# Agriculture in Development of Select African Countries:

## Linkages with Trade, Productivity, Livelihood and Food Security

25 years 1983 2008 CUTS International

#1102

# About the Book

The current publication by CUTS is the outcome of the research conducted during the second phase of "Fostering Equity and Accountability in the Trading System" (FEATS) Project. The present research flows from the research conducted during the first phase and employs similar methodological approach by actively involving national stakeholders in the project countries: Kenya, Malawi, Tanzania, Uganda and Zambia through the respective FEATS National Reference Groups (NRGs). The final publication is the culmination of desktop and field research conducted over a period of 15 months, which were extensively reviewed by the CUTS team and FEATS Project Advisory Committee. The emerging research drafts were also presented at two meetings of the NRGs.

The research focus is broadly on the positive inter-linkages between trade and agricultural development in the five project countries by developing the capacities of the governments to focus on the importance and promotion of the agricultural sector, while providing recommendations tailored to the unique circumstances of each project country. The research provides an analysis of the importance of the agricultural sector in the economies of the five countries, and demonstrates how trade policies, if directed well, can positively contribute towards agricultural productivity, and increased food security, which are vital for rural livelihoods and poverty reduction.

The research indicates that in spite of flawed macroeconomic and trade policies in the agricultural sector adopted in the past, the governments are now cognisant of the issue and eager to formulate more holistic policies with the participation of a broader group of stakeholders. It also underscores broad limitations that the countries face in boosting agricultural productivity and ensuring food security, due to physical, legal, economic, social and cultural factors, and outlines how the promotion of regional trade and effective trade facilitation policies can provide effective solutions.

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# Foreword

Trends in macroeconomic data that indicate the rising economic potential for Africa, a topic which has been the subject of great discourse and deliberation amongst economists, policy makers and academics alike, point to the great strides the continent has been making in recent years in pursuing their common concerns of sustainable economic growth and development. This recent success is the result of the central choices made by African countries to increase economic expansion, promote liberalisation of trade, reduce poverty and foster inclusive development. In fact, due to a combination of factors such as real GDP growth, higher commodity prices in global markets, lower debt and increased integration into external markets, most African countries have witnessed favourable growth in the past decade.

However, one of the greatest challenges faced by the continent is to reduce the number of people living in poverty by a half by 2015, in order to meet the objectives of the Millennium Development Goals. For this purpose alone, for African countries to successfully and sustainably climb out of poverty, they have to formulate holistic policies that not only achieve and maintain real economic growth, but also prioritise equitable development.

In its quest to achieve the Millennium Development Goals, the significance of the agricultural sector in the African context cannot be oversimplified. As most African countries are agrarian economies, the objective to employ effective trade policies to enhance the potential of the agricultural sector in order to promote rural livelihoods, ensure food security and earn foreign exchange is of utmost importance.

In recent years, the debate over trade policy has become highly ideological. The work done by CUTS under the "Fostering Equity and Accountability in the Trading System" or FEATS project is an attempt to bring facts and a holistic analysis to address the question of how effective trade policies incorporated at national level could foster the growth of the agricultural sector in five project countries in Eastern and Southern sub-Saharan Africa, namely, Kenya, Malawi, Uganda, Tanzania and Zambia. The publication aims to bring out the relevant issues pertaining to trade policy and agricultural development in the five project countries in order to contribute to the existing knowledge and literature and to assist key stakeholders to formulate better policies.

The current publication is exhaustive and represents extensive interests and views across the spectrum. Noteworthy among these is the fact that the studies conducted by the researchers under the project focuses not only on the simplified, broader and common issues faced by the project countries, but also their unique problems and requirements to have a richer clarity on prescribing solutions. Therefore, it is commendable to mention

that the most urgent issues recognised by the stakeholders in the five project countries have been reflected.

The publication undertakes a systematic study of the current aims and objectives of the key economic and agricultural policies in the five project countries. It brings to light the diverging concerns between the landlocked countries (Zambia, Uganda and Malawi) and the non-landlocked countries (Kenya and Tanzania) in their pursuit of achieving their targeted development through trade. For instance, the essential focus is interestingly on the promotion of agricultural productivity through improved trade facilitation for the landlocked countries, and ensuring food security through the promotion of regional trade in the non-landlocked countries. It encapsulates the social, political, economic as well as cultural factors present in the countries that drive the importance of linking trade and agriculture to rural livelihoods and food security.

The publication provides in depth analysis on the subject and seeks to provide tailor-made policy recommendations based on the unique characteristics of the five countries.

I wish to congratulate CUTS and its research team for their efforts to successfully implement the FEATS project, and for the valuable contribution they are making in fostering better understanding of the dynamics of agricultural development through trade.

**M Ann Tutwiler**
Former Coordinator, Global Food Security, US Department of Agriculture
Former Managing Director, Agricultural Markets Programme
at the William and Flora Hewlett Foundation

# Preface

CUTS implemented a project entitled "Fostering Equity and Accountability in the Trading System (FEATS)" in five sub-Saharan countries of Kenya, Malawi, Tanzania, Uganda, and Zambia. The broad objectives of the project included:

- ensuring and enhancing positive linkages between trade and development in Africa by developing the capacity of governments to proactively and positively respond to trade issues through their involvement in policy research,
- advocacy with trade officials and in national capitals by establishing robust, two-way linkages between activities in Geneva and in project countries, and
- generating a more coherent and pro-trade for development voice in the formulation and implementation of trade and development policy at both the national and international levels.

CUTS has used its tested RAN (research-advocacy-networking) model to undertake all project activities in an integrated and inclusive manner. While research remains at the centre of project activities, it is both informed by and supports networking and advocacy in project countries as well as in Geneva. The inclusive and grassroots-linked methodology for research ensures continuous capacity building of stakeholders throughout the process as well as the ownership of outcomes.

This is the second research publication under the FEATS project that presents the outcome of research during the second phase that focussed on interlinkages between trade and agriculture by analysing issues such as agricultural productivity, food security, livelihoods, regional trade and trade facilitation in the context of relevant national, regional and international trade and agriculture policies, and interests and concerns of stakeholders. The analysis in this publication further builds on the research conducted during the first phase of the project on trade policy making processes and the role of stakeholders in trade policy making in project countries.

The process started with electronic consultations with members of FEATS country National Reference Groups (NRGs) regarding the focus and scope of country research studies. Based on these consultations, draft Terms of Reference were prepared and country researchers identified. The ToRs for the five country research studies were presented to an international conference organised in Geneva, Switzerland on October 01, 2009 for discussion and finalisation.

Country researchers started with desktop research and presented their first drafts in early 2010 for review by CUTS research team and members of the FEATS Project Advisory Committee (PAC). These drafts were also discussed in NRG meetings in project countries

in March-April 2010. Country researchers then undertook field work and stakeholder interviews and prepared the revised drafts by early Fall 2010. In addition to another review by CUTS research team and members of FEATS PAC, these drafts were discussed and validated by country stakeholders in NRG meetings organized in project countries in October 2010. I am proud to present the outcome of this long, inclusive and robust process to the national, regional and international audience.

Agriculture is at the centre of development efforts in Africa on which a number of initiatives are being undertaken. These initiatives can broadly be termed as those which are mainly for enhancing productivity (e.g. USAID-led CAADP - The Comprehensive Africa Agricultural Development Programme) and those which are mainly to improve infrastructure including trade facilitation measures (e.g. development of Central and North-South corridor, etc). These two are complementary: increase in productivity without corresponding improvement in marketing facilities can lead to "marketable surplus" (of farmer-households) but not "marketed surplus". Infrastructure development is a key to improve "marketed surplus". However, a third, and equally important aspect is an environment that encourages, fosters and supports healthy interaction between farmers on the one hand and private sector investors and traders on the other – soft infrastructure. Productivity-enhancing initiatives can certainly improve the "endowment set" of a farmer-household but in order to make use of it and to improve the corresponding "entitlement set", both "better infrastructure for better marketing" and "positive terms of trade between the farmers, and investors and traders" need to be provided. This in essence is the main message coming out of the research in this publication.

I am confident that this research will generate a renewed interest among national and regional policy makers in Africa and their international development partners to address all issues in a coordinated, holistic, balanced and sustained manner so that trade can play its critical role to harness the potential of agriculture for inclusive growth and development in project countries. I am also confident that all relevant stakeholders will be involved in this endeavour. CUTS as always is committed to playing its role.

It is my pleasure to thank all who are associated with the FEATS project and the conduct of this research including the funding partner, The William and Flora Hewlett Foundation of the US, country researchers, partner organisations in the project countries, and members of the PAC and National Reference Groups. I am also thankful to my colleagues in CUTS resource centres in Jaipur, Geneva, Lusaka, and Nairobi for successfully implementing the FEATS project.

Jaipur, India
February 2011

**Pradeep S Mehta**
Secretary General
CUTS International

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Many experts and friends contributed to this study and their contribution is gratefully acknowledged. In particular, thanks are due to: the members of FEATS National Reference Groups in Kenya, Malawi, Tanzania, Uganda and Zambia for providing comments on various drafts of the study; and the members of FEATS Project Advisory Committee (PAC) for guidance throughout the process to conduct the study.

Any remaining omissions and mistakes are the responsibility of the research team including respective country researchers.

# Abbreviations and Acronyms

**A**

| | |
|---|---|
| AAMP | Area-Based Agricultural Modernisation Programme |
| ACF | Agricultural Consultative Forum |
| ACIS | Advanced Cargo Information System |
| ACODE | Action Coalition for Development and Environment |
| ACTESA | Alliance for Commodity Trade in Eastern and Southern Africa |
| ADMARC | Agricultural Development and Marketing Corporation |
| ADP | Agricultural Development Programme |
| AFC | Agricultural Finance Corporation |
| AfDB | African Development Bank |
| ASF | African Swine Fever |
| AGOA | Africa Growth and Opportunity Act |
| AICAD | African Institute for Capacity Development |
| AIMS | Agricultural Information Management Systems |
| ALRMP | Arid Lands Resource Management Project |
| APIP | Agricultural Productivity Improvement Programme |
| ARDP | Agricultural and Rural Development Policy |
| ARDS | Agricultural and Rural Development Strategy |
| ASALs | Arid and Semi-Arid Lands |
| ASDS | Agricultural Sector Development Strategy |
| ASWAP | Agricultural Sector Wide Approach |
| ASYCUDA | Automated System for Customs Data |

**B**

| | |
|---|---|
| BDS | Business Development Services |
| BMU | Beach Management Unit |
| BoT | Bank of Tanzania |
| BoU | Bank of Uganda |
| BRC | British Retail Consortium |

**C**

| | |
|---|---|
| CAA | Civil Aviation Authority |
| CAADP | Comprehensive African Agricultural Development Programme |
| CAC | Camp Agriculture Committee |
| CBC | Customs Business Centre |
| CBI | Centre for the Promotion of Imports from Developing Countries |
| CBPP | Contagious Bovine Pleuropneumonia |
| CDO | Cotton Development Organisation |
| CDT | Cotton Development Trust |

| | |
|---|---|
| CET | Common External Tariff |
| C&F | Clearing and Forwarding |
| CHOGM | Commonwealth Heads of Government Meeting |
| CICS | Competitiveness and Investment Climate Strategy |
| COMESA | Common Market for Eastern and Southern Africa |
| CSO | Central Statistical Office |
| CSO | Civil Society Organisation |
| CTI | Commercial, Trade and Industrial |

**D**

| | |
|---|---|
| DACO | District Agricultural Coordinators |
| DCGL | Dwangwa Cane Growers Limited |
| DDA | Dairy Development Authority |
| DENIVA | Development Network of Indigenous Voluntary Associations |
| DFID | Department for International Development |
| DFR | Department of Fisheries Resources |
| DRC | Democratic Republic of Congo |
| DTIS | Diagnostic Trade Integration Study |

**E**

| | |
|---|---|
| EAC | East African Community |
| EBA | Everything But Arms |
| ECF | East Coast Fever |
| ECGS | Export Credit Guarantee Scheme |
| EIA | Environmental Impact Assessment |
| EIF | Enhanced Integrated Framework |
| EPA | Economic Partnership Agreement |
| EPRC | Economic Policy Research Centre |
| EPZ | Export Processing Zone |
| ERS | Export Refinance Scheme |
| EU | European Union |
| EUREPGAP | Euro-Retailer Produce Working Group's Good Agricultural Practices |

**F**

| | |
|---|---|
| FAO | Food and Agriculture Organisation |
| FAUEX | Federation of Associations of Uganda Exporters |
| FDI | Foreign Direct Investment |
| FEATS | Fostering Equity and Accountability in the Trading System |
| FEWS | Food Early Warning Systems |
| FMD | Foot and Mouth Disease |
| FNDP | Fifth National Development Plan |
| FoB | Free on Board |
| FRA | Food Rights Alliance |
| FRA | Food Reserve Agency |
| FRDP | Fiscal Restructuring and Deregulation Programme |
| FTA | Free Trade Area |

**G**

| | |
|---|---|
| GAP | Good Agriculture Practices |
| GART | Golden Valley Agricultural Research Trust |
| GBI | Greenbelt Initiative |
| GDP | Gross Domestic Product |
| GHI | Global Hunger Index |
| GMP | Good Manufacturing Practices |
| GNP | Gross National Product |
| GoK | Government of Kenya |
| GoU | Government of Uganda |
| GSP | Generalised System of Preferences |

