unable to produce at full potential due to the capital constraint whereas large-scale traders without access to official credit cannot compete with their international competitors who have more flexible access to credit.

The government has formulated the National Micro-finance Policy in 2000 to ease producers' and traders' access to credit, but the implementation of the policy is lagging behind. In order for an entrepreneur to get and manage a loan successfully, he or she needs to have demonstrated ability to save. This is also a requirement for joining a Rural Savings and Credit Cooperative Societies (SACCOS) or (rarely) for obtaining a formal loan from a bank. Currently small-scale traders are unable or have no means to save, and even the existing working capital is depleted during the times of hardship in the household. Even though most of the traders wish for micro-credit and soft loans, the existing experiments with private loan schemes have often not been successful. For example, at Kariakoo market the brokers were offered small loans with high interest rate for the period of 3-6 months. Because the marketing margins that the brokers operate with are not high, small amount of borrowed capital is not generating large extra income in such a short period of time, which is needed to service the loan. Thus many brokers had bad experiences of getting into trouble when they failed to pay back the loan on time. Besides private loan schemes, many wished for government funded soft loans, that are usually offered for disadvantaged groups without any consideration for their ability to pay back the loan. These loans are often badly followed up, which results in poor repayment rates, and thus government loans are almost considered as grants. This, however, is not a functional nor sustainable way to facilitate trade. On the other hand, the government based loans with high interest rates and short loan periods have been tried at Tandale market by the cooperatives, but the demand for such a hard loan without means of using it profitably has been in low demand. On the other hand, there are encouraging examples of committed grassroot level solutions to tackle the problem of poor business skills and low working capital (see the case of TAMAGRASAI in box 4) but the local government is currently ill-equipped to foster such civil movements and facilitate their expansion.

Box 4: Grassroot solution for business skills training and micro-credit – TAMAGRASAI

Tandale Market Grain Sellers and Investors Association (TAMAGRASAI) started in 2002 when wholesalers with limited working capital started a joint venture to help them stand up and defend their rights. The association grew fast and it has currently 186 members. TAMAGRASAI aims to facilitate trade by providing training in business skills to its members. The members who have benefited from the training are now better able to manage their business and get more income. Besides business training, the association has received one-off training of hygiene from the WHO and is training its members in matters related to HIV/AIDS. Every member pays a monthly contribution to the association according to the size of their business: small scale traders pay 1000 shillings per month and large scale traders pay 10,000 shillings per trip they make to the regions to buy the goods. These contributions have then been invested in shares at the stock market to increase the stock of capital. The association has at present capital of 15 million shillings all raised from members' contributions. In 2004 the association started a credit scheme offering loans to its members. Small scale traders can borrow money to cover transportation costs with 2.5% interest and large scale traders can borrow up to one million shillings with five percent interest for six months. The repayment rates have been high as the members are committed to the association and they have been trained in business skills and loan management. However, the current capital owned by the association is not enough to meet the demand for loans and plans for expanding the association. The association has approached the local government already in 2003 and asked for their assistance in organising more training and establish links to private financial institutions where the association could apply for a loan on behalf of its members The association has also requested the local government to help in improving the market conditions to attract more business and investors into the market, but so far they have not received an answer.

Source: Own interview with TAMAGRASAI representatives in Dar es Salaam, March 2005.

6.2.3 Risk aversion

Producers' and traders' inability to borrow against future earnings leads also to low risk and often low return strategies being selected. As the markets are often poorly integrated and supply is unreliable, the fluctuation of prices and availability of goods was highlighted as a major constraint for trade by all stakeholders in the supply chain. The producers are unable to specialise as they cannot rely on the local markets to supply the necessary food products outside the harvest season, nor can they know the selling price of the cash crop at the time of cultivation. Also the adoption of new cash crops has been slow in many villages as the farmers cannot be sure of the potential market, and thus they are unwilling to face the risk of not being able to sell the products. Traders, on the other hand, have to deal with irregular supply and transport, which limits their possibilities to diversity their business and obtain loans. Many of the traders interviewed for the study raised concern about delays in transportation that affect the quality of the products and in unstable markets can also change the price of the goods to be sold to an unprofitable level within days. This affects especially the larger traders who trade goods across markets, and for whom delays in transport can mean loss of the customers as well as rotten products. The lack of ability and willingness of smaller traders to bear such risk works as a market barrier allowing larger traders to exercise market power in pricing of their services. Finally, the final consumers mentioned the price fluctuation as one of their main constraints for using the markets. The insecurity at the market is not limited to the national market. Also at the export market the price of raw cashew nuts has varied radically from low levels of 300 shillings per kilo up to 800 shillings per kilo in recent years. Further efforts to market the Tanzanian cashews directly to the world market would thus require ability to deal with such price fluctuations. This adjusting is currently done mainly by the producers who are often ill-equipped to bear such risk.

6.3 Weak Institutional Framework

6.3.1 Farmers' and Traders' Associations

Even though the central government is promoting trade and negotiating policies to remove barriers for trade, the lower levels of institutions are still underdeveloped and unable to function as credible players at the national and export market. Crop boards for marketing of export crops are led by political appointees, and cannot at present serve the function of representative of stakeholders' interest. Still, new credible institutions in the liberalised market environment are yet to emerge. At the grass root level lack of business skills and poor liquidity of farmers puts them in a weak bargaining position when the final price of their products is to be decided. The price negotiations for the cashew nuts present an example of the need of strong institutional representation of the producers. Even though the world market price for kernels gives the overall guidelines for price determination, individual farmers are still unaware of this price. Even though farmers have started building farmers' associations, they are still weak and lack the education and experience needed in the price negotiations when faced by experienced international buyers with the relevant information and capital. An individual farmer is often willing to accept which ever price is being offered by the buyer who is coming to the village, especially at the time when the cash from the last harvest has been depleted for a long time ago.

Similarly the lack of credible representation has led to difficulties in obtaining farming inputs. For years the effective demand for pesticides and other farming inputs has been greater than current supply. All sulphur coming to Tanzania is bought often for prices far above the cost of production and transportation, and farmers go across the boarder to Mozambique to buy the necessary inputs. Government subsidies are commonly demanded to keep the price of inputs low for the farmers. However, government subsidies have often a distortive effect on the market and the subsidy schemes are costly for the government. Furthermore, it is uncertain whether the subsidy would lead to the desired result of cheaper inputs as the supply of sulphur seems to be limited not so much due to farmers' inability to pay the fair price, but for the market power exercised by the private traders. Facilitating the licensing of new brand names for farming inputs and entry of new importers, as well as promoting farmers' efforts to communicate current demand for inputs are likely to be more effective and cheaper ways to increase the production. Government-organised input funds have been an effort to collect money for next season's inputs by deducting a small amount of revenue from the production sold. However, the mismanagement of such funds has led to failures to provide the promised inputs and have left the farmers with even less purchasing power to fight for the existing supplies. An organised ordering of inputs in good time is likely to be a productive way to solve some of the market imperfections currently in place, but in order for such schemes to work they should be implemented on voluntary basis by an institution trusted by the farmers that is knowledgeable enough to be able to bargain for the timely and reasonably priced supply. Such an institution is yet to emerge in Tanzania. In absence of sufficient supply of farming inputs, the knowledge of good farming practices can play an important role in enhancing the production.[7] The Tanzanian producers are still learning the trading practices in the free market system and establishing a uniform association for the farmers with strong leadership is a goal for the future. This long-run goal can be supported by vigorous capacity building but in the short run the producers might benefit from professional businessmen acting as main negotiators on their behalf.