**H**

| | |
|---|---|
| HACCP | Hazard Analysis and Critical Control Points |
| HORTEXA | Horticulture Exporters Association |

**I**

| | |
|---|---|
| ICBT | Informal Cross Border Trade |
| IFAD | International Fund for Agricultural Development |
| IFPRI | International Food Policy Research Institute |
| IFWG | Integrated Framework Working Group |
| IMF | International Monetary Fund |
| IPAR | Institute of Policy Analysis and Research |
| IPC | Integrated Phase Classification |
| IPM | Integrated Pest Management |
| ISO | International Organisation for Standardisation |
| ISTT | In–service Training Trust |
| IT | Information Technology |
| ITC | International Trade Centre |

**J**

| | |
|---|---|
| JICA | Japan International Cooperation Agency |

**K**

| | |
|---|---|
| KACITA | Kampala City Traders Association |
| KARI | Kawanda Agricultural Research Institute |
| KCG | Kasinthula Cane Growers |
| KFSM | Kenya Food Security Meeting |
| KFSSG | Kenya Food Security Steering Group |
| KIHBS | Kenya Integrated Health and Budget Survey |
| KNBS | Kenya National Bureau of Statistics |
| KRA | Kenya Revenue Authority |

**L**

| | |
|---|---|
| LDC | Least Developed Country |
| LDT | Livestock Development Trust |
| LINTCO | Lint Company of Zambia Limited |
| LVFO | Lake Victoria Fisheries Organisation |

**M**

| | |
|---|---|
| MAAIF | Ministry of Agriculture, Animal Industry and Fisheries |
| MAAPS | Marketing and Agro-Processing Strategy |
| MACO | Ministry of Agriculture Cooperatives |
| MARDEF | Malawi Rural Development Fund |
| MBS | Malawi Bureau of Standards |
| MDGs | Millennium Development Goals |
| MEGS | Malawi Economic Growth Strategy |
| MEMD | Ministry of Energy and Mineral Development |
| MEPC | Malawi Export Promotion Council |
| MEWD | Ministry of Energy and Water Development |
| MFIs | Micro-Finance Institutions |
| MFN | Most Favoured Nation |
| MFNP | Ministry of Finance and National Planning |
| MFPED | Ministry of Finance, Planning, and Economic Development |
| MGDS | Malawi Growth and Development Strategy |
| MICT | Ministry of Information, Communications, and Technology |
| MIPA | Malawi Investment Promotion Agency |
| MIS | Market Information Systems |
| MJCA | Ministry of Justice and Constitutional Affairs |
| MoES | Ministry of Education and Sport |
| MoLG | Ministry of Local Government |
| MoW | Ministry of Works and Transport |
| MRA | Malawi Revenue Authority |
| MPRS | Malawi Poverty Reduction Strategy |
| MRFC | Malawi Rural Finance Company |
| MSMEs | Micro Small and Medium Enterprises |
| MSY | Maximum Sustainable Yield |
| MTENR | Ministry of Tourism, Environment and Natural Resources |
| MTTI | Ministry of Tourism, Trade, and Industry |
| MWLE | Ministry of Water, Land, and Environment |

**N**

| | |
|---|---|
| NAADS | National Agricultural Advisory Services |
| NaFIRRI | National Fisheries Resources Research Institute of Uganda |
| NAP | National Agricultural Policy |
| NARO | National Agricultural Research Organisation |
| NCPB | National Cereals and Produce Board |
| NDF | Northern Dark Fired |
| NDP | National Development Plan |
| NEMA | National Environment Management Authority |
| NES | National Export Strategy |
| NFA | National Forest Authority |
| NGO | Non-Governmental Organisation |
| NOGAMU | National Organic Agricultural Movement of Uganda |
| NPA | National Planning Authority |
| NSA | Non-State Actor |
| NSGRP | National Strategy for Growth and Reduction of Poverty |

| | |
|---|---|
| NTB | Non Tariff Barrier |
| NTMs | Non Tariff Measures |
| NTP | National Trade Policy |

**O**

| | |
|---|---|
| OECD | Organisation for Economic Cooperation and Development |
| ODCMT | Organisation Development Community Management Trust |
| OGS | Out-Grower Scheme |
| OPM | Office of the Prime Minister |
| OTRI | Overall Trade Restrictiveness Index |
| OVOP | One Village One Product |

**P**

| | |
|---|---|
| PAP | Poverty Alleviation Programme |
| PEAP | Poverty Eradication Action Plan |
| PFA | Prosperity For All |
| PHD | Poverty and Human Development Report |
| PIP | Pesticide Initiative Programme |
| PIRT | Presidential Investors Roundtable |
| PMA | Plan for Modernisation of Agriculture |
| PRA | Pest Risk Assessment |
| PRINT | Promotion of Regional Integration in the Livestock Sector |
| PRSP | Poverty Reduction Strategy Paper |
| PSFU | Private Sector Foundation Uganda |
| PSO | Private Sector Organisation |

**R**

| | |
|---|---|
| RAFU | Road Agency Formation Unit |
| RATES | Regional Agricultural Trade Expansion Support |
| RDS | Rural Development Strategy |
| REWS | Regional Early Warning System |
| RoO | Rules of Origin |
| RTA | Regional Trade Agreement |

**S**

| | |
|---|---|
| SACA | Smallholder Agricultural Credit Administration |
| SADC | Southern Africa Development Community |
| SAP | Structural Adjustment Programme |
| SEATINI | Southern and Eastern African Trade Information and Negotiations Institute |
| SEP | Strategic Exports Programme |
| SIDA | Swedish International Development Cooperation Agency |
| SMEs | Small and Medium Enterprises |
| SPS | Sanitary and Phytosanitary |
| SPS | Starter Pack Scheme |
| SQAM | Standards, Quality, Assurance, Accreditation and Metrology |

| | |
|---|---|
| SSM | Special Safeguard Mechanisms |
| STECO | Smallholder Tea Company |
| SUCOMA | Sugar Corporation of Malawi |

**T**

| | |
|---|---|
| TBT | Technical Barriers to Trade |
| TIP | Target Input Programme |
| TRACE | Trade Capacity Enhancement Project |
| TTF | Transport and Trade Facilitation |
| TUNADO | The Ugandan National Apiculture Development Organisation |

**U**

| | |
|---|---|
| UBOS | Uganda Bureau of Statistics |
| UCDA | Uganda Coffee Development Authority |
| UCFFA | Uganda Commercial Fish Farmers Association |
| UCGEA | Uganda Cotton Growers and Exporters Association |
| UEPB | Uganda Export Promotion Board |
| UFA | Uganda Fisheries Authority |
| UFEA | Uganda Flower Exporters Association |
| UIA | Uganda Investment Authority |
| UIRI | Uganda Industrial Research Institute |
| UMA | Uganda Manufacturers Association |
| UNBS | Uganda National Bureau of Standards |
| UNCCI | Uganda National Chamber of Commerce and Industry |
| UNCTAD | United Nations Conference on Trade and Development |
| UDN | Uganda Debt Network |
| UNDP | United Nations Development Programme |
| UNFF | Uganda National Farmers Federation |
| UNIDO | United Nations Industrial Development Organisation |
| UNRA | Uganda National Roads Authority |
| URA | Uganda Revenue Authority |
| URC | Uganda Railways Corporation |
| URT | United Republic of Tanzania |
| USAID | United States Agency for International Development |

**V**

| | |
|---|---|
| VAT | Value Added Tax |
| VODP | Vegetable Oil Development Project |

**W**

| | |
|---|---|
| WB | World Bank |
| WFP | World Food Programme |
| WTO | World Trade Organisation |

**Z**

| | |
|---|---|
| ZARI | Zambia Agriculture Research Institute |
| ZEGA | Zambia Export Growers Association |

# 1 Agricultural Development and Trade in Five Sub-Saharan African Countries: An Overview

– Rashid S. Kaukab and Suddha Chakravartti

## 1.1 Introduction

### 1.1.1 Context

Since the early 1990s, several African countries have made numerous strides and considerable progress in opening up their economies to global markets through liberalisation and trade, often augmented by policies adopted under the auspices of the World Bank and the International Monetary Fund (IMF). This move was further manifested by a plethora of Regional Economic Communities (RECs) that aim at deeper regional integration among African countries. The above arrangements, both at the international and regional levels, were designed with the purpose of fostering trade and investment amongst member countries by expediting the removal of trade barriers and other impediments to international and regional trade in order to foster development and economic growth, raise and secure livelihoods, and reduce poverty. The success of these measures has been mixed. While economists supporting economic globalisation point out the underlying assumption of the benefits accrued by creation of larger markets and opportunities through trade and liberalisation, many on the opposite side of the spectrum have criticised these arrangements for the adverse consequences and asymmetries it has created.

While few can argue against the intrinsic worth or the importance of trade and liberalisation in addressing today's development challenges, it is of utmost importance that much of the pivotal interrogations on the subject should be channelled not towards its idiosyncratic merits or demerits, but rather on how it is managed (Stiglitz, 2007), in

order to fulfil its desired objectives. Indeed, trade if managed well can be a powerful instrument for economic development and poverty reduction, as well as a tool to correct the imbalances between areas of surplus and areas of deficit, based on the comparative advantage theory. Therefore, by increasing opportunities and expanding markets, trade has a direct impact on competitiveness, productivity and livelihoods.

It is in this context that the country studies in this volume seek to analytically explore the policy interlinkages between the promotion of trade and the development concerns of agricultural productivity, food security, and livelihoods in five sub-Saharan African countries, namely, Kenya, Malawi, Tanzania, Uganda and Zambia, henceforth termed as the "project countries." These countries are located in Eastern and Southern sub-Saharan Africa. All of them, except for Kenya, are Least Developed Countries (LDCs), and three, namely Zambia, Malawi and Uganda, are landlocked having their own unique attributes. Moreover, all five depend on their agriculture sector as the mainstay of the economy in terms of employment and its contribution to rural livelihoods, food security and international trade. On the other hand, however, their agricultural sector suffers from lack of competitiveness, limited productivity improvements, and occasional adverse impacts due to international trade.

Although the project countries, their civil societies, donor agencies and international partners are wholly cognisant of the affirmative role which trade can play in addressing the aforementioned problems, there is a need for better awareness of the intricacies of the issues involved in order to forge coherent trade and agriculture policies that can then harness the full potential of their agriculture sectors for inclusive growth and development.

### 1.1.2 FEATS Project and Research Methodology

These research studies were undertaken during the second phase of the Fostering Equity and Accountability in the Trading System (FEATS) project implemented by CUTS. This 3-year project had the following as its broad objectives:

- Ensuring and enhancing positive linkages between trade and development in Africa by developing the capacity of governments to proactively and positively respond to trade issues through their involvement in policy research
- Advocating with trade officials and in national capitals by establishing robust, two-way linkages between activities in Geneva and in project countries
- Generating a more coherent and pro-trade for development voice in the formulation and implementation of trade and development policy at both the national and international levels

The project was divided into two phases of 18 months each. The first phase from April 2008 to September 2009 focussed on trade policy making processes and the role of all relevant stakeholders. The second phase launched in October 2009 focussed on issues related to agriculture, trade and development. Each phase included organically linked sets of activities consisting of policy research, advocacy and networking with policy research being the fulcrum around which other activities revolved.

The research in the second phase was designed to examine in each country the linkages between agriculture and trade with particular focus on agricultural productivity and trade facilitation (in the context of landlockedness of the three countries), and food security and regional trade (for the two non-landlocked countries).

An inclusive methodology was adopted at each stage of the research with a view to maximise sharing and cross fertilisation of information, ideas and analysis and to ensure buy-in by all relevant stakeholders in the countries. The process started with the identification of the specific focus of research studies in each project country. Based on feedback from National Reference Groups in each country, the topics and framework for research were developed. Hence the emphasis of Malawi, Uganda and Zambia country studies on agricultural productivity and trade facilitation, and of Kenya and Tanzania country studies on food security and regional trade. The terms of reference were also finalised after several rounds of inputs and feedback from country stakeholders.

The country research studies were completed over a period of 15 months. First, drafts were prepared by country researchers based on desktop research. Second, some field work including interviews with relevant stakeholders was undertaken to supplement the desktop research. Third, the emerging drafts were presented in two meetings of the National Reference Groups organised in the countries in March 2010 and October 2010 respectively, for discussion and validation of findings. The drafts were also reviewed by CUTS research team and members of FEATS Project Advisory Committee.

### 1.1.3 Introduction to the Synthesis Chapter

This synthesis chapter aims to bring out the main elements of information and analysis contained in the five country research studies in this volume. It should be noted, however, that this synthesis chapter is not a summary of the country studies. The comprehensive country studies on trade and agriculture nexus in Kenya, Malawi, Tanzania, Uganda and Zambia present rich and varied knowledge and insights. The synthesis chapter attempts to present an overview of only the central points to drive home the key messages while avoiding repetition and duplication, but filling in gaps where they are essential for formulating a coherent picture.

The chapter is divided into five sections. After the introduction, the second section gives a brief economic and structural analysis of the project countries. Sections three and four are devoted to relevant agriculture and trade issues respectively. The section on agriculture covers agricultural productivity, food security and agricultural policies, whereas the section on trade includes issues such as international trade, regional trade and trade facilitation. The discourse in sections three and four and their various sub-sections weaves other relevant issues with the focus issue of the section/sub-sections and brings out the interlinkages and their implications. Moreover, livelihoods is a running theme in sections 3 and 4. Finally, section five presents conclusions and recommendations.

## 1.2 Brief Economic and Structural Analysis

### 1.2.1 Key Economic Indicators

Each project country reveals certain similarities in terms of its socio-economic conditions, political situation, historical backgrounds, development paths, agriculture and trade policy and performance record. However, they differ substantially based on their own unique context. Examining carefully the social, political and economic factors affecting each project country, as well as their common and unique factors, can facilitate a more comprehensive understanding of the underlying trade and agriculture-related developmental problems faced by them, and could further aid policy makers to adopt suitable strategies and interventions.

Table 1.1 presents basic information regarding the main economic indicators of the five countries. The table reveals very interesting data and information required for this research. All project countries registered a real growth in their gross domestic products (GDP) at an approximate average of six percent per annum during the first half decade of the new millennium, with Tanzania and Uganda recording the highest growth rates. This was prior to the global economic crisis in 2008, when most African countries enjoyed a favourable average growth rate and per capita GDP growth. This favourable growth in the first half of the decade could be attributed to higher commodity prices, growing export volumes, prudent macro-economic policies, increased foreign direct investments (FDI), debt relief, and sustained aid packages, amongst others. But as evidenced, the global economic crisis post 2008 slowed down this growth.

The table also reveals that although most of the project countries are LDCs and have experienced similar real GDP growth rates in the recent past, there are variations. For instance, there are still broad differences between the per capita Gross National Income (GNI) of Zambia at US$970 in 2009, and Malawi at US$280. In terms of population too, they represented a wide range between Zambia with an approximate population of 13 million, and Tanzania with an approximate population of 44 million. Poverty is widespread in all the project countries, and the majority (almost 80 percent) of their respective populations reside in rural areas and are employed in the agriculture sector.

### 1.2.2 Agriculture: Contribution and Constraints

In terms of the economy, agriculture is of major importance to all five countries and its role is crucial for food security and as the driver for livelihood and poverty reduction. Not only does it constitute a substantial portion of their economies (table 1.2), foreign exchange and trade, the sector is of tremendous importance due to the percentage of the labour population it employs. Therefore, strategies and interventions at policy level focussing on the achievement of inclusive development in these countries have to give precedence to the agricultural sector.

The governments of the five project countries have recognised the importance and potential of the agricultural sector in their economies. This is manifested by granting tremendous weight and significance to the sector, as is apparent from various national policy documents, legislations and strategic Vision documents. Although the renewed commitment and current policies adopted have demonstrated positive results, agriculture

| Table 1.1: Main Economic Indicators | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | **Nominal GDP (current US$) 2009** | **Real GDP (annual percentage change) 2010 projections** | **Annual GDP growth rate (2005-2009) percent** | **Population 2009** | **GNI per capita (current US $) 2009** | **Percentage of population living below US$1.25 a day** | **Percentage of population living below national poverty line (2006)** | **Percentage of total population living in rural areas (2009)** | **Unemployment (percentage of total labour force)** |
| Zambia | 12,747,657,530 | 6.6 | 5.2/ 6.3 | 12,935,368 | 970 | 32.8 (2004) | 68.0 | 64 | 12.9 |
| Uganda | 15,735,689,089 | 5.8 | 6.3/ 7.1 | 32,709,865 | 460 | 19.1 (2005) | 31.1 | 87 | 3.2 |
| Malawi | 4,974,856,180 | 6.0 | 2.6/ 7.7 | 15,263,417 | 280 | 32.3 (2004) | 52.4 | 81 | 7.8 |
| Kenya | 30,200,251,314 | 4.1 | 5.9/ 2.2 | 39,802,015 | 770 | 6.1 (2005) | 46.6 | 78 | 9.8 |
| Tanzania | 21,623,014,292 | 6.5 | 7.4/ 5.5 | 43,739,051 | 500 | 46.8 (2000) | 35.7 | 74 | 4.3 |
| *Source: World Bank, IMF (World Economic Outlook 2010)* | | | | | | | | | |

| Table 1.2: Sectoral Distribution of GDP | | | | | | |
|---|---|---|---|---|---|---|
| | Agriculture as % of GDP | | Industry as % of GDP | | Services as %GDP | |
| | 2000 | 2009 | 2000 | 2009 | 2000 | 2009 |
| Zambia* | 21.0 | 20.7 | 23.8 | 31.6 | 55.2 | 47.7 |
| Uganda | 29.4 | 24.7 | 22.9 | 25.8 | 47.7 | 49.5 |
| Malawi | 39.5 | 35.9 | 17.9 | 20.5 | 42.5 | 43.5 |
| Kenya | 32.4 | 22.6 | 16.9 | 15.3 | 50.7 | 62.1 |
| Tanzania** | 45 | 45.3 | 39.2 | 37.3 | 15.7 | 17.4 |

*Source: The World Bank (http://databank.worldbank.org)*

*Figures for Zambia are for 2008 and based on UNCTAD Handbook of Statistics.

** Figures for Tanzania are for 2000 and 2006.

was often neglected by the governments of the project countries as well as international donors in the 1980s and 1990s. This was due to two main reasons. The first is directly related to policy and trade patterns the countries inherited post-colonisation, which were mostly extractive (minerals, ores and oil), outward looking, and geared mainly for the European markets (UNCTAD, 2009). The second reason for neglecting the agricultural sector was due to the skewed macro-economic and trade policies adopted by the governments of the countries which focussed on import substitution and self sufficiency, through mainly industrialisation by taxing agriculture after independence.[1] Table 1.3 provides information on the agricultural sector in the five countries.

| Table 1.3: Agriculture in Project Countries | | | | | | |
|---|---|---|---|---|---|---|
| | Agricultural land (percentage of total land) | Arable land (percentage of total land) | Agriculture value added (percentage of GDP) 2009 | Agriculture value added per worker (constant 2000 US$ prices) | Main agricultural products | Employment in agriculture (percentage of total employment) 2009* |
| Zambia | 34.4 | 7.1 | 21 | 220 | Tobacco, Cotton, Maize, Sugar, Coffee, Tea | 66 |
| Uganda | NA | 27.9 | 38 | 197 | Coffee, Tea, Tobacco, Livestock, Maize, Fish | 76 |
| Malawi | 52.8 | 31.9 | 36 | 136 | Tobacco, Tea, Sugar, Cotton, Maize | 79 |
| Kenya | 47.4 | 9.1 | 28 | 345 | Maize, Tea, Horticulture Products, Coffee, Tobacco | 69 |
| Tanzania | 38.6 | 10.2 | 45 (2006) | 326 | Maize, Cassava, Sweet Potato, Beans, Millet | 77 |

*Source: Country research studies in this volume and the website 'New Agriculturist'*
*Calculated from UNCTAD Handbook of Statistics

The above mentioned two reasons are the primary causes for the decline in agricultural competitiveness, and hence productivity in these countries despite the fact that they are primarily agrarian economies. These policy choices affected them negatively and the countries reverted from being exporters of food to being net importers of food. Most of the project countries have witnessed chronic food insecurities in the recent past, as evidenced in Zambia and Malawi, both declaring national food emergencies in 2002 (Centre for International Disaster Information, 2003). Moreover, agriculture is mostly carried out by marginalised farmers in small farms. Limited investment in utilities (irrigation systems, transportation, etc) and lack of inputs (farm credit, insurance, improvised seeds, fertilisers, subsidies, etc) have resulted in farming being carried out mostly at subsistence level and dependent on climatic factors.

Although international donor efforts of providing food aid in these crises have been critical for livelihood concerns in the short run, they have been mostly uncoordinated with government policies. In some situations, surge of food aid has adversely affected agricultural productivity in the host countries by lowering the price of food products in domestic markets, thereby creating disincentive for farmers to grow crops. This not only affects the livelihoods of farmers, but also forces them to shift to other business practices away from agriculture.

While excluded from the current research due to dearth of primary and viable data on the subject, more in-depth study and analysis is required to structure an informed opinion, it is no doubt pertinent to mention the current controversy surrounding "land grabs" or "agricultural investments." The concept of land acquisition is a new and upcoming dimension to the problem relating to agricultural productivity, food security and rural livelihoods in the project countries. These investments or acquisitions are made by external countries in the project countries in order to secure food security for themselves. The debate on land acquisition is currently centred on their viability and their affect on the project countries. Many supporters believe that these acquisitions are beneficial for the project countries as they create employment, infrastructure and revenues, amongst others. On the other hand, some view this phenomenon as extremely detrimental for the host countries as they create an enormous burden and shift vital resources, like water, away for their purposes; dislocate segments of the population away from their lands; and hence contribute adversely towards food security and rural livelihoods.

### 1.2.3 Trade and Agriculture: Some Linkages

Trade is recognised as a key driver for economic growth and development, if managed properly. The current research focusses on the theme of present trade policies and concerns of the project countries (trade facilitation and promotion of regional trade) to construct an argument on how trade can have a potentially positive impact by boosting agricultural productivity and ensuring food security. Trade can have desired results on assisting the project countries to diversify their economies and to find complementarities. All project countries primarily export agriculture and mineral commodities. All countries in the project are also members of the World Trade Organisation (WTO) and are pursuing integration objectives on many subjects through a host of other RTAs.

Although liberalisation efforts do go a long way in addressing development challenges in the project countries, unhindered free markets do not necessarily result in inclusive growth, unless directed well. The current model of application that shapes our understanding of liberalisation is based on the importance given to external markets, *vis-à-vis* internal markets, competitiveness over productivity and the ignorance of the plus sum game, that all countries can benefit. This market-oriented approach may not work always and there is clearly a desire among many stakeholders for balancing market orientation with livelihoods concerns.

The potential of agriculture to contribute to inclusive and sustainable growth and development in all five countries is undeniable. In fact, the widespread poverty in these countries, which is much more pronounced in rural areas, cannot be eradicated without such agricultural development. Trade can play an important role in unleashing the potential of agriculture. But it must be recognised that this entails understanding and addressing complex interlinkages.

Trading their way to prosperity is even more formidable for the three landlocked countries of Malawi, Uganda and Zambia. Their landlocked status coupled with poor physical infrastructure substantially adds to the cost of trading, whether imports or exports. Increased costs of imports that are often required for agricultural development (e.g. fertiliser, agricultural machinery etc.) reduces the access to such imports by small and subsistence farmers. On the other hand, exports from these countries, including agricultural exports, are more expensive and hence uncompetitive in export markets due to additional costs of exporting.

Malawi, Uganda and Zambia also face low levels of agricultural productivity that have not shown significant improvement over the years. The reasons are many - including weather conditions, lack of adequate inputs, absence of entrepreneurial mindset among farmers, misplaced government policies, very limited research and extension services etc. Landlockedness also comes in the way of improving agricultural productivity in at least two ways. One, high costs of imported inputs needed to increase productivity make them inaccessible to the majority of farmers. Two, gains from productivity increases are not remunerative for farmers who are unable to export the additional production. This also means that the potential positive role of trade to increase productivity is constrained due to the landlocked status of these countries.

The other two project countries, i.e. Kenya and Tanzania are not landlocked and hence do not face such problems. However, food security is a major concern in both these countries. Kenya in particular is dependent on food aid and imports to ensure food security for its population. Trade can help in several ways. Import of food in deficit years is an obvious example. At a deeper level trade creates opportunities for income and employment throughout the economy. These opportunities lead to greater purchasing power and hence better access to food whether domestically produced or imported.

Regional trade is already an important means to improve food security. Due to diversity in agro-ecological zones, weather, and government policies, production of foodstuffs in

these countries does not follow a similar pattern. Hence importing from food surplus neighbours by food deficit countries is a desirable option. In fact, this trade is already substantial though often informal and hence unrecorded. Appropriate policies at the national and regional level particularly to reduce the cost and improve the regulation of regional and border trading in foodstuffs can maximise the positive impact of regional trade on food security in individual countries.

## 1.3 Agriculture

### 1.3.1 Agricultural Productivity

Chapters 3, 5 and 6 in this volume that undertake detailed study and analysis of the economies of the three landlocked project countries, namely Zambia, Malawi and Uganda, situated in Eastern and Southern sub-Saharan Africa, focus on the nexus between agricultural productivity, livelihoods and trade. The information contained in these chapters reveal these countries' heavy dependence on agriculture, which constitutes more than two thirds of their labour force, a substantial portion of GDP and foreign exchange earnings, as is also evident from table 1.2 and table 1.3. Productivity in the agricultural sector is therefore critical for the overall economic development in these countries and its importance cannot be overestimated especially in light of rural livelihoods and poverty reduction strategies.

The region is also well endowed with physical access to agricultural land that can contribute towards their comparative advantage for trade in agricultural products as compared to other parts of the continent. Differing seasonal patterns, farming and harvesting periods imply theoretically that no part of the region should face a deficit in food at any given time. Having a comparative advantage in many agricultural products, the scope for agricultural productivity also amplifies the potential for expanding trade in agricultural products in the three project countries to augment export revenues essential for development of livelihoods. Higher agricultural productivity can translate not only to higher food supplies and lower food prices for the consumers, but to increased farmer/producer incomes which affect livelihood choices.