In order to empower the producers to act as equal trading partners with the buyers in the future the process of unionisation and selection of leaders must be home-grown and come from the farmers' movement rather than being imposed from above. Farmers associations and cooperatives in particular have the potential of developing into representative organisations for their members, but currently they lack the institutional capacity and resources to function efficiently. Local government with its current resources has been unable to respond to this need for capacity building and facilitation of groups at grassroot-level. After active advocacy and lobbying the Tandahimba Farmers' Association (TAFA) in Mtwara presents a successful case study where farmers' group has raised the need for extension services that has been provided by the district council, and currently the government agricultural specialist is working with TAFA in promoting new crop varieties and better processing practices of existing products, like cassava. The government decentralisation scheme Local Government Reform Programme (LGRP) is aimed at empowering the local institutions to enable them to handle increased responsibility and enhance their responsiveness to local initiatives. However, the results of the programme are yet to be seen.

6.3.2 Enforcing Contracts in Impersonal Trade – The Institution of Middlemen

Another institutional barrier for trade is the weak institutional framework for following and enforcing trading agreements between unknown parties. In many developing countries where laws and legal capacity to enforce them are inadequate informal relations can substitute for courts allowing deals to be made (Greif 1997, Hendely et al. 2000) or informal institutions emerge to replace the lacking enforcement institutions (Greif 1993, Gabre-Madhin 2001). Also in Tanzania unstable markets, changing agents and poor ability to enforce the contracts in case of violation leads to long supply chains of friends and brokers as contracts cannot be made directly between the consumer and the producer who do not know each other. At the beginning of the supply chain, even though contract farming and fair trade agreements are promising strategies of stabilising the market and negotiating the price before the harvest season, in reality the producers are often unable to make advance agreements with the traders as enforcement of these contracts is difficult. Throughout the supply chain deals are made with middlemen to ensure timely and reliable supply of agreed goods, which adds to the marketing marking between the original producer and the final consumer. At the end of the chain, even though the final consumers in Dar es Salaam are better-off than their counterparts in the rural markets, they also pay a sizable premium of buying the goods at the end of a long supply chain. Many consumers raised wishes

[7] In the case of cashew production, proper tree management has been found to yield best harvest even when no farming chemicals are used (Nathaniels 1998).

for government control to keep the food in the cities at affordable level, which already is part of the government policy.
The lack of formal contracts and ability to enforce informal agreements means that most of the deals are done between relatives or close personal friends. For example the tribes originating from the costal regions are often serving as traders for coconuts in Dar es Salaam as coconuts are mostly produced along the coast where their relatives live. Producers and traders are also likely to trust the transporters from the same group or ethnic origin who can speak their tribe language, and thus even the transport markets are segmented as representatives of a given tribe tend to drive goods to and from the region where they are from. Currently the traders only trade with people they know and thus the success in business relies heavily on social capital and personal contacts that can be used as guarantors for the transactions. As the agreements are hardly ever done in writing, trusting the counterpart is of crucial importance. In absence of standard units of measurement and standardised grading of products, buyers and sellers need to be present when the transaction takes place to ensure and visually inspect the quality and quantity of the goods being traded. However, the long supply chains and use of middlemen in not limited to trading goods, but also services are traded through a broker. The transporters usually get information about goods to be transported through a broker, but the role of the broker can also be fulfilled by the people who are looking for working opportunities to load and offload trucks coming to their market. The broker knows the local demand for transport services and sells the information to the transporters for 10 percent commission of the transport fee (or fixed 100 US Dollar commission for shipments abroad). Dealing with a broker is the safest and often the only way of getting goods to transport. The fee for the broker is paid in cash immediately even though the transporters themselves most often do not get paid before the goods are sold at the final destination.

Reliance on personal or family relations is costly in terms increased transaction costs as well as losing a large part of the potential market. However, in absence of reliable legal framework for trade, traders are willing to pay premium for trading with relatives or otherwise trusted members of the society. This phenomenon is well known also in other developing countries, and a pronounced example of costly preference for known counterparts is given in the cashew nut trade. Most of the agents who are working for the Indian exporters are Indians themselves and only a few Tanzanian businessmen are accepted to operate as export agents on lower margins. Exporters are willing to pay a premium amounting up to 25 percent of the agent’s fee for dealing with a trader of their own nationality compared with established Tanzanian traders. The high premium is explained by the importance of being able to trust and enforce the trade agreements with the counterparts in cashew trade: the agents are given large amounts of money (up to 500 million shillings per week in high seasons) to buy the products on behalf of the exporter and thus trusting the business partners is essential. Even though exporters’ preference for Indian agents is disapproved by their Tanzanian competitors, the tradition of favouring relatives and members of the same tribe is well embedded also in the Tanzanian culture.

At present the agricultural marketing system in Tanzania operates to assure the functioning of the market in second-best environment in absence of sufficient knowledge of national supply, demand, and prices. As large-scale sellers do not know all buyers personally, brokers help by fixing several smaller deals with people known to them who may place orders for products through the broker. The brokers thus shorten the time in which the perishable goods are sold and money paid to the producer, and work as intermediaries between the large-scale sellers and smaller-scale buyers. Most of the buyers and traders indicated the other traders and neighbours as their main source of market information, highlighting the importance of these social networks for trade. Brokers in different parts of the supply chain match previously unknown traders with producers and ensure the transaction with their permanent presence at the market, but also increase the cost of transaction by adding yet another middleman between the original buyer and seller (see box 5 for a description of the largest institution of brokers in Tanzania). The brokers, however, are rarely in a position to charge high margins, as they face fierce competition from other traders. At Tandale market the brokers and wholesalers explained that selling the goods is taking a longer time than in the past due to increased competition at the markets and wholesalers give credit to their customers nowadays more often as a means to close the deal. This, however, puts additional pressure on traders' working capital, which was mentioned as one of the main limitations for trade.