Nevertheless, in spite of the positive attributes of agricultural productivity, certain physical conditions, economic policies, legal frameworks and cultural attributes can have a detrimental effect on food production in the project countries. Table 1.4 synthesises clearly the abovementioned point. Agricultural productivity, calculated as yield per unit of area, has actually declined for several key food crops in the three countries between the period of 2001-2002 and 2008-2009.

Therefore, it is of critical importance to analyse the primary factors that affect agricultural productivity in the three project countries.

One of the primary factors affecting agricultural productivity is the availability and the quality of the resources used (Wiebe, 2001). Although the three project countries are positively endowed with the abundance of land which could be used for agricultural production, a more determining factor is the quality of such land, availability of other physical inputs such as water, and climatic factors. The interaction between the quality

| Table 1.4: Agricultural Productivity Trends for Landlocked Countries (Yield per unit Area) | | | |
|---|---|---|---|
| **Zambia (Metric Ton/Ha)** | **Maize** | **Cotton** | **Cassava*** |
| 2001-2002 | 1.5 | 1.24 | 5.7 |
| 2008-2009 | 1.68 | 0.84 | 2.9 |
| **Malawi** | **Maize** | **Tobacco**** | **Sugarcane (MT/Ha)** |
| 1998 | 1.2 | 0.81 | 100 |
| 2009 | 2.2 | 0.99 | 111 |
| **Uganda (Kg/Ha)** | **Coffee** | **Maize** | **Cotton** |
| 1996 | 1200 | 1280 | 620 |
| 2006 | 360 | 500 | 300 |

*Source: Calculated from the productivity graphs in country research studies. Hence All numbers are approximate based on graph readings*

* For Cassava, the most recent data is for 2007-08.
**For Tobacco, the data is until 2008.

of soil, land degradation and climatic conditions are the primary reasons for crop failures, which affect agricultural productivity and food security. Although poor soil quality, climatic factors and water availability do not necessarily make agricultural production impossible, they certainly contribute towards raising the costs of conducting such activities, and thereby affecting its economic feasibility and competitiveness.

Various studies conducted reveal that the quality of cropland is one of the lowest in sub-Saharan Africa (*Ibid*). Further, compounding the problem of soil quality is the inequitable distribution of arable lands and differing climatic conditions within the three project countries, a detailed analysis of which is provided in subsequent chapters. As arable land is inequitably distributed owing to topographical factors and agricultural production is directly linked to favourable climate owing to lack of irrigation facilities, the three project countries continue to experience sporadic shortages of food in certain parts while facing abundant harvests in other.

Where land is relatively of poor quality and climatic conditions do not favour agricultural productivity, effective policy measures need to be initiated for improving land productivity and encouraging trade to form a balance between areas experiencing abundant food supplies and areas experiencing food shortages.

There are various other economic, legal and cultural factors that affect agricultural productivity in these countries. For instance, farming and raising of animals in these three countries are mostly conducted at a subsistence level by small and marginalised farmers working on small tracts of land. Only a limited segment of agricultural production is actually carried out at commercial level by bigger farms. Cultural attributes also factor into performance productivity as subsistence farmers carry out agricultural production mainly as a way of life for livelihood purposes and for self consumption, rather than for business purposes. Further, the countries are characterised by shortcomings in domestic

policies which do not augment or promote smallholder growth in order to boost agricultural production by integrating them into the domestic, regional and international markets. Failure to promote smallholder growth and participation has resulted in decreased agricultural productivity in the three countries.

Other major factors hindering agricultural productivity in the three countries are market failures and the inability experienced by small and marginalised farmers to avail easy credit, insurance, and cheap inputs such as fertilisers. Subsidies and distribution systems can be used effectively through government policies for the provision of such inputs to rural farmers, making its access easier and cheaper for them. Subsidy policies, if implemented efficiently, can rectify market failures in the short run and create incentives. The only caveat is that these policies concerning subsidies need to be adopted with some caution, as they can sometimes prove to be expensive, inefficient and difficult to remove. Many studies exist on the detrimental effects of an inefficient subsidy policy, where vital national resources are channelled from crucial development problems towards unproductive sectors.

Therefore, government policies targeting the abovementioned problems have to be holistic, which necessitates better coordination amongst all stakeholders. Enhanced policy dialogues, public-private partnerships in agricultural production and marketing, access to regional markets, reducing middlemen influences and better information flow to all stakeholders can go a long way in ensuring that farmers secure better returns for their productivity. Due to this vulnerability experienced by rural farmers, they remain in the poverty trap that seriously undermines their ability to acquire and use inputs and technological innovations that otherwise exists.

Land entitlements and tenureships are other legal and institutional challenges faced by these countries. Land ownership creates incentives for farmers to invest in the land which directly affects agricultural productivity. Moreover, land ownership or entitlements facilitate the use of land as collateral for other investments that are necessary for its efficient use. This incentive to invest and make land more efficient for agricultural productivity is diminished if farmers have no entitlements to the land, or if land is widely held as collective or communal land.

Finally, trade policies can be very effective to boost agricultural productivity and to ensure food security. As mentioned before, liberalisation in trade policies and effective trade facilitation measures can provide a balance between areas experiencing surplus and areas experiencing deficits in food supply, especially in the case of landlocked countries. Further, since the internal markets in all three project countries are relatively small, the rise in agricultural productivity must correspond with greater access to foreign markets which can be gained through trade promotion. Failure to promote regional trade in agricultural products and export bans adopted by countries on certain agricultural commodities affect smallholder farmers negatively due to falling prices, which force them to abandon productive practices and new technologies and sometimes shift to other occupational practices. Thus, the promotion of regional trade complemented with effective trade facilitation measures in agriculture can increase both agricultural productivity and smallholder farmers' revenues.

### 1.3.2 Food Security

Food security is variously defined. According to the World Bank, food security at the individual level refers to "secure access by all people at all times to enough food for a healthy, active life" (World Bank, 1996). However, the most comprehensive definition of food security is provided by the Food and Agriculture Organisation (FAO) as "Food security [is] a situation that exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life" (FAO, 2002).

This definition encompasses three key elements that are widely agreed to be necessary for food security. First is *availability* of enough food based on dietary needs and food preferences. The source of this availability – domestic production or imports – is not important. What is important is that food products preferred by people are available in sufficient quantities to meet their needs for an active and healthy life. Second is *access* to the available food. It is not enough that preferred food products are available. People should also have either the control over them (if self produced) or the means to purchase them from others. Hence, and very importantly, access is not only physical access or availability of food in markets but also the ability to purchase in quantities that are sufficient to meet the food consumption needs (Gilson, 2004). Third is *stability* of availability and access over time. Food is a daily basic need for individuals and households and therefore its availability and access should be guaranteed at all times.

This definition is also useful for a better understanding of food security-trade linkages that can be at many levels, e.g., production, distribution and consumption. For instance, trade, through imports and exports, can impact food security either negatively or positively. The impact can be positive when trade allows imports of staple food products at affordable prices to supplement domestic production in food scarce countries, and facilitates export of other products by these countries so that economic means for importing food are augmented Further, trade can enhance food security by increasing livelihood options directly through improved profitability, and spin-off and multiplier effects in the form of increased demand for labour and business opportunities in transport, processing, trading, etc. Moreover, free flow of products can lead to greater production efficiencies and lower prices for both urban and rural consumers. Besides, niche crop products and horticultural exports, which tend to be relatively labour intensive, have created new livelihoods for many poor producers and labourers, including in African countries (Christoplos, 2009).

On the other hand, trade can also have a negative impact on food security. For example, heavily subsidised food production in OECD countries can depress international food prices and hence increase food imports into smaller developing countries where subsistence agriculture is still practiced. Lower international food prices will discourage investment in food production in these countries and cheap food imports can displace domestic production, particularly by small and subsistence farmers. Trade can also negatively impact food security when trade liberalisation measures adopted by smaller developing countries lead to immediate increase in imports while the exports by these countries either do not increase or remain limited to a few commodities. This can lead to a worsening of balance of payments, and hence constraining the ability of these countries to purchase food from abroad for domestic consumption.

It also flows from the comprehensive definition of food security given above that in a globalised world connected through trade, food security discussion should not focus exclusively either on national self-sufficiency of food production or on food imports. Both can and should be complementary. It should also be noted that countries can be food self-sufficient at the national level but also contain some food insecure individuals because of unequal distribution of food availability and access within the country (Stevens *et al,* undated).

Two country research studies in this volume, i.e. Kenya and Tanzania, have examined the issue of food security in these countries. As data in table 1.5 shows, both these countries face the challenge of food security and the situation is alarming. Moreover, the situation has improved very slightly in the last 20 years or so.

Data presented in the country studies (chapters 2 and 4 of this volume) also indicate that food insecurity is linked to poverty in various regions of the countries. Such regional disparities in the availability and access to food are explained by the variations in agricultural production in these areas as well as market fragmentation that hinders the flow of food products from surplus to deficit areas in times of need.

**Table 1.5: Food Insecurity in Kenya and Tanzania**

| Country | Global Hunger Index (GHI) | | Status | | Percentage of population undernourished |
|---|---|---|---|---|---|
| | 1990 | 2010 | 1990 | 2010 | 2002-2004 |
| Tanzania | 22.9 | 20.7 | Alarming | Alarming | 44 |
| Kenya | 20.3 | 19.8 | Alarming | Serious Problem | 31 |

*Source: Global Hunger Index 2010[2] and Human Development Report 2007-2008*

A number of factors are responsible for this alarming food security situation in Kenya and Tanzania. These can be categorised into economic, environmental, social, and political and institutional factors.

Three economic factors can be identified as critical. One, low food production that is due to small plots of land, low input use, labour distribution constraints, plant diseases, low levels of public and private investment in agriculture, short rainfall season, and insufficient market information that does not allow adequate production responses. This has led to low food production every year that is not sufficient for their household requirements. Two, household poverty forces small farmers to sell a greater portion of their produced food crops to meet family needs (such as education, medical, water and basic needs other than food) causing depletion of their household food stocks for their own consumption and limiting the availability of food at household level. This is further exacerbated by volatility in food prices. Three, barriers to trade (e.g. non-tariff barriers such as sanitary and phyto-sanitary standards) and underdeveloped infrastructure

have created fragmented and inefficient markets. This has resulted in producers not realising the full benefits from the crops they produce, thus leading farmers to remain poor and food insecure. Moreover, high transportation cost, caused by rising fuel prices and poor road conditions coupled with poor storage structures, limits movement of food and distribution from surplus areas to deficit areas. Poor infrastructural connection between producer areas and main consumption markets also worsens the situation.

Several environmental factors adversely affect agricultural production and productivity and hence food security. Farmers have continued to grow maize in the agro ecology suitable for sorghum, millets, pigeon peas etc. As a result they have experienced repeated crop losses even when rains would have supported growth of drought tolerant crops, leading to chronic food insecurity in rainfall marginal areas. Moreover, degradation in both pastoral and marginal agriculture areas means that even when rains are favourable, vegetation regeneration is limited. High runoff and poor water storage suggests that only a small proportion of rainfall is appropriately used. Natural calamities such as droughts and floods further worsen the situation. During droughts, agricultural labour opportunities are scarce thus limiting income and purchasing power of casual labourers dependent on agriculture and livestock labour activities. Marginal farmers and fishing households situated along the lakeshore and river basins are exposed to recurrent floods that lead to loss of life, assets, crops and displacement of people. Households in flood prone areas limit investments in productive activities due to their vulnerability to flood destruction and thus limiting their income sources.

An important social factor contributing to food insecurity is high prevalence of HIV/ AIDS in farmers, fishermen, traders, pastoralists and workers. The impacts include loss of productive family members, diverting money to medical care and funerals, increased dependency of orphans, reduced agricultural production and reduced remittances from urban centres to rural areas. Other adverse social factors include high levels of unemployment and under-employment; gender inequality particularly in land ownerships which places women – who often contribute more to food security at the household level – at a greater disadvantage; and unequal distribution of assets such as arable land, water, finances, farm technology, and capital that are not easily available to small and subsistence farmers.

Finally, political and institutional factors are also important. These include: agriculture, food security and related policies and interventions by the governments; strong and well functioning public and private institutions to provide inputs into and ensure efficient implementation of policies; and safety nets to protect the most vulnerable. If positive, these factors can address and mitigate the impact of negative economic, environmental and social factors. However, in reality, political and institutional shortcomings are quite apparent. The public and private institutions are still quite weak and often subject to political interventions. Policy framework though much improved than before still suffers from wrong prioritisation, abrupt changes and lack of full implementation. For example, changing land use policies coupled with expansion of farmlands as well as of national parks for the strategic promotion of wildlife tourism has limited agriculture and grazing land for pastoralists. Moreover, the main intervention during food insecurity crises has been provision of relief food and seeds while paying limited attention to the long term

solution of the problem by identifying and addressing the root causes. Finally, due to limited public resources and weak institutions there are limited safety nets to effectively protect the farmers from natural and man-made disasters.

Food insecurity is a chronic and serious challenge in Kenya and Tanzania that needs to be faced squarely and resolutely. As the information and analysis in chapters on Kenya and Tanzania demonstrates, there are no quick solutions. Ensuring stable availability of and access to preferred food to all households will require a holistic approach to target the underlying economic, social, environmental, and political/institutional factors in an integrated manner. Trade can play a useful role as part of this integrated strategy both as a short term solution to seasonal food shortages and as a means to increase the economic opportunities and entitlements of small farmers, agricultural labourers, pastoralists and urban poor.