Box 5: Brokers at Kariakoo – Institution of trade facilitators at unregulated markets

The broker institution is especially pronounced at the Kariakoo market, which is the largest market in the country. By law, all agricultural products should first be sold at Kariakoo before they are transferred to other markets in Dar es Salaam or abroad. In practice, however, goods may be sold directly to the buyer elsewhere, and for example Tandale has gained status as the main market for rice. Kariakoo still has a dominating role as the central market of the country accommodating thousands of traders and hundreds of tons of products daily. All products coming to the Kariakoo market to be sold must be sold through brokers. This brokerage institution is compulsory and guarantees the registered brokers a secured position at the market. There are currently 1344 brokers registered at the market, and individual brokers cannot affect their commission but trading is done with rather low margins. The working capital of the brokers fluctuates, but is normally at least one million shillings. However, trading perishable goods presents a risk as the broker is liable to pay for the accommodation of the seller while he is waiting for the goods to be sold. Perishable goods may get rotten within days in absence of cool storage facilities. The Kariakoo institution serves as a guarantor for the brokers while the sellers are waiting to get paid. An aspirant broker needs to be known at the market and be recommended by two existing brokers to qualify for registration. Once registered, the broker agrees to obey good trading practice and his business is backed up by the Kariakoo institution and the storage facilities at the market can be used freely. In case of contract violation the institution can help to settle the dispute and discipline the broker in question. In absence of a working legal framework for enforcing contracts and settling disputes, this permanent broker institution helps to increase the credibility of the traders and decrease the risk for the buyers and sellers trading at the market.

Source: Own interviews with the market actors at Kariakoo in Dar es Salaam, March-April 2005.

Furthermore, virtually all trade in Tanzania is done in cash as most people do not have a bank account. This also increases the demand for middlemen as carrying large sums of cash in unknown areas is risky to the large-scale buyers. Even the existence of a known middleman is not always enough to ensure large transactions to take place, and large-scale buyers take a personal risk when they trade, which again bids up the trading margins. Exporters commonly hire an agent to deal with the cash transfers to the villages who often hires armed guards to accompany large money transfers. Thus, formalising money transfers in the country is likely to encourage large-scale trade and decrease the costs of trade.

Nowadays mobile phones are increasingly used to check the prices and negotiate last minute changes between the producer and the broker. Even though owning a handset is still rare, even medium-scale trader may have a sim-card which they can use when needed. Taking advantage of new innovations, such as increasing use of mobile phones, is a sign of traders' willingness to improve the poorly functioning system for market transactions which has proved to be welfare improving in many developing countries (Economist 2005). However, the tradition of long lasting trade contacts and blood relationships is still dominant in trade in Tanzania. Decreasing the cost of formalising agreements, enabling smooth transaction between strangers, and enabling the legal machinery to deal with a large number of small contract violations are long term development goals, which have the potential of improving the trading practices and decreasing the transaction time and cost in benefit of both producers and consumers.

6.3.3 Corruption

Lastly, a major institutional impediment for efficient trading is the widespread corruptness and inefficiency of the regulatory administration. Even though the poor roads cause delays in transportation, more common cause for delays is the road blocks. There are several weighting stations along the roads to control that the trucks are not carrying loads above the permitted limit given to each vehicle. Besides legitimate controls, the trucks are often stopped by bribe-seeking members of the police force. According to the transport professionals, a truck can be stopped 10 to 15 times on its way from Dar es Salaam to Iringa. The current amount of an acceptable bribe ranges from 2000 to 5000 shillings which results in higher transaction costs and unnecessary delays in transportation. Despite the problems with poor infrastructure and laws against giving and taking bribes the transporters highlight corruptness of the police as the main constraint for their business.

The poorly functioning police force creates also a free playground for the armed bandits who pose a real threat for goods transported by road. Armed robberies are commonplace and all transporters interviewed for this study had personal experience of this. Gangs of armed bandits stop the car by blocking the road with a fallen tree, sprinkle nails on the road in order to cause a puncture for the trucks, or attack when the truck slows down for a speed bump. The drivers are forced out of the car and the goods transported are stolen. Sometimes the bandits take the whole truck leaving the driver in a remote area. Especially the road to Mozambique and Malawi is known for its safety hazards. Sometimes the transporters are accompanied by armed guards but this increases the cost of transport and the drivers usually prefer travelling without armed guards as the bandits are also armed and carrying arms only leads to exchange of fire while non-resistance only leads to the goods to be stolen. Only drivers of large companies are less likely to face problems as they are often transporting goods belonging to World Food Programme or other international organisations, which are mostly left undisturbed by the police. The freelance drivers, on the other hand, have a saying 'Usiku mbu mchana inzi – hakuna kulala' that freely translates into ‘mosquitoes during the days and flies during the night – no time to sleep’ referring to problems with the police during the day and risk of an armed robbery during the night.

The problems with the corruption are deeply rooted in the institutions and police is no exception in the country. However, overlooking the problem is costly in terms of lost trading volumes due to high marketing margins, rotten products due to unmotivated delays, and unrealised tax income from trade. Tackling political corruption with improvements in wage and incentive schemes may not lead to a desired change of the institutions which have no incentive to change themselves. This incentive needs to come from outside the institutions, i.e. from the civil society which currently is tired of corruption, but is unable to raise its voice against it. Giving voice and empowering transporters’, traders’, and producers’ associations to make police and political bodies accountable for their actions could create the necessary incentive for slow change.

7.0 POLICY RECOMMENDATIONS – THE WAY FORWARD

The government of Tanzania has made major changes in its policy to open the markets and to facilitate free trade in the country. Current agreements with the WTO allowing Tanzania to enjoy non-reciprocal preferential access to developed markets, such as the European Union (EU) under the Everything but Arms (EBA) agreement, recent validation of the East African Community (EAC) Customs Union, as well as membership at Southern African Development Community (SADC) are substantial changes into enlarging the market for the Tanzanian products. Also the national market has been enhanced and trade facilitated by continuing to streamline the national tax policies and remove legal barriers for entry. However, changes at the top must be complemented with supporting policies at lower levels of administration to ensure that trade liberalisation serves as a welfare increasing policy instrument. The government policy of trade liberalisation has been successful in removing formal barriers for trade and increasing competition at all levels of the supply chain, but old attitudes and informal barriers still remain. Many traders still long for the good old days with practically no competition and government subsidies to the farmers guaranteeing low price of agricultural products at the farm gate. Even though the support of such marketing power and unsustainable subsidies that distort the markets are part of the past, attitudes change slowly. In order for trade liberalisation to work for pro-poor growth, trade needs to be facilitated by active government policies.

Improving road infrastructure has been on the government agenda for a long period of time but it has not received the emphasis and sense of necessity that it requires. Current level of road infrastructure fails to facilitate efficient trade leading to unnecessarily high transportation costs and long transportation times. It also decreases the size of the market by blocking more remote producers and potential consumers from the market giving market power to the few large-scale players who are able to meet the transaction costs. Investing especially in feeder roads is likely to bring about large welfare gains in terms of large volumes traded, which again brings more money into circulation and creates improved livelihood opportunities. Facilitating access not only to local village markets but also improving the regional markets by strengthening the national supply chain is vital in order to generate local growth centres and to allow poor rural households to benefit from the development by increasing their options for trading and income generation. On the whole, transportation costs are often hitting the poorest part of the population disproportionally hard for two main reasons. Firstly, the poorest groups are often living in geographically remote areas where transportation costs are higher. Secondly, the transportation costs comprise a proportionally more important part of the price of food crops than cash crops and the poorest groups usually spend largest part of their income on food. Thus decrease in transportation costs overall might well be considered as a pro-poor policy.