### 1.3.3 Agricultural Policies and Strategies

The socio-economic performance of project countries is linked directly to the performance of the agricultural sector. Its multifaceted role encompasses ensuring food security, increasing employment, boosting foreign exchange, attracting FDI, promoting rural development and as an effective tool for poverty reduction.

In spite of the importance of the agricultural sector to livelihood concerns, and keeping in mind that the five project countries are primarily agrarian economies, they are beset with food insecurity, some having faced food emergency situations in the recent past. For instance, although 70 percent of the national food requirements of Zambia are produced by smallholder farmers, 25 percent of these farmers are food insecure. As with most sub-Saharan African countries, the five project countries have reverted from being exporters to net importers of food. This phenomenon cannot be singularly attributed to demographic, natural and climatic factors, although they do play a role, but also to the negligence and inefficient government policies in the five project countries regarding agriculture. Even when the government has intervened in the agricultural sector to boost productivity, the studies conducted in this research reveal that these interventions were beset with ineffective, misguided and uncoordinated macroeconomic and trade policies.

Although there has been a renewed interest in agriculture culminating in some positive results as evident from various strategy papers, policy documents, legislations and Vision documents (table 1.6), the agricultural sector in the five project countries had been neglected by their governments and international donors in the past. Emphasis was placed upon industrial growth, and very limited significance was placed upon the promotion of regional trade and agricultural development. Secondly, when the government intervened in agricultural policies, the sector's role was viewed as simply to produce adequate food for fulfilling domestic demand. Too much emphasis was solely placed upon the production or the availability of food. But as we can clearly understand from the preceding sections on food security, the issue not only encompasses the physical availability of food, but also goes further into the questions of equitable access and affordability. These policies, primarily focussed upon achieving self sufficiency and import substitution as a path to development, created various vulnerabilities for the

agricultural sector in these countries. In the quest for achieving self sufficiency by ignoring trade and interdependence made the agricultural sector in the five project countries more vulnerable to external shocks, like rise in fuel prices, transport prices, conflicts, and crop failures due to unfavourable climatic conditions.

Further, the period between the 1980s and 1990s witnessed the interventions made by the World Bank in many of the project countries through their Structural Adjustment Programmes (SAPs). These policies entailed promise of development through rapid liberalisation of the economies of the project countries. Although the policies have created positive results in some cases, in others, especially in the agricultural sector, their effects have been debatable. This is because the World Bank through its SAPs pushed for the elimination of vital farm subsidies and encouraged the move towards the production of cash crops. Due to these policies, agricultural productivity was negatively affected by the exorbitant prices for farm inputs. Smallholder farmers soon could not afford the prices of these inputs. These policies not only decreased agricultural productivity by increasing the cost of production, but it took away farmers' incentives to produce food crops.

As a result of the combination of ineffective government and donor policies, the countries were repeatedly affected by food crises. In this regard, donor efforts to provide relief food aid did help in the short run in emergency situations. But in the long run, due to the lack of coherence and understanding of the root causes of food insecurity, these relief food aids actually affected the countries negatively by driving down prices of agricultural products, thereby affecting livelihood situations.

Even though the governments of the five project countries have made many strides in renewing their interest in the agricultural sector post liberalisation in the 1990s, very limited systemic empirical work has been done to assist policy makers to raise their awareness to initiate holistic programmes to promote the agricultural sector. There are still many economic, legal and socio-cultural hurdles to be overcome in the path towards agricultural development.

For one, land ownership is of great importance. Majority of the available land for agriculture is primarily held as collective or communal land in the five project countries. Only a minor portion of land is actually owned by the small farmers themselves. This calls for legal and institutional changes in the five project countries to make the ownership of land more feasible. Lack of ownership or entitlement to land has two negative aspects. One, it reduces the incentives for the smallholder farmers to invest in the land, such as new technologies to make it more productive, as it is communally owned; and two, unless there is ownership of land, the land in question cannot be used by the farmers themselves as collateral for new investments. Therefore, there is a need for policy shift and new legislations in this regard, whereby it makes it easier for smallholder farmers to own land.

Secondly, since agricultural production takes place mostly at subsistence level with minimum technology use and investments, the productivity of such land clearly becomes dependent on factors like soil quality, access to water, farm inputs, credit and climatic

| Table 1.6: Key Policies (Agriculture) | | |
|---|---|---|
| | **Policy** | **Objectives** |
| Zambia | 1) Fifth National Development Plan and Vision 2030<br>2) Through a private sector led strategy, while government focusses on complementary services such as infrastructure and support services. | 1) Poverty reduction strategy programme, viewing the agricultural sector as a potential engine for broad-based rural growth and attainment of the Millennium Development Goals.<br>2) Achieving improved food security and poverty reduction |
| Uganda | 1) Plan for Modernisation of Agriculture (PMA 2000), as well as Zonal Agriculture Strategy of 2005, the Rural Development Strategy (RDS of 2005) and the Prosperity for all Vision of 2007 (PFA)<br>2) Ministry of Agriculture is currently developing a new agricultural policy | 1) Increase investment in agriculture, but objectives of different strategies got muddled and little progress was made<br>2) (a) Private sector investment in agriculture to encourage market oriented production process, (b) zonal agricultural strategy will be pursued to encourage regions to gain maximum exploitation of comparative and competitive advantage within different regions, (c) focus on supporting value chain development for strategic commodities, (d) support individual farmers and groups with special attention to gender equity, (e) agricultural extension services via a decentralised service delivery structure to ensure that they reach all regions and farmers even at the lowest levels, and (f) all resources for agriculture are sustainably managed to support current and future generations |
| Malawi | 1) Vision 2020, designed to be achieved by increasing food crop production, developing irrigation farming, improving efficiency, reducing post-harvest losses, promoting off-farm income generating activities, economic empowerment of vulnerable groups, and | 1) Make Malawi secure, democratically mature, environmentally sustainable, and self reliant, with equal opportunities for and active participation by all, having social services, vibrant cultural and religious values and technologically driven middle-income economy by the year 2020<br>2) Promote and facilitate agricultural productivity so as to ensure food |

*Contd...*

| | Policy | Objectives |
|---|---|---|
| | improving policy analysis<br>2) New Era Agricultural Policy and the Food and Nutrition Security Policy | security, increase incomes, create employment opportunities through the sustainable management and utilisation of natural resources, use research and effective extension delivery systems; and promote value-addition, agribusiness and irrigation development |
| Kenya | 1) Economic Recovery Strategy for Wealth and Employment Creation and the Strategy for Revitalising Agriculture 2003<br>2) Agricultural Sector Development Strategy (ASDS) 2010-2020 | 1) Emphasised a sector-based approach implemented by three ministries, providing an umbrella legislation to replace the existing pieces of laws and legislations, rationalising roles and functions of agricultural institutions, strengthening extension services, increasing small holder access to credit, and revamping the cooperative movement<br>2) Transforming agriculture from subsistence to commercial farming and agribusiness through two strategic thrusts: increasing productivity, commercialisation and competitiveness of the agricultural commodities and enterprises; and developing and managing key factors of production. Linking trade with agricultural production and food security |
| Tanzania | 1) National Agricultural Policy, and Food and Nutrition Policy<br>2) Food for Work Programme (FFW) by WFP; National Strategy for Growth and Reduction of Poverty (NSGRP); Agriculture Sector Development Programme (ASDP) and Tanzania Social Action Fund (TASAF) | 1) Improve agri-techniques and agriculture practices so as to enhance agricultural productivity; achieve high levels of nutrition by focussing on food security; care for special groups, essential human services, food and nutrition; roles of various sectors in the implementation of the Food and Nutrition Policy in Tanzania<br>2) Generally concentrate on ensuring proper production and availability of food in Tanzania |

conditions. Here, as mentioned earlier the governments can step in to make the use of land more efficient. In this regard, the governments of the five project countries have initiated various policies with the objectives of sustainable management and efficient utilisation of natural resources, using research and effective extension delivery systems; to promote value-addition, and for the development of irrigation systems. Table 1.6 provides some of the key agricultural policies initiated by the governments of the five project countries.

Most of the policies initiated have been geared towards viewing the agricultural sector as a potential engine for broad-based rural growth and for the attainment of the Millennium Development Goals (MDGs). They are directed towards transforming agriculture from subsistence farming to commercial farming and agribusiness in order to promote agricultural productivity, ensure food security and reduce poverty. The research studies in this volume also demonstrate the interventions made by the governments of the five project countries to rectify market failures and create a suitable atmosphere for business. In this regard, plans are already underway to increase investments in agriculture. The role of private sector investment and participation in agricultural productivity and marketing has been prioritised to encourage market oriented production and distribution process. Zonal agricultural strategies are also being pursued in many countries to encourage regions to gain maximum exploitation of comparative and competitive advantage within different regions. Renewed focus is also being placed upon value chain development for strategic commodities.

The policymakers are also cognisant of the importance of subsidies for farm inputs and for the creation of a more efficient channel for distribution of seeds, fertilisers, etc, which would benefit small holder farmers in availing them. There are also support programmes for facilitating agricultural extension services through decentralised delivery channels to ensure that these services reach all regions and farmers, even at the lowest level. The policies initiated by Kenya in this regard also provide a good alternative example to the use of subsidies manifested in its liberalised fertiliser distribution programmes for individual farmers and groups.

Some institutional and structural changes are also underway to increase small holder access to credit and insurance, and to revamp the cooperative movement in agriculture in order to increase productivity. Policies are also being undertaken to promote cooperation and for the effective coordination of efforts between key stakeholders in agriculture in the five project countries to better manage information flows between them, and to ensure policy coherence.

In the case of Kenya and Tanzania, where the focus of the current research is on food security, governmental policies dealing with food security and nutrition have also been identified. These policies target the achievement of high levels of nutrition by defining the roles of various sectors in the implementation of food and nutrition policies. They also promote food security through the active participation of the private sector in storage and distribution facilities to bridge the gaps between deficit and surplus areas, while also focussing on gender inequalities. Table 1.7 presents a brief analysis of these policies by Kenya and Tanzania.

The governments have also realised the importance of promoting regional trade and improve trade facilitation in the five project countries. Especially in Kenya and Tanzania, it is now widely accepted that trade, if directed properly, could provide opportunities in the project countries by increasing employment possibilities throughout the economy. An increase in employment would further entail increases in purchasing power, which is crucial for availing food. Liberalised trade can indeed be advantageous for both agricultural productivity and livelihood concerns in the landlocked countries, and can be extremely beneficial for ensuring food security in Kenya and Tanzania.

**Table 1.7: Food Security and Nutrition Policies/Strategies**

| Thematic Areas Related to Trade and Food Security | Food Security and Nutrition Policies/Strategies | |
|---|---|---|
| | **Tanzania** | **Kenya** |
| Existence of specific policy or strategy on Food and Nutrition Security | Draft Policy on Food and Nutrition | There is a Food and Nutrition Policy |
| Recognition of food crops as tradable commodities | Yes, although has been subject to interruptions, but now given a special emphasis in the newly launched KILIMO Kwanza | Yes, although occasional controls of wheat exports experienced |
| Promotion of regional trade in food commodities | Has always a taken a cautious approach in encouraging farmers and traders to reach the regional food market | As the country with the highest negative food production balance, it promotes strategic liberalisation of regional food trade as a means of ensuring food security, improvement of food sector competitiveness and sharing of information |
| Food storage | Some of the public food storage facilities sold to private sector | Allows public and private sector investment in storage facilities as a way of bridging gaps between surplus and deficit areas |
| Market development through linking surplus and deficit food production areas | National Road Development Programme geared to connect all regions with tarmac roads and all districts with all-weather roads | The policies emphasise accessibility and distribution channels within the country and the region |

*Source: Common Food Security Strategy for the East African Community, 2009*

## 1.4 Trade

### 1.4.1 International Trade Profile of Project Countries

International trade can be an important means to increase agricultural production and productivity, improve rural livelihoods and food security, and hence lead to inclusive economic growth and development. However, trade, if not managed properly, can also lead to severe shocks in the immediate to medium term leading to falling production and employment in affected sectors and hence negatively impacting food security and rural livelihoods among others.

Positive contribution of trade was particularly witnessed prior to the global economic crisis in 2008 as most African countries enjoyed a favourable average growth rate of six percent per annum, and per capita GDP growth at four percent per annum during this period (African Economic Outlook, 2010). This was also the first time when African trade had broken the US$1tr mark (includes exports and imports). The reason for this favourable growth can be attributed to higher commodity prices and growing export volumes, amongst others. But the global economic crisis in 2008 brought this period of significant growth in Africa to a sudden end.

There are of course various reasons for this. But the most pressing issue was the fall in African commodity prices, especially during the latter half of 2008 and through 2009, which was compounded by the lack of diversification of export products and destinations. The sharp decline in demand from the international markets for African products and services led to the fall of commodity prices and the shrinking of African trade. In many ways, the adverse effect from the reduction in external trade could be absorbed and mitigated if Africa could generate an internal demand as witnessed in countries like China and India.

All the five project countries are cognisant of the role of trade for inclusive growth and development, including for agriculture, food security and rural livelihoods. Their trade policies and strategies are geared towards greater integration into the global economy on balanced and equitable terms (CUTS, 2009). This is also reflected in their participation in international (WTO), regional (COMESA, EAC, SADC) agreements, and in non-reciprocal preferential arrangements (AGOA of the US and EBA of the EU).[3] Table 1.8 provides further information regarding trade flows and arrangements for the five countries revealing several interesting points.

All the project countries are significantly integrated into the world economy if measured by their imports and exports as percentages of their respective GDPs. Combined volumes of imports and exports are as high as 61percent of GDP for Kenya and Zambia, and 49, 47 and 43 percent for Tanzania, Uganda and Malawi respectively. Hence the focus of these countries should be more on improving the contribution of trade to growth and development through balancing and changes in the composition and direction of trade, and not so much on further expansion. Their major exports are mostly agricultural commodities, except for Zambia which is highly dependent on mineral commodity exports. Such dependence on primary commodity exports exposes them to declining terms of trade and price shocks inherent in commodity trade. Their major imports consist of

**Table 1.8: Participation in International Trade**

| Country | Exports of goods and services as percentage of GDP (2009) | Main Exports (2008) | Main destinations for exports | Imports of goods and services as percentage of GDP (2009) | Main Imports (2008) | Main sources of imports | Current Account balance as percentage of GDP – 2008 (IMF Staff Estimates) | Membership of Trade Agreements and non-reciprocal Preferential Arrangements |
|---|---|---|---|---|---|---|---|---|
| Zambia | 30 | Copper, cobalt | China, Saudi Arabia, Democratic Republic of the Congo | 31 | Machinery and transport equipment, petroleum products, chemicals | South Africa, UAE, China | -5.46 | WTO, COMESA, SADC, AGOA, EBA |
| Uganda | 14 | Coffee, fish, fish products | Sudan, Kenya, UAE, Rwanda | 33 | Petroleum products, machinery and telecommunication equipment | Kenya, India, UAE, China | -7.73 | WTO, EAC, COMESA, AGOA, EBA |
| Malawi | 20 | Tobacco, tea, sugar | Germany, Egypt, South Africa, Zimbabwe | 23 | Fertiliser, petroleum products | South Africa, China, India, France | -2.89 | WTO, COMESA, SADC, AGOA, EBA |
| Kenya | 25 | Horticulture, tea | UK, The Netherlands, Uganda, Tanzania | 36 | Machinery and transport equipment, petroleum products, food products | India, China, UAE, South Africa | -5.52 | WTO, COMESA, EAC, AGOA |
| Tanzania | 22 (2006) | Mineral products, manufactured goods, coffee | India, China, Japan, The Netherlands | 27 (2006) | Oil, machinery and transport equipment, food products | India, China, South Africa, Kenya | -9.69 | WTO, EAC, SADC, AGOA, EBA |

*Source: CIA Factbook (2010)*

machinery and equipment, petroleum and petroleum products, chemicals and fertilisers, and, in the case of Kenya and Tanzania, food products. While these imports are necessary to boost national production and productivity of agriculture, industry and services and to maintain food security, they reflect on the lack of development and competitiveness of their industrial sectors. Moreover, substantial imports of food products by Kenya and Tanzania despite these countries having very large agricultural sector, indicate the problems of inefficient agricultural production and limited agricultural productivity.

The main export markets include the traditional European trading partners (e.g. UK, Germany, the Netherlands), emerging Asian economies and Middle Eastern countries (e.g. China, India, Saudi Arabia, UAE), and other African countries (e.g. South Africa, Egypt, Zimbabwe, Democratic Republic of the Congo). This diversification in export markets away from traditional partners in Europe is a positive development for two reasons. One, the mature markets in Europe are growing at a much slower pace than the emerging markets in Asia and the Middle East. Two, diversified basket of export markets provide some cushion against sudden shocks in individual markets. The diversification is even more pronounced for imports as main sources of imports for project countries are now in Asia and Africa.

One worrying element is the current account balance. All the five countries are importing much more than their exports and hence running very high levels of current account deficits. Current account deficit measured as a percentage of GDP is close to ten percent for Tanzania, more than five percent for Kenya, Uganda and Zambia, and about three percent for Malawi. These are unsustainably high levels that can lead to macro economic instability.

Table 1.9 takes a closer look at the agricultural trade profile of these countries. Agricultural exports comprise the bulk of exports for these countries contributing to about one third of total exports in 2006 for Kenya, Uganda and Tanzania and a staggering 99 percent for Malawi (percentage was much lower for Zambia that mainly depends on exports of copper and cobalt). However, this percentage has substantially decreased from 2000 for Kenya, Uganda and Tanzania when their agricultural exports were around one half of their total exports. (On the other hand, Malawi dependence on agricultural exports increased from 81 percent to 98.9 percent of total exports between 2000 and 2006).

Agriculture imports as percentage of total imports also declined between 2000 and 2006 for all countries except for Uganda where they almost doubled from 10.5 percent to 19.1 percent of total imports during the same period.

Composition of imports *vis-a-vis* exports is quite revealing. While agricultural exports are mostly cash crops such as cotton, tea, coffee, tobacco and horticultural products, agricultural imports are mostly food products, e.g. maize, wheat, palm oil and sugar. This may indicate a trend towards producing and exporting higher value agricultural products while importing food products. This can have a positive impact on national food security if the exports are generating greater purchasing power particularly for small farmers, agricultural labourers, and urban poor on the one hand and the imported food products are reaching food deficit areas on the other. Similarly, rural livelihoods can benefit from

| Table 1.9: Trade in Agriculture Profile of Project Countries | | | | | | |
|---|---|---|---|---|---|---|
| | Agricultural exports as percentage of total exports | | Main agricultural exports | Agricultural imports as percentage of total imports | | Main agricultural imports |
| | 2000 | 2006 | | 2000 | 2006 | |
| Zambia | 13.8 | 8.8 | Flour of wheat, wheat, oil hydrogenated, palm oil, tea | 13.7 | 8.4 | Hydrogenated oil, palm oil, soybean oil, wheat |
| Uganda | 52.4 | 34.7 | Coffee (green), tobacco (unmanufactured), tea, beer of barley | 10.5 | 19.1 | Palm oil, wheat, sugar (refined) |
| Malawi | 81.0 | 98.9 | Tobacco (unmanufactured), sugar raw centrifugal, tea, cotton lint | 6.8 | 3.6 | Wheat, tobacco (unmanu-factured), soybean oil |
| Kenya | 46.9 | 36.3 | Tea, vegetables (fresh), coffee (green), cigarettes | 14.1 | 7.8 | Palm oil, wheat maize |
| Tanzania | 59.7 | 30.8 | Tobacco (unmanufactured), coffee (green), cotton lint, cashew nuts (with shell) | 21.1 | 14.3 | Wheat, palm oil, malt, sugar (refined) |
| *Source: FAOSTAT for Kenya, Malawi, Tanzania and Uganda, and UNCTAD for Zambia.* | | | | | | |

this trading pattern if the returns from producing export cash crops are higher and evenly distributed. These should be some of the key issues for policy makers to address.

### 1.4.2 Regional Trade in Agriculture (including informal trade)

Closer economic integration among African countries through freer regional trade among them is a cherished goal for many. This can create larger markets to facilitate economies of scale and scope that will improve production and productivity, facilitate development of regional trade infrastructure that will also reduce the cost of international trade, and reduce dependence on traditional export markets. Moreover, regional trade in agriculture and particularly food products can improve food security by allowing movement from surplus to deficit countries and areas. However, regional trade among African countries is still rather limited though growing steadily.

Some factors that hinder African regional trade are over dependence on single primary commodities by many countries, the lack of diversification in production and exports and the lack of complementarities between the trading countries. Many of Africa's small (and vulnerable) countries are overly dependent on single primary commodities like minerals, agricultural products and raw materials for their export earnings, and most production and exports from African countries are geared for the demand for markets outside Africa. Most sub-Saharan countries have few goods which can be traded with each other, hence the scope for trade is reduced due to lack or complementarities essentially required for promoting trade amongst nations. The problem is further exacerbated by the fact that many countries in Africa produce similar products which are not demanded by each other. The issue of non-complementarity cannot be solved very easily in the short run. African countries have to try to diversify and build competence and comparative advantage in other products in order to promote demand for intra-regional trade.

Infrastructure also remains a key bottleneck for African inter-regional trade, investments and private sector development. Transport systems in Africa remain underdeveloped and expensive. For example, exports from Tunisia first go to France to be re-exported to Cameroon. Transporting products from Angola to South Africa is as expensive as shipping them to China. Shipping a car from Japan to the Ivory Coast costs US$1500, whereas it costs US$5000 to ship a car from Ethiopia to Ivory Coast (African Economic Outlook, 2010). Only 29.7 percent of African road networks are paved (Ibid). The infrastructure issue also becomes vital when one analyses the quantum of perishable agricultural products that Africa produces, which need to be exported within a few hours or days (e.g. horticulture exports from Kenya). The continent's railway network is also very poor. Although strides have been made in promoting transport corridors to facilitate trade in Africa (especially for landlocked countries), their scope has been very limited.

Moreover, there is a virtual absence of production, financing and marketing channels among businesses in Africa. There is imperfect, insufficient or asymmetric market information on opportunities for businesses in African markets. Then there is the issue of multiple currencies and convertibility problems. Lack of harmonised regulations, cumbersome procedures and the high cost of doing business greatly affect intra-African trade.

Finally, while tariff barriers have been brought down through various RECs, non-tariff barriers such as licensing requirements, sanitary and phyto-sanitary standards, etc. remain. More than one third of Africa´s imports face non-tariff barriers, which are higher than both OECD and emerging fast growing economies.

Despite the above constraints, and due to the renewed commitment to RECs that the five project countries have actively pursued (COMESA, EAC and SADC)[4] , their trade with other Africa countries is now substantial. This is depicted in table 1.10.

Kenya, Tanzania and Uganda substantially increased their exports (as a percentage of their total exports) to other countries in COMESA, EAC and SADC between 2001 and

2009. On the other hand, Malawi increased its exports to SADC countries as a percentage of its total exports, and imports from EAC countries as a share of its total imports over this period. Finally, during the same period, Zambia's imports from COMESA and EAC countries as a percentage of its total imports and exports to COMESA countries as a percentage of its total exports also increased. This presents a rather dynamic situation of enhanced trade flows to and from these countries to other countries in the Eastern and Southern African regions.

Country research studies on Kenya and Tanzania included in this volume also examined regional trade in agriculture and food products including informal trade. Historically, Kenya and Tanzania have enjoyed strong agricultural trade ties. Among other factors, this trade has evolved due to poor transport infrastructure within Tanzania, making Kenya an outlet for surplus food production from the Arusha and Lake Victoria regions. It is common for maize from south Tanzania, parts of Malawi, and Zambia to reach the Kenyan markets of Nairobi (USAID, 2007).

Other products imported into Kenya from Tanzania are beans, fish, rice, root crops and sugar. Moreover, various fruits and vegetables grown in north Tanzania are regularly traded in the urban markets of Nairobi and Mombasa, where the products are further processed (GTZ, 2010). Major agricultural commodities imported by Tanzania from Kenya are wheat flour and sugar.

According to estimates by ministries and industry associations, about 80 percent of trade in agricultural produce and food in the East African region is informal and not statistically recorded. Informal trade takes place in different forms and is known by different names (e.g., illegal, unofficial, underground, parallel market activities, black market activities, over and under-invoicing, smuggling or hoarding). According to a study done by USAID (1998), Informal Cross-Border Trade (ICBT) activities between Tanzania and the neighbouring countries were found to be significant and involved exchange of large volumes of agricultural food commodities (mainly maize, rice, beans, sugar, wheat flour and root crops) and water-based resources (including all kinds of fish species and prawns).

**Table 1.10: Project Countries' Trade with COMESA, EAC and SADC**

| | Imports from EAC as % of total imports | | Exports to EAC as % of total exports | | Imports from COMESA % of total imports | | Exports to COMESA % of total exports | | Imports from SADC % of total imports | | Exports to SADC % of total exports | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2009 | 2001 | 2009 | 2001 | 2009 | 2001 | 2009 | 2001 | 2009 | 2001 | 2009 |
| Kenya | 0.3 | 1.6 | 19.1 | 26.2 | 3.5 | 3.2 | 25.6 | 32.7 | 8.3 | 11.3 | 10.8 | 16.5 |
| Malawi | 1.9 | 5.9 | 5.4 | 3 | 9.5 | 8.7 | 17.9 | 14.4 | 57.1 | 56.9 | 19.9 | 23.3 |
| Tanzania | 6.2 | 4.9 | 6.8 | 9.6 | 8.1 | 6.3 | 9.5 | 16.2 | 13.2 | 11.8 | 3.8 | 13.6 |
| Uganda | 28.7 | 12.8 | 19.3 | 27.1 | 29.4 | 13.7 | 25.6 | 48.6 | 8.8 | 7.6 | 10.8 | 14.9 |
| Zambia | 1.2 | 2.9 | 2.4 | 1.7 | 10.6 | 17.6 | 8.2 | 14.8 | 67.6 | 58.0 | 29.2 | 21.9 |

*Source: International Trade Centre (ITC) Trade Map*

Informal trade by its very nature (i.e. unrecorded and unregulated) is difficult to quantify. However, various estimates of informal trade in agriculture and food products in the EAC region have been offered. According to a survey carried out between July-October 1997, at least 84,000 tonnes of maize valued at KSh12.4mn was imported from Uganda into Kenya informally mainly to meet the needs of the food deficit regions of Western Kenya. This represented about five percent of the total official Kenyan imports of maize in that year but was far more than the official imports of maize from Uganda. (Akello-Ogutu & Echessah, 1997). According to another estimate included in country research study on Tanzania in this volume and based on relevant literature survey the total trade in agricultural food commodities between Kenya and Tanzania amounted to about US$6.3mn, with a larger proportion (i.e. US$4.3mn) being exports from Tanzania into Kenya and the rest exports from Kenya to Tanzania. While these are not large amounts, such trade plays an important role for rural livelihoods and food security as will be discussed later in this section.