Within Tanzania, several authorities are involved in the planning and management of road transport including Ministries of Transport, Works, Home Affairs, Regional Administration, and Local Government and Finance. However, currently the coordination between the authorities is poor, governance is weak due to corruption, and enforcement of agreed policies is insufficient (National Transport Policy 2003). The government has recently acknowledged that achieving the general development targets set in the National Poverty Reduction Strategy Paper (PRSP), Vision 2025, and the Rural Development Strategy

(RDP) requires enhancement of transport infrastructure with a view to speeding up the process in other productive sectors. In order to achieve the set targets for poverty reduction and to harmonise the existing policies, the government formulated a National Transport Policy in 2003 which outlines the measures to be taken in order to improve the infrastructure in the country. Ministry of Works has created a concrete plan for the road sector improvements, namely the Ten Year Road Sector Development Programme that highlights the preferences of the Tanzanian Government in upgrading the existing road network, giving priority to important cash crop and food crop producing areas, areas with important mining or tourism sector, and areas with important international transit trade with neighbouring countries. The funding for this plan is expected to be divided between the donor community (90 percent of the development cost and 5 percent of the maintenance cost) and the Tanzanian Government (10 percent of the development cost and 95 percent of the maintenance cost). However, under current financial setup of the road sector, the resources are insufficient even for the realisation of the minimal work programme consisting of "the indispensable actions in order to avert serious hindrances to a minimal growth of the national economy" (Ten Year Road Sector Development Programme, Phase II, 2002). Financing the urgent infrastructure improvement is not a question of lacking resources, as the economy is already paying dearly for the poor road network in terms of higher vehicle operating costs and trade foregone[8], but a matter of giving the sector the priority it requires. As a rule of thumb every one US dollar of essential maintenance postponed, increases the cost of operating a vehicle in the current period by more that three dollars, which implies that road users could well afford to pay for maintenance if they can afford to own and operate a vehicle (Kruger et al. 2002). However, as investment in infrastructure at large-scale requires mobilisation of large sums, donor community could consider increasing its role in financing the readily designed Ten Year Road Sector Development Programme.

If the road network would allow easy access even to more remote areas, processing facilities could be more easily based into rural areas where the surplus producers of perishable goods are. In absence of good storage facilities, goods processed close to their production site can then easily be shipped to larger markets and thus increase the effective demand and supply of these goods. Roads, processing, and storage facilities, as well as market infrastructure are all part of the necessary prerequisite for efficient trading. Currently the marketplaces are in poor condition, which presents a serious health risk to the traders and the consumers, and hinders the expansion of the market in terms of new customers and investors. Yet another important part of infrastructure is the support for telecommunication infrastructure, which can serve an important role in disseminating market information. The mobile phones are becoming a more important part of trade and price negotiations also in Tanzanian agricultural trade, and the active involvement of competing private sector providers should be encouraged also in the future to ensure competitive pricing and reliable supply of the services. In addition to technical improvements, in order for market expansion to happen, the customer base must also be allowed to increase by encouraging non-farm rural employment opportunities and vocational

8 The maintenance cost per annum has been estimated at USD 80 million whereas lack of maintenance is projected to cost the nation USD 365 million annually mainly due to vehicle operating costs and loss of asset of the existing roads (Marmo et al. 1997).

training. These will ensure that the money stays in circulation in rural areas. Trade is only a part of a holistic development agenda aimed at improving people's welfare.

Less costly but also less straightforward change needed to facilitate trade is the improvement of capacity base and institutions. This cannot be done by the donor community alone but the change needs to be home-grown in order to ensure ownership of and commitment to the changes at all levels of administration. At the grassroot level providing more training in business skills, demonstration farms for more market based production, and other vocation training are likely to improve the income earning capacity of the small-scale producers and traders. Government institutions, on the other hand, need to tackle corruption as it currently forms a serious block at the market. Increased awareness and empowerment of the civil society, political will and improved training and incentive schemes for the police officers are means to tackle this problem. Also government efforts to stabilise and regulate the markets to facilitate trading between strangers are needed to shorten the supply chain and cut costs. This would also facilitate the circulation of working capital which is currently seen as a problem at every stage of the supply chain. Improved access to capital through loans is a desirable policy goal but the way in which such a policy is implemented is of crucial importance. Despite the burning need for loans credit schemes are unlikely to succeed unless they are properly followed up and complemented with training component in business skills and servicing the loan. On the other hand, in case demonstrated ability to save and commitment to enhancing the business has been raised at the grassroot level, the capacity of the local government should be improved to facilitate such initiatives. Building capacity of the local government is also highly topical in light of the government plans to concentrate the channelling most of funds from the donors through the central and local governments.

Trade facilitation can be a powerful tool in poverty alleviation as it has the possibility of generating income earning opportunities for the rural farmers who currently have very little possibilities to earn income otherwise. However, for trade to be efficient and in order for the poorest farmers to be able to gain from trade, mere changes at the national level are not sufficient. Active policy measures are needed to empower farmers to negotiate the prices, access the larger markets and to move people up the supply chain from the village markets to regional and national markets by removing the informal barriers of entry. As discussed above, based on the findings of this study, the following areas should gain priority in the government policy:

- Increased funding for physical infrastructure (trunk and feeder roads, telecommunications, market infrastructure) both from national and international sources
- Emphasis on rural non-farm employment and intra-regional market development
- Large-scale capacity building in business skills and market orientation
- Improved access to credit and better management of credit schemes
- Empowerment of civil society to form representative bodies to improve their bargaining power and to facilitate fight against corruption
- Enforcement of existing laws, and formalisation of contracts to diminish risk of trading
- Improved dissemination of market information

The President's Office has already launched a Business Environment Strengthening for Tanzania (BEST) Programme that aims at facilitating the transformation of the governance and regulation to provide businesses and traders an enabling environment to expand. BEST, Agricultural Marketing Policy, Anti-Corruption Policy, Agricultural Sector Development Policy, and Micro Finance Policy are all examples of political commitment to improve the agricultural marketing environment in Tanzania along the same lines as outlined in this study. However, it is not the lack of policies at the macro level but the weak implementation of existing policies at the micro level that currently hinders trade and economic growth. Active policy measures that allow people who currently have very few possibilities to benefit from trade to participate with equal terms are likely to lead to welfare improvements that can greatly improve the living standard of the poor. This has also a strong gender implication as women are currently unequally represented in the supply chain and usually only fulfil the role of a small-scale retailer of perishable goods. Production, processing and trading tasks are clearly segregated between the sexes disfavouring women's placement at the powerful positions in trade. The Agricultural Marketing Policy sets a clear vision "to have an agricultural marketing system that is efficient, effective and equitable by 2015". The major challenge for the years to come is the effective and timely implementation of this policy so that agricultural trade could realise its potential as a tool in the fight against poverty.