Informal cross-border trade within EAC occurs largely through unofficial routes established around formal ones at border townships and seas. For instance, on the Tanzania-Kenya border, informal trade occurs at Namanga and Sirari.[5]

Existing literature offers several reasons for flourishing informal trade (Akello-Ogutu1997; Little 2007). These studies have pointed out that, in general, the restrictive policies such as import tariffs, quotas, exchange controls, state trading monopolies, and export restrictions followed in many countries create incentives for illegal trade. To this list must be added the legal requirements for trade in agriculture and food products such as compliance with sanitary and phyto-sanitary standards and livestock clearance certificate as well as general requirements for formal trade such as trade licenses, and business and road licenses. Another reason cited by many respondents to the survey conducted for Kenya research study in this volume was delays at the borders which in some cases (for example, along Busia-Malaba border) was up to 7 hours. Moreover, there are often illegal payments to be made to border officials. These add to the costs of formal trade and hence encourage informal trade particularly in small quantities along porous borders.

Informal trade can have both positive and negative implications for the economies of the countries involved. On the positive side, informal trade increases business activities and enhances income and employment opportunities for poor households in the border regions. On the negative side, informal trade reduces the incentive to invest in the formal economy, compromises implementation of health, safety and environmental standards (especially for the agricultural products which would not pass through the formal sanitary and phyto-sanitary controls), and erodes government revenues.

Similarly, the implications of informal trade on food security and rural livelihoods can be both negative and positive. On the negative side as is corroborated by interviews from traders and farmers, cheaper imports from neighbouring countries drive down food prices and hence act as a disincentive for farming. This in turn can have a negative impact on both food security and rural livelihoods in the long run. However, on the positive side, informal trade contributes to greater food security when food products flow from surplus areas across the border to deficit areas within a country as is the case of informal trade in maize which is a staple food in both Kenya and Tanzania.

### 1.4.3 Landlocked Status and Trade Facilitation

While analysing the prospects of trade, one factor which plays a significant role in a country's economic performance is its location. Certainly, the idea that geography affects the economic performance of a country is an old argument. In fact, Adam Smith opined on the importance of geographical advantage to the economic development of countries

**Table 1.11: Features of Landlockedness for Malawi, Uganda and Zambia**

| | Number of International Borders | Main Export Routes |
|---|---|---|
| Malawi | 3 (Tanzania, Zambia, Mozambique) | • Mchinji border post which is used for trade destined to and from Zambia and the Democratic Republic of the Congo<br>• Mwanza is on the southwest border with Mozambique. It handles traffic to and from the seaport of Beira in Mozambique and South African ports as well as the southern African region in general including South Africa itself (62.4 percent of the total export/import traffic)<br>• Nayuchi is on the southeast border with Mozambique. It serves trade passing through the seaport of Nacala in Mozambique. This route is serviced by railways (16.1 percent of the total export/import traffic in 2003)<br>• Songwe is in the northern part of Malawi, on the Tanzanian border. It serves the Northern Corridor traffic destined to and from the Port of Dar Es Salaam in Tanzania |
| Uganda | 5 (Kenya, Tanzania, DRC, Rwanda, Sudan) | • The Northern Corridor with road, rail (including rail ferry) and pipeline transport services between the hinterland countries and the port of Mombasa in Kenya (95 percent of Uganda's overseas imports and exports transit through Mombasa)<br>• The Central Corridor that comprises similar services, except the pipeline, pertaining to the port of Dar Es Salaam in Tanzania (3.5 percent of Ugandan trade takes place through this port)<br>• An air corridor out of Entebbe International Airport<br>• Road services between Uganda and countries further inland |
| Zambia | 8 (Namibia, Angola, DRC, Tanzania, Malawi, Mozambique, Zimbabwe, Botswana) | Busiest Borders : Chirundu (Zimbabwean Border) and Nakonde (Tanzanian Border)<br><br>Developing a North-South Corridor from the southern part of the DRC and northern Zambia to the port of Dar-Es-Salaam, Tanzania in the north-east and the southern ports in South Africa |

more than two centuries ago. But it is only the last decade that has witnessed renewed interest on the importance of the subject (Collier, 2008), through the pioneering works of Jeffrey Sachs, Tony Venables and Paul Krugman, amongst others (Ibid). It has now been established beyond reasonable doubt that productivity of a country depends on its specialisation, which in turn is dependent upon the extent of markets. In this regard, one can assume that rich countries, which are more innovative and dynamic, have certainly benefited from an expanded access to markets, which is determined by their geographical location (Sachs, IRDC, 2001). To contextualise the above argument in the current economic environment, no country in today's globalising world can attempt to develop economically unless it is connected to the global markets and access to global markets is directly interlinked, more specifically, with the location of a country, proximity to markets, proximity to coastlines, and proximity to sea navigation (Ibid).

Thus keeping the above mentioned in mind, the current research warrants a closer economic analysis arising from the fact that three project countries, namely Zambia, Uganda and Malawi, are landlocked LDCs that manifest their own unique economic predicaments. The fact that they are landlocked creates various disadvantages in their path towards economic development. In the context of the three landlocked project countries, the importance of direct sea based connections, especially for trade, cannot be overemphasised. For instance, Uganda, which is located roughly 1000 km from the sea, finds this position to be detrimental to its ability to expand its economy through trade (UNCTAD, 2003). Table 1.11 tries to underscore the relevant features of landlockedness for the three project countries.

The major determinant factor in the case of landlocked countries is the cost of transportation which shares a direct nexus to geography. It is fairly established that the cost of transportation by sea is much lower than transportation through land. According to UNCTAD study, landlocked LDCs spend almost double the percentage of their export earnings for transport than the average developing country. Needless to mention, this directly affects their productivity and competitiveness. Jefferey Sachs further points out that the bottom 38 percent of the global population live in landlocked countries and their geographical status negatively affects an average of half a percentage from their growth rates (Collier, 2008). Table 1.12 demonstrates the trade disadvantages affecting the three landlocked project countries with regard to higher transportation costs and costs arising out of additional time lost.

The problem of landlockedness for the three project countries is further compounded by the fact that they are not resource rich like Botswana or countries in Central Asia. The latter countries, in spite of their landlocked status, boast of significant resources which have relatively high demand in the global markets that offset their geographical limitations. The project countries have low value and narrow export base consisting mainly of predominantly agricultural products and minerals. Secondly, being landlocked can be an advantage if the country in question finds its markets in neighbouring countries. But the project countries cannot boast of economically strong neighbours in which they can significantly expand their markets. Thirdly, proximity or distance to sea is not the only determinant for greater access to global markets, but infrastructure is. Here, the three project countries share similar experiences of being dependent on their neighbours'

| Table 1.12: Additional Trading Costs due to Landlockedness for Malawi, Uganda and Zambia | |
|---|---|
| **Country** | **Additional Trading Costs** |
| Malawi | US$35 per tonne to transport sugar to Beira with backhaul as compared to US$60 without backhaul. In 2003 Malawi paid US$60.7mn for the transportation of exports. Time costs add about three percent to the transport cost making the total transaction cost US$78.9mn.This translates to 35 percent of Malawi's total export value in that year. On the other hand, transport cost for imports was estimated at US$129.3mn |
| Uganda | Additional costs comprise charges for international road freight, railway and rail ferry transportation, airfreight, sea freight, customs operations, clearing and forwarding (C&F), insurance, port services, and telecommunications |
| Zambia | Zambia has limited ability to export bulky low-value products, especially certain agricultural products. The extra cost of getting such products to the coast needs to be compensated by more efficient production compared to that of coastal countries. Increasingly more of Zambia's agricultural products are exported by air - a shift that required a focus on high value and low weight and volume products, but also an improved access to air transport. |

infrastructure which is inadequate. These inadequacies and expenses incurred in transportation, such as freight, insurance, transit costs etc., increase the cost of production, and hence decrease their relative competitiveness in exports. Finally in the case of these three project countries, their access to sea ports is also determined by the political situation and relations with their neighbours.

The landlocked status of the three project countries makes it potentially harder to reach export markets and realise economies of scale as well as access cheap imports. For instance, the average cost of exporting a container in Uganda is US$3190, a cost that is well over the average cost of US$450 spent on exporting a container in Malaysia (Pannhausen, C. and Untied, B., 2010). Furthermore, Ugandan exporters require an average of 37 man days for exporting owing to their landlocked status, whereas it takes five man days in the case of Malaysia *(Ibid)*.

The other compounding problem for the three landlocked countries is the limited and narrow agricultural export base which makes them dependent on international market prices for these commodities, rather than influencing them. Therefore, they are 'price takers' in the international market. This means that the higher transaction costs which they face due to being landlocked cannot be factored into the price of their exports. These costs are eventually transferred to the producers by the intermediaries, thereby reducing the producer's real income from the sale of the commodity. Because of the low

returns, the producers are less motivated to produce these crops, hence distressing agricultural productivity.

Secondly, many agricultural products that are exported by these countries are perishable and require expeditious transport to other markets. Some companies in the project countries even suspended their horticultural exports to foreign markets on account of high transport costs. In the case of Zambia, agricultural products are increasingly being exported by air, a shift that requires more focus on high value and low volume/weight products. In Malawi, the export competitiveness is offset by high transaction costs, as its exports have to travel a minimum of 948 km using its neighbour's road and railway infrastructure to reach the ports in Mozambique. As table 1.12 shows, the time costs add about 3 percent to the transport cost making the total transaction cost to be about 35 percent of Malawi's export value in that year. The situation is further aggravated by the country's lack of diversification of exports and imbalances between imports and exports.

The extra costs and additional time incurred due to transport and inefficient trade facilitation reduces the feasibility for export promotion in the landlocked project countries. To make their exports more feasible and competitive, policies would need to be formulated which would lower transportation costs and improve trade facilitation in the region. There is an urgent need to upgrade transportation facilities, invest in infrastructure, improve the quality of rural roads (which are mostly unpaved and are not useable during the rainy seasons, but are essential for agricultural development and marketing), and improve railway and freight facilities which are not only inefficient and unreliable but also suffer from poor financial conditions. In terms of trade facilitation, policies should be developed to improve the customs infrastructure to make them less time consuming, reduce container dwelling time at ports, reduce time taken for border clearance, integrate border agencies, foster the better use of information technology, develop single window for process payments, train officials, and aim at harmonising trade facilitation process and policies at the regional level.

Another solution for the three landlocked countries is to exploit land linkages with neighbours, considering the high number of countries they border with similar levels of economic development. Here, efficient productivity, diversification of product base, finding complementarities and establishing more efficient trade facilitation systems can go a long way in encouraging exports and productivity, hence livelihoods. The countries could, for instance realign their domestic policies in exports and imports to favourably exploit their location. For example, Zambia could favourably exploit its location as the origin, destination and transit country for five of the major 18 transit corridors in sub Saharan Africa. These corridors boast of superior and cost efficient infrastructure as compared to other regional networks. Improvements in trade facilitation and shift in import-export policies geared for the promotion of regional trade to SADC and COMESA countries and away from the EU, for instance, can produce significant results.

## 1.5 Lessons Learnt and Recommendations for Way Forward

The five country research studies in this volume provide a rich mosaic of information and analysis related to the role of agriculture in inclusive growth and development through trade with particular focus on issues such as food security and livelihoods,

agricultural productivity, and regional trade including informal trade. Synthesised lessons and recommendations of the five country studies confirm several long-held views as well as offer some new insights into the complex interlinkages involved and present a coherent plan of action for all relevant stakeholders. Following is a summary of these conclusions and recommendations which are organised under ten themes. However, the themes and recommendations are interlinked and need to be addressed collectively.

***Agriculture is the key sector for inclusive growth and development***

This may appear to state the obvious but it is critical to reiterate that the agriculture sector in project countries, despite its decreasing share in the GDP, is the key for balanced, equitable, and sustained and sustainable growth and development. This is largely attributed to its role as the main provider of employment and driver of international trade, and having direct links with livelihoods, poverty, and food security in these countries. This must be acknowledged upfront by all concerned at the national, regional and international levels and then appropriately reflected in all international, regional and bilateral trade agreements as well as national policies and practices of governments and the efforts and actions of non-state actors. More specifically:

- The governments should commit at least ten percent of their annual budget on agriculture.
- International organisations, donors and RECs should prioritise agriculture in their plans and interventions.
- CSOs should focus on identifying and promoting the elements of an enabling environment for private sector led and farmer friendly agricultural development.

***Improving agricultural productivity should be the priority to facilitate trade, improve livelihoods and ensure food security***

Despite unfavourable weather in some years, there has been an overall increase in the productivity of some agricultural tradable crops in the past decade. Governmental efforts such as interventions that aimed at increasing land productivity by smallholder farmers through the Farm Input Subsidy Programme, the promotion of organic manure, intensive extension methods, and promotion of high yielding varieties, have played a role in this regard. Private sector-farmers collaboration through out-grower schemes, and participation of smallholder farmers in cash crop farming has also contributed to the improved productivity of some cash crops such as chillies, paprika, sugar, etc.