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APPENDICES

Appendix 1: People and organisations interviewed for the study

Dar es Salaam:

ESRF:
Dr. Josaphat Kweka
Dr. Oswald Mashindano
Mr. Liam Kavanagh

University of Dar es Salaam:
Professor Wilbard Maro
Dr. Natu Mwamba
Dr. Fanuel Shechambo
Professor Lucian Msambichaka

Embassy of Finland:
Ms. Sari Jormanainen, Advisor

Embassy of Sweden, SIDA:
Ms. Ewa Hagwall, Private Sector Development Advisor

Participants at the National Stakeholders' Workshop on the Agricultural Marketing Policy on the 8th of April 2005.

Participants of the seminar workshop at the ESRF on the 14th of April 2005.

Kariakoo market:
Mr. B.J. Mallaya, Planning and Commercial Operations Manager
Mr. Nicanol Omollo, statistician
Focus group discussions with large-scale traders, retailers, and brokers.
10 retailers
8 buyers

Tandale Market:
Mr. Ali Ismail Uledi, Deputy Chairman
Mr. Saidi Lumuli, Secretary General
Mr. Juma Dito, Protocol Officer of TAMAGRASAI
Mr. Rogatian Mketo, Secretary General of Tandale Vegetable Cooperative Society
Mr. Mharami, Secretary General of Tandale Food Product Cooperative Society

Focus group discussions with grain wholesalers, fruit wholesalers, and transporters
11 retailers
10 buyers

Ilala market:
16 retailers
21 buyers

Kinondoni market:
Mr. Ramadani S. Mchopa, Chairman of the market organisation
Mr. Juma R. Natosa, Member of the market organisation
10 retailers
10 buyers

Mabibo-market Ubungo:
Mr. Fergo P. Njovu, Chairman of the market organisation
Mr. Benni Lukara, Secretary general of the market organisation
Mr. Filbet Oforo, Revenue collector for the municipal council
10 retailers
11 buyers

Focus group discussion with transporters at the truck depot in Dar es Salaam.

Ifakara

Ifakara market:
Mr. Juma Kitowelo, manager
21 small-scale traders
10 buyers

Bethlehem market and Kibaoni market:
10 small-scale traders

Focus group discussion with local rice brokers

Ms. Sikudhani Wajadi, Secretary of a local women's group

Mtwara

Rural Integrated Project Support (RIPS)
Julie Adkins, Programme manager
Swallah S. Swallah, Development facilitator

Abbasi Exports Limited
Vinil Kumar, Cashew nut quality controller

Mr. Hamis Zawad, Buying agent

Cashew nut Board of Tanzania (CBT)
Mr. Amma, Director of Planning and Marketing

TANROADS
Mr. Damien Mbavalinzi, Regional Manager
Mr. Mkina, Senior Maintenance Engineer

Tanzanian Revenue Authority (TRA)
Mr. Laurent Paul, Regional Manager

District council
Mr. Kapinga, District Agriculture and Livestock Officer

Naliendele Agriculture Research Institute

Mtwara-market:
Union of traders at the main market in Mtwara (WABISOCO)
Mr. Ahmad Afeli, Chairman
Mr. Muhammed Juma, Vice-chairman
Mr. Saidi Namala, Executive Secretary
Mr. Hassan Chale, Assistant

15 small-scale traders
15 buyers

Focus group discussions at the Mtwara market: Local traders, wholesalers, producers, transporters

Kitangari- village:
Kitangari Tulinge Women's Development Association (KITUWODEA)
Ms. Zaituni Nawamba and other group members

Focus group discussions in Kitangari-village with large- and medium-scale cashew nut producers

Magombo-village:
Focus group discussion with small-scale peasant farmers

Newala-market:
Newala Farmers' Association
Mr. Muhindini Mnali, Chairman
Mr. Simon Kaminyoge, Secretary

Union of traders at Newala-market (UWABINESO)
Mr. Adinani Saidi Kachepe, Chairman
Mr. Saidi Hassan Mbeweka, Secretary

5 small-scale traders
5 buyers

Tandahimba-village:
Tandahimba Farmers' Development Association (TAFA)
Mr. Adinani B. Mbwana, Chairman

Mr. Amimu Mgeni, Agricultural Specialist

Appendix 2: Transportation costs from Dar es Salaam to neighbouring countries (per 10 tons in US Dollars)

Dar es Salaam – Kenya	2,500 USD
Dar es Salaam – Uganda	2,500-2,600 USD
Dar es Salaam – Rwanda	2,500-2,600 USD
Dar es Salaam – Burundi	2,500-2,600 USD
Dar es Salaam – DRC	3,000 USD
Dar es Salaam – Zambia	2,400 USD
Dar es Salaam – Malawi	2,600[10] USD
Dar es Salaam – Mozambique	2,800 USD

Source: Own survey

10 Estimated from the other costs

Appendix 3: Summary of the survey results – mean characteristics of the respondents

	Traders		**Buyers**	
	Dar es Salaam	**Ifakara/Mtwara**	**Dar es Salaam**	**Ifakara/Mtwara**
<u>Access to markets</u>				
Distance to the market (km)	4.4	1.7	4.4	1.9
Time to reach the market (min)	24	28	24	28
Came to the market by bike (%)	46%	25%	41%	15%
Came to the market by bus/car (%)	21%	0%	20%	4%
Has a possibility to use a bike (%)	88%	67%	90%	55%
Has a possibility to use a bus (%)	96%	22%	93%	19%
Has passable road to the market (%)	100%*	88%	100%*	87%
(* by assumption)				
Times coming to the market per week	7	6.6	6.6	6
<u>Personal characteristics</u>				
Age	28	37	28	31
Gender (% of males)	58%	59%	55%	32%
Is the household head (%)	32%	67%	42%	35%
Household size	5.1	5.3	5.0	7.5
Number of dependants	1.7	2.2	1.5	2.0
Engaged in wage employment (%)	23%	0%	22%	19%
No education/Primary/Above primary	38% / 57% / 5%	11% / 73% / 16%	43% / 50% / 7%	11% / 59% / 30%
Literate (%)	63%	90%	62%	90%
Land owned (acres)	0	4.0	0.1	3.1

Appendix 3 (Continued)

	Traders		**Buyers**	
	Dar es Salaam	**Ifakara/Mtwara**	**Dar es Salaam**	**Ifakara/Mtwara**
Land rented (acres)	0	0.7	0	0.2
Cultivates agricultural output (%)	0%	69%	2%	68%
Poverty and food security				
Living standard[11] (Poor/Average/Good)	84% / 16% / 0%	43% / 57% / 0%	74% / 24% / 2%	13% / 81% / 6%
Less than 3 meals per day (%)	5%	27%	7%	3%
Forced to skip meals this month (%)	5%	39%	2%	29%
Traders				
Gives credit to customers (%)	100%	67%	N/A	N/A
Has storage facilities (%)	4%	14%	N/A	N/A
Years been a trader	3.7	10.9	N/A	N/A
Other family members are traders (%)	7%	61%	N/A	N/A
Number of observations	57	51	60	31

Source: Own survey

[11] This is a subjective measure based on own evaluation of the living standards. In Ifakara/Mtwara living with less income was considered rather normal whereas in Dar es Salaam a household with the same income would have classified as poor.

Appendix 4: Selected Statistics of the districts of Kilombero (Ifakara) and Mtwara

	Kilombero	Mtwara
District area	14,918 km^2	3,437 km^2
Population:		
Total population	322,779	204,770
GDP per capita (T.Shs)[12]	171,530	221,378
Access to electricity	3.0 %	2.2 %
Employment categories:		
Peasant farmer	81 %	80 %
Forestry, fishing	7 %	10 %
Trade	3 %	5 %
Public administration	3 %	3 %
Other sectors	7 %	2 %
Number of registered traders	695	3037
Average rainfall	1000-20,000 mm/year	900-1000 mm/year
Major crops and production in 1999/2000 for Kilombero and 2003/2004 for Mtwara (tons):		
Paddy	35,743	9,304
Maize	15,375	3,604
Bananas	6,874	70
Cassava	33,410	89,309
Road network:		**Mtwara region**
Trunk roads (km)	78	216
Regional roads (km)	210	817
District roads (km)	254	1359
Feeder roads (km)	305	2600
Total road density (km/km^2)	0.057	0.312

Source: Kilombero district council, Mtwara district council, TRA, TANROADS, National Bureau of Statistics (NBS)

12 Average for the region

Appendix 5: Survey questionnaires

MARKET QUESTIONNAIRE: PART 1

Access to the market:

1. **How far is your house from this market? (Help with estimation if needed)**
   A: ……………………….kilometres
2. **How long does it take for you to get to the market?**
   A: …………hours ………… minutes
3. **Do you walk or come by bike/bus/car?**
   A: Walk…… Bike…… Bus …… Car…… Other (please, specify)………..
4. **Do you have the possibility to use other means like bike/bus/car? (Tick all that apply!)**
   A: Bike…… Bus …… Car…… None of the above……
5. **Is there a road to your village? Is the road passable throughout the year?**
   A: Road YES NO **NOTE: IN DAR ES SALAAM, SKIP AND RECORD YES FOR ALL**
   A: If yes, passable YES NO If not, why not?...

Individual characteristics:

6. **What is your main occupation?**
   A: Occupation:…………………………………………………………………………
7. **Are you engaged in wage employment at the moment?**
   A: YES NO
8. **How old are you?**
   A: ………….. years
9. **Male or female?**
   A: MALE FEMALE
10. **Tribe?**
    A: ………………………………………………………………………………………..
11. **Are you the head of the household? If not, what is your relation to the head?**
    A: YES NO If not, relationship…………………..(e.g. wife, no head)
12. **How many members do you have in your household?**
    A: ………………………………………………………………………………………..
13. **How many of them are under 15 or above 65 years old?**
    A: ………………………………………………………………………………………..
14. **What is the level of your education?**
    Primary ….. Secondary ….. Tertiary …. No education …..
15. **Can you read and write? How about the household head?**
    A (interviewee): Literate ….. Illiterate ……
    A (household head): Literate ….. Illiterate ……

16. **Do you/your household own any land you use for cultivation? How much?**
    A: YES NO If yes: ………………….. acres

Poverty and food security status:

17. **What is your standard of living compared with other households in your area?**
    A: Poor ………….. Average ………….. Good …………..
18. **Have you been forced to skip meals this month due to insufficient income this month?**
    A: YES NO
19. **What proportion of your income is spent on food?**
    A: Very small …. 25% ….. 50% ….. 75% …. Almost all …..
20. **How many meals can you afford for the household in a day?**
    A: 1…… 2 ……. 3 ……. More than 3 ………

PART 2A: THIS QUESTIONNAIRE IS FOR BUYERS ONLY!

21. **How often do you come to this market?**
    A: …….times a day/week/month (delete as appropriate)
22. **Which other markets (bigger or smaller) do you use?**
    A: 1st …………………………………… B or S 2nd …………………………….. B or S
23. **Why do you use these other markets? More products? More sellers? Closer location?**
    A: More products…… More sellers …… Closer location …..
    Better value …… Other (please specify)…………………………………………………
24. **How far from your house are these other markets?**
    A: 1st …………….km 2nd ……………..km
25. **What would be the closest place for you to sell/buy?**
    A: Describe (e.g. selling point, market, cross roads?) ………………….. Distance……. km
26. **What products are you going to buy today?**
    A: List the products: ……………………………………………………………………….
27. **Are these goods available at this market throughout the year?**
    A: YES NO
28. **Where do you go to get the items you need that are not available at this market?**
29. A: ………………………………………………………………………………………..
30. **Are you producing some of your food yourself? If yes, ask for share?**
    A: YES (………. %) NO
31. **Where do you get the money to buy the goods? (Tick all that apply!)**
    A: Wage …. Sell own production ….. Other (specify)………………
32. **Do you also buy from traders coming to your village or do you always come to the market? How much higher are the prices charged by the traders?**

    A: Buys from traders coming to the village………….. Always comes to the market ………..
    If traders, prices are ………………. times/percent/shillings higher (delete as appropriate)
33. **Do you have enough information to know the right price of the goods and their availability at the market?**

    A: YES NO Possible comment: ……………………………………….
34. **Where do you get this information from? Your friends? Radio? Newspaper? (Tick all that apply!)**

    A: Friends…… Radio…… Newspaper…… Trader ……. Other (specify)…..……………..
35. **What is the <u>main</u> constraint for you to use the market?**
    A: Time to get there …….. Not enough goods to buy…… Unreliable supply or prices….… No transport……. No cash to buy goods……. Other (specify) ……………….……………...

36. What would be the best way to improve the market and/or your access to the market?

A: ……………………………………………………………………………………………
……………………………………………………………………………………………………

37. If this was done, how would this change your behaviour? Do you think you would rely more on the market for your daily consumption?

A: ……………………………………………………………………………………………
……………………………………………………………………………………………………

Additional comments by the interviewee/interviewer: …………………………………………..
……………………………………………………………………………………………………..
……………………………………………………………………………………………………..

THANK YOU VERY MUCH FOR YOUR TIME!