However, productivity of most agricultural crops remains much below the potential and the sector exhibits almost three times less productivity compared to services and industrial sectors. The limited productivity gains result in food insecurity, chronic poverty, and little surplus for trade, perpetuating a vicious cycle of low productivity, low and high cost production, un-competitiveness in domestic and international markets, and little surplus/incentive to trade and invest in productivity improvements.

A combination of poor crop and animal husbandry practices, low access to farm power and mechanisation, and decreasing soil fertility especially in traditional farming areas, have led to low average yields and reduced incomes to especially smallholder farmers. In addition, most of the rural producers do not have adequate access to the markets for

both inputs and outputs. There is a dearth of complementary services such as reliable road networks, telecommunications, irrigation and technical assistance such as extension services.

Increased productivity and efficient markets, in conjunction with rational government policies, can dramatically alter the economic contribution of the agricultural sector to trade, food security and livelihoods. Following recommendations are made to achieve this objective:

- Governments should increase their expenditure on agriculture especially on feeder roads, extension services and key irrigation infrastructure for small-scale farmers. The focus of increased governmental investment should target improving land, labour and water resource productivity as well as disease, pests and weed control.
- Agricultural inputs are often imported and are expensive. Therefore, the governments should continue and strengthen the input subsidy programmes particularly for small farmers to enable them acquire these inputs at low cost.
- The private sector should join the governments and invest in improved seed multiplication and improved irrigation technology.
- Out-Grower Scheme sponsors should provide a transparent production and marketing chain, ensure that the inputs to farmers are provided on time and the linkage between the prices and quality of the crops are well understood by the farmers. Further, farmers should be educated and be able to appreciate the grading procedures.
- Farmers associations should link up with researchers and research institutions for collaborative work towards improving agricultural productivity. They should also sensitise the farmers in the use of improved productive technologies, such as improved seeds and use of farm manure or chemical fertilisers and improved animal breeds.

***Formal regional trade should be promoted to improve livelihoods and food security***
Greater regional integration including through open trading arrangements can boost economic growth through creation of larger markets and reducing dependence on the mature and slowly growing developed country markets. It can also improve livelihoods by generating business activities particularly in the small and medium size sectors, and ensuring food security by allowing timely and less costly movement of food products from surplus to deficit areas in the region.

All five countries are part of several RECs and regional trade is generally on an upward trend. However, a large part of regional trade in agriculture and food products takes place through informal means and hence is not recorded. Such informal trade while beneficial for some traders and food security in the immediate term, reduces governmental revenues and depresses prices of the traded commodities and hence can act as a disincentive to invest in agricultural activities by small farmers.

There are several reasons for the flourishing informal regional trade in agriculture and food products. Restrictive government policies create incentives for illegal trade. There are also legal requirements for trade in agriculture and food products such as compliance with sanitary and phyto-sanitary standards. Moreover, there are often delays in clearing

the goods at formal border trading points as well as illegal payments to be made to border officials. These add to the costs of formal trade and hence encourage informal trade particularly in small quantities along porous borders.

Governments, secretariats of the regional organisations, and the private sector are recommended to take the following actions to promote formal regional trade in agriculture and food products which would help improve livelihoods and will also generate revenue for governments through customs receipts:

- Governments should encourage formal trade by reducing tariff and non-tariff barriers as well as clamping down on illegal payments.
- Relevant standards, including sanitary and phyto-sanitary standards should be harmonised at the regional level and adequately communicated to the farmers and agricultural traders.
- The secretariats of RECs should assist the governments of the member countries to apply harmonised food safety standards.
- The secretariat of RECs should ensure wide dissemination of information and knowledge regarding the regional market including establishing systems that can assist the agricultural producers and traders in forecasting the price levels, harvesting periods and market supply situations.
- Private sector regional organisations such as the East African Grains Council (EAGC) should work with the REC secretariats to: establish regional crop forecasting systems; develop a transparent regional mechanism for management of seasonal export/import restrictions; and harmonise COMESA, EAC and SADC trade facilitation measures.

***Trade facilitation measures are urgently needed to facilitate regional and international trade and improve agricultural productivity, particularly in landlocked countries***

A number of trade infrastructure constraints in these countries have led to fragmented and imperfect markets, increased costs of agricultural production and trade, and hence impoverished and food insecure livelihoods. Landlocked countries such as Malawi, Uganda and Zambia are particularly affected as their imports and exports have to cover larger distances across several borders to reach their destinations.

Trade facilitation constraints can be categorised as: i) those related to internal transportation within a country; ii) those related to movement across borders; and iii) those related to movement through transit countries. None of the project countries has reliable and efficient internal transport networks. Hence the cost of transporting goods, including agriculture inputs and outputs, from one part of the country to another is very high. It is often mentioned that the core problems that do not allow farmers to reach the targeted markets are the high transport costs and poor transport conditions. The formal border trade points between countries are constraining trade instead of facilitating it due to cumbersome customs procedures, taxes, bribes and delays occurring on the border posts. These problems are further aggravated for landlocked countries as their imports and exports have to cross several countries and borders.

There is a general recognition of these constraints and several schemes are being implemented related to, among others: the harmonisation of customs documentation

and procedures; the introduction of a code on handling goods in transit; the Yellow Card Scheme; the Customs Bond Guarantee Scheme; the harmonisation of axle load; the harmonisation of sanitary and phyto-sanitary measures and technical barriers to trade; and a number of Corridor schemes to link landlocked countries to ports.

However, a lot more still needs to be done. Some of the recommendations related to the promotion of regional trade are also relevant for trade facilitation constraints. In addition, the following actions should also be taken:

- Governments should give priority to: improvements in transparency of procedures; better use of information technology; improving efficiency in customs administration through upgrading the customs infrastructure; reducing border clearance procedures; upgrading road and rail networks and reducing transport costs; integrating border agencies and developing a single processing and payment window; and training of trade/border officials.
- The REC secretariats should concentrate on ensuring that there is a reliable transport network – including roads, railways and waterways - throughout the region so that the agricultural products in the region can be easily moved from one country to another.
- The private sector, together with the governments and REC secretariats, should invest in *interconnections*. The nodes along the Corridors provide a range of services including intermodal transfer, equipment exchange and cargo inspection. If the interconnections are to operate efficiently, it is necessary to provide sufficient capital investment for infrastructure and ensure effective management of the services provided at these interconnections. The private sector can play a critical role while at the same time reaping commercial benefits.
- Landlocked countries should invest to transform them into land-linked countries and hence turn their current geographical disadvantage into an advantage. For example, Zambia borders eight other countries and is the origin, destination or transit country for five of the eighteen major transit corridors in sub-Saharan Africa. This can be used to make it an efficient hub for cross-border trade.

***International trading system and developed countries' policies should contribute and not constrain food security and livelihoods***

International trading system comprising the WTO, inter-regional trade agreements, and non-reciprocal preferences granted by developed countries to LDCs and other developing countries are important determinants of production and investment decisions and flows of trade in agriculture. Developed country policies such as subsidies, tariffs and other NTBs which lead to distortions in agricultural markets adversely impact free and fair trade and hence livelihoods and food security in project countries. Though some attempts have been made to address these issues through agricultural negotiations in the WTO Doha Round, e.g. through proposals regarding the Special Safeguard Mechanism (SSM) and Special Products (SPs), not much progress has been made in terms of finalising the negotiations with concrete commitments. Moreover, creating an open, equitable global food system requires bringing trade, investment and technology together in a much more coordinated way than is possible in traditional trade agreements and negotiations.

It is, therefore, important to have a global system that addresses these concerns. Neither food self-sufficiency nor food assistance is up to the task. They are too costly and largely antithetical to the changes needed to ensure greater food safety and security. Trade reforms, buttressed with additional institutional and resource commitments, are less costly, more reliable and congnisant of the needs of the poor. Hence following recommendations are offered:

- The WTO Doha Round should be completed at the earliest with balanced and development-friendly outcome including an agreement on agricultural trade that includes effective provisions related to SSM and SPs for developing countries.
- Trade policies of developed countries that cause distortions in agricultural markets must be removed.
- Economic Partnership Agreements (EPAs) between the EU and project countries should be based on a clear recognition of their unequal economic and trade situations, and with a view to supporting livelihoods, agriculture and food security in these countries.
- International trading and food and agriculture systems should work in tandem, including by involving FAO on issues related to agriculture and food trade.

***Government policies and actions should be holistic, balanced, and specific***

Agriculture sector in project countries presents an opportunity to use trade and trade policy measures to promote productivity, rural development and food security. On the other hand, it also presents a formidable challenge to governments as both the constraints that the sector faces and the solutions required span several policy domains and need holistic, inter-connected, balanced and sustained policy interventions. Lack of such a policy approach has tended to exacerbate the situation, for instance there is generally a disconnect between trade and food security policies. Moreover, both food and trade policies do not directly tackle the issue of livelihoods. The problem is compounded by the lack of knowledge and commitment by political decision-makers.

There is also a growing emphasis on commercial aspects in agriculture and trade policies. While this makes sense to transform subsistence farming into a profitable activity, there should be a balance between commercial imperatives of agricultural policy with welfare imperatives such as employment, improved livelihoods, food security and nutrition and gender equality. Market orientation does not need to be at the cost of livelihood orientation.

Several recommendations in earlier parts of this section are addressed to governments. Recognising the key role of government policies and actions in trade and agriculture, following further recommendations are also made:

- Governments should adopt comprehensive and balanced trade and agriculture policies that are interlinked and take into account the importance of regional trade for livelihoods and food security. These policies should also tackle issues of domestic/ internal trade by dealing with internal bottlenecks such as infrastructural constraints and distribution mechanisms from areas of surplus to areas of deficit.

- The governments should pay attention to the needs of the farmers as presented by the national farmers' associations and incorporate them into relevant policies and strategies.
- The warehouse facilities should be improved as these will assist in the management of the harvests and thus diminishing the possibilities for food insecurity.
- The governments should also set up Farm Service Centers which will be responsible for addressing the needs of the local farmers regarding agricultural machinery and inputs such as fertilisers.
- In order to ensure fairness in the cash crops sector, governments should play their role as a regulator and facilitate the development of a code of conduct or a Marketing Act that could encourage ethical and transparent trading between the farmers and the sponsors of out-grower schemes. Moreover, the governments can facilitate the commercialisation of small-scale farmers by developing their expertise, knowledge and infrastructure to support the private sector investment in the sector.
- Small scale farmers cannot access loans due to lack of formal security. To resolve this problem, the governments should accelerate the establishment of non-traditional forms of security, such as warehouse receipts, accounts receivables, and forward contracts.
- Governments as custodians of land must ensure grant and enforcement of land rights and title deeds must be given where appropriate to ensure security.
- Governments needs to invest in irrigation technology as a public good to minimise farmers' reliance on rain fed agriculture.
- A number of donors are involved in promoting agriculture and trade in these countries. Governments should properly coordinate the activities of these donors to ensure effective and efficient use of funds.

***Education and capacity building of small farmers and traders is a must***

A recurring theme in the five country research studies is the lack of information and relevant knowledge (e.g. about national, regional, and international policies and agreements; market opportunities; good crop husbandry practices, etc.) among many stakeholders particularly small farmers and traders. This constrains governmental effort to improve agricultural productivity on the one hand, and the utilisation of trading opportunities to improve livelihoods by small farmers and traders on the other. Extensive and collaborative intervention by the governments, REC secretariats, donors, CSOs, and private sector are needed to address the current information and knowledge gaps. Some recommendations in this regard include:

- Extension-Research-Farmer linkages should be strengthened to identify the causes of farmers' inability to adopt good crop husbandry practices and high yielding varieties. Where possible, research should identify the factors that determine progressive farmers which could be introduced to other farmers so as to increase rates of technology adoption to reduce supply-side constraints and improve agricultural productivity.
- Other stakeholders such as the REC secretariats, private sector, donors and CSOs should assist the governments by carrying out research, seminars and workshops, etc. to educate farmers and small traders and disseminate information widely.

***Multi-stakeholder consultative and coordination mechanisms should be encouraged***
Research study during the first phase of the FEATS project (CUTS, 2009) showed the importance of well-functioning consultative forums to improve the content and implementation of trade policies. The country research studies in the present volume strengthen that finding by pointing out the need to involve all relevant stakeholders in the development and implementation of trade and agricultural policies and strategies. Multi-stakeholder coordination has also been identified as very important to maximise the benefits from policy interventions and market opportunities. Some recommendations in this regard include:

- The ministries of agriculture and trade should closely collaborate with each other as well as with other relevant ministries and agencies to plug the existing gaps between trade, rural livelihoods, agriculture, and food security issues.
- Agricultural producers and traders should be involved in the formulation and implementation of relevant policies at both the national and regional levels.
- At the regional level, organisations such as the EAGC should be involved in view of their role as honest brokers by virtue of being regional organisations with membership including farmers, traders, millers, input suppliers and other stakeholders.
- National and regional consultative and coordination mechanisms should include as appropriate: representatives of relevant REC secretariats and government ministries and agencies, private sector, farmer organisations, food-processing units, non-governmental organisations and community-based organisations. There should be collaboration among the stakeholders based on the role of each of them as outlined in policies and strategies. This concerted