PART 2B: THIS QUESTIONNAIRE IS FOR TRADERS ONLY!

38. How often do you come to this market?

A: …….times a week/month (delete as appropriate)

39. What products are you selling?

A: ………………………………………………………………………………………..

40. Did you buy them from the producer or from another trader?

A: From the producer ……… From another trader ………

41. How many traders that you know of are operating in this area?

A: ………………………………………………………………………………………..

42. How do you handle the transport of the goods from the producer to the market and/or the buyer? Tick all types of transport alternatives that are available to you?

A: Car …… Bike …….. Carry ……. Lorry ……. Other (specify) ………………..

43. Besides transportation, do you incur any other costs from trading?

A: (e.g. negotiating, credit, storage) ………………………………………………………..

44. Do you have access to storage facilities?

A: YES NO If yes, describe ……………………………………………..

45. How long do you store the goods for?

A: ……….. days ………….. weeks ………… months

46. Do you process the goods between buying and selling?

A: YES NO If yes, describe ……………………..………………………

47. What is the spread between your buying and selling price?

A: ………….. percentage/ shillings per kilo/item/transaction (delete as appropriate)

48. What is your average daily profit?

A: ……………………………………. shillings

49. Do you manage to save from your profit?

A: YES NO

50. What is the biggest cost of trading? Transport?

A: ……………………………………………………………………………………….

51. Do you give credit to your customers?

A: YES NO

52. Do get credit yourself? From where? (Tick all that apply!)

A: None ….. Other traders…. Producers….. Banks…… Other………….………….

53. a) Do you sell products to Dar es Salaam?

A: YES NO

b) How much would it cost to ship your products to Dar es Salaam?

A: ……….. shillings per kilo/bag/shipment Don’t know ……….

c) How much higher price would you get in Dar es Salaam?

A: ……… shillings per kilo/bag/other Don’t know ………

54. Is trading your <u>main</u> activity?

A: YES NO

55. **What other economic activities do you have?**

A: ………………………………………………………………………….........................

56. **How long have you been a trader?**

A: ……..years ………. months

57. Are any other members of your family traders?

A: YES NO If yes, which family members? ……………………………

58. What would be the best way to facilitate your trading?

A: ………………………………………………………………………………………...

…………………………………………………………………………………………

59. If this was done, how would it affect your trading?

A: ………………………………………………………………………………………...

…………………………………………………………………………………………

Additional comments by the interviewee/interviewer: …………………………………………..

……………………………………………………………………………………………………..

PART 2C: THIS QUESTIONNAIRE IS FOR TRADERS IN DAR ES SALAAM ONLY!

60. **How often do you come to this market?**
    A: …….times a week/month (delete as appropriate)
61. **What products are you selling?**

A: List the products: ………………………………………………………………………………

62. **Where do the products come from?**

A: (e.g. Morogoro) ………..……………………………………………………………………..

63. **Where did you buy the goods?**

A: (e.g. market in Dar es Salaam, farm in Morogoro) ……………………………………………

64. **Who handled the transportation into this market?**

A: Producer ……. Other trader/transporter …….. Self …… Other (specify) ……………

65. **How much do you think it costs to transport these goods to this market?**

A: ……………………………………..shillings

66. **What are the main difficulties in buying the goods from other locations?**

A: Lack of information….. Transportation …. Unreliable supply……Other (specify)…..............

67. **How much do you usually sell per day?**

A: ………………………………. shillings

68. **What type of outgoings do you have to pay from your gross income apart from buying the goods?**

A: Rent (market place) ….. Tax ….. Salary …. Transport …..
Other?………..

69. **What is your average daily profit?**

A: …………………………………… shillings

70. **Do you manage to save from your profit?**

A: YES NO

71. **What kind of storage facilities do you have for unsold goods?**

A: ……………………………………………………………………………………………….

72. **How long do you store the goods for?**

A: ………… days …………… months

73. **Do you give credit to your customers?**

A: YES NO

74. **Are most of your clients poor, middle income or high income households?**

A: Poor …… Middle …… High …….

75. **Do get credit yourself? From where? (Tick all that apply!)**

A: None ….. Other traders…. Producers….. Banks…… Other………..………….

76. **What other economic activities do you have besides trading?**

A: ……………………………………………………………………………….......................

77. **How long have you been a trader?**

A: ……..years ………. months

78. **Are any other members of your family traders?**

A: YES NO If yes, which family members? ……………………………

79. What do you think would be the best way to facilitate your trade?

A: ……………………………………………………………………………………………….

…………………………………………………………………………………………………..

80. If this was done, how would it affect your trading?

A: ……………………………………………………………………………………………….

…………………………………………………………………………………………………..

Additional comments by the interviewee/interviewer: …………………………………………..

……………………………………………………………………………………………………..

……………………………………………………………………………………………………..

Appendix 6A: Market actors in the national supply chain

Producers

The producers live in rural areas and cultivate crops both for own use as well as for sale. Mixed cultivation of several crops on the same plot is common, and the majority of food crops consumed are produced at home. Selling agricultural production is most often the only source of cash in the rural households, and thus getting the surplus production to the market is of crucial importance. Usually the retail trade is left for professional traders who live close and can stay at the markets all day, as it often takes the producer the whole day just to reach the market. If the producer has small quantities to sell, they normally sell them at the village avoiding the cost of going to the market. Some larger producers are able to meet the transport costs that need to be paid in cash to ship the products directly to Dar es Salaam to a known broker, who then sells the products on the producer's behalf. Small-scale producers, on the other hand, are unable to finance the transport and wait for the payment and thus their only option is to sell at farm gate.

Local Brokers

Local brokers know the region and its producers well. However, they do not normally have sufficient working capital to act as large-scale traders transporting goods to Dar es Salaam, but they serve the role as intermediaries between the unknown large-scale buyer and local producer for a small commission. Local brokers hire a small lorry and go to a local village where they negotiate the price for which they are prepared to buy the products. Villagers are then invited to bring the goods to the lorry to be transported to larger collection points to wait for Dar es Salaam buyers. The local traders are often also supplying goods for the wholesalers at the regional markets, who are unable or unwilling to go to the villages to collect the products themselves. Goods like paddy are easy to store in bags, and the paddy is processed into rice only when the buyer is known. Large-scale buyers come to the collection points and buy goods from several small brokers at the same time. They pay the commission in cash, freeing the brokers' capital to be spent again on local produce.

Large-Scale Buyers from Dar es Salaam

The large-scale buyers purchase the goods directly from the producer or where the local traders are well organised (like in Mbeya) or alternatively if the local producers are not known, they buy from the local brokers. The buyers organise the transport of goods to Dar es Salaam (sharing a truck with another trader if necessary). They rarely own their own means of transport but hire trucks from the place of purchase. However, finding a truck in rural regions can be expensive and difficult as trucks are often standing in Dar es Salaam waiting for goods to be shipped back to the regions. There are relatively few large-scale buyers who know each other and can coordinate trips to different regions depending on the supply in each region and demand in Dar es Salaam. Once the goods reach Dar es Salaam, they are sold either to a buyer who has placed an order for the goods in advance; through brokers to a large number of smaller customers; or large-scale buyers can act as wholesalers directly and sell to retailers from their own storage. The large-scale buyers operate on a working capital of several million shillings but only the largest of them have enough capital to store the goods and wait for the prices to increase.

Also increased competition in the national market has prolonged the time it takes to sell the products in Dar es Salaam tying traders' working capital for days before the next trip to the regions can be made.

Transporters and Brokers of Transport Services

Transporters are facilitators of trade but not traders themselves. They take the goods from one trader to another for an agreed fee which is paid for in cash. The transporters may be part of a large transportation company but most often they work on freelance basis driving a hired truck, or they are paid by the owner to drive goods on demand. Trucks transport agricultural products from the regions to Dar es Salaam and wait there for industrial or processed agricultural goods to be transported back to the regions. Sometimes trucks go back empty especially before long holidays as it is costly to stay and wait in Dar es Salaam. The driver of the truck often gets a very modest fee as the owner of the truck takes the bulk of the existing profit.

Brokers in Dar es Salaam

The use of brokers in Dar es Salaam is common, as large quantities needs to be distributed to small-scale buyers before the perishables get rotten. Brokers are often organised and specialise in trade at a specific market. The brokers work for the seller and their fee for their service depends on the quantity sold and the price they are able to get. Brokers act as trade facilitators as they match together previously unknown buyers and sellers, and guarantee the transaction by their continuous presence at the market, their reputation as a trader, as well as the reputation of the organisation they represent.

Wholesalers in Dar es Salaam

Wholesalers are mainly based at Kariakoo or Tandale markets in Dar es Salaam. Tandale is the main market for grains and deals up to 10 tons of rice daily. The wholesalers buy goods coming to Dar es Salaam in bulk directly from the producers or other large-scale traders who have purchased the goods from the regions. Sometimes, especially during the harvest season even the wholesalers go directly to the regions to purchase the goods. Small-scale wholesalers operate a working capital of 200,000-1 million shillings whereas large-scale wholesalers have more than 5 million shillings to trade with. Retailers from other markets in Dar es Salaam come to buy their products from the wholesalers and incur an additional transportation cost of shipping the products from Tandale or Kariakoo into smaller markets in the area. Wholesalers grade and weigh the products and pay for the transport in cash. As scales are scarce, bags of rice purchased can sometimes contain less rice than expected which adds to the risk of trading borne by the wholesalers.

Retailers in Dar es Salaam

Retailers in Dar es Salaam are mostly small-scale traders who purchase the products from larger traders and help them to distribute the goods to the final consumer. The largest retailers act simultaneously as wholesalers, operate a well established business with a comfortable working capital and play an active role in the national supply chain. Medium-scale retailers buy the goods from the wholesalers and often express willingness to move up the supply chain to operate as wholesalers but despite years of experience as retailers they are often unable to increase their working capital to the necessary level. Small-scale retailers in Dar es Salaam most often sell perishable goods like bananas and have just sufficient working capital to buy the products for the next day. Even though the retailers in Dar es Salaam cater for a wider range of customers, the competition between the traders keeps the marketing margins low.

Final consumers

Final consumers in Dar es Salaam come to the markets several times a week to purchase food items for own consumption. Using the markets instead of supermarkets gives them the possibility to bargain on prices and a larger choice of goods. Consumers in Dar es Salaam are more likely to have a wage income or business income as are the rural consumers, and thus they have more purchasing power to demand the goods they need. The main food items can always be found at the markets in Dar es Salaam even though their prices may fluctuate. Consumers can thus rely on a steady supply of food from the markets and subsistence farming is rare in the capital, even though some consumers reported complementing their consumption by cultivating a plot of land outside the city centre. Markets in Dar es Salaam are easy to reach throughout the year and the large number of small-scale traders keeps traders' margins at a very competitive level.

Appendix 6B: Market actors in the export supply chain for cashew nuts

Producers of cashew

Cashew nut is produced both in large farms covering around 150 acres as well as in smaller farms of one or two acres. Similarly to other small-scale peasants in the country, the cashew producers are constrained by their lack of capital to purchase necessary inputs for production and lack of know-how on how to improve their production. The special characteristic of the cashew farmers is their common dependence on one cash crop to provide cash income for the whole year. Even though other counter-seasonal cash crops, such as millet and soybeans, could be cultivated in the same plot with cashew nuts, varying production over and above the traditional cashew and cassava is still very rare. The farmers are rarely able to get a loan to cover the cost of farming inputs, like sulphur dust, needed in May, June and July before the harvest season in October. This seasonal shortage of cash could be aided with wider range of cash crops cultivated: millet harvest season falls conveniently for the same months when the cash for farming inputs is required.

Primary Cooperatives

Primary cooperatives used to be the only legal buyers of cashew nuts, but after the trade liberalisation their role has changed into mere trade facilitators. The cooperatives do not buy the products themselves, but act as a forum for the buyers to bring the money and the producers to bring the products. The buyers come and place an order for cashews at the primary cooperative who delegates the products collected from the members for the highest bidder or for the optimal price for the society. They collect the cashew nuts from the farmers on behalf of the buyer, and their scales, personnel and organisation are used to manage the large-scale trade of cashews during the harvest season. The primary cooperatives are also liable for collecting the levy issued by the district council. Primary cooperatives are organised into secondary cooperatives, i.e. unions, but these higher levels of organisation are currently playing a very marginal role as a representative body with little bargaining power and weak leadership.

Export Agents

Export agents are a small group of well established and well-off businessmen who are entrusted by the exporters to order and collect cashews on their behalf. Once the money has been deposited at the primary cooperative at the village, the agent returns after a while usually with his own truck to collect the products from the cooperative. The transportation cost is borne by the main exporter who also pays a comfortable margin for the agent. The total pay for the agents' service sums up to high figures as the margin is paid per kilo and the agents are buying several tons at a time. Farmers have expressed willingness to transport the products directly to the exporter avoiding the middleman institution of agents but currently the producers lack the organisation and transportation capacity for this plan to materialise.

Main Exporters

The main exporters are few in number and they are all large, well-managed companies with offices in Dar es Salaam. Still, these companies are often mere buying agents for larger companies in India, where the cashews are to be transported. The export companies are formed of experienced businessmen who are well prepared for the price negotiations and who are able to exercise considerable market power due to their knowledge and experience of the market, access to large amount of capital, good transportation facilities from Tanzania to India, and good contacts to the final buyers of raw cashew nuts in India. The export trade is efficient and professional, and in order for the Tanzanian companies to compete at the same market, they would need a considerable improvement in business skills and capital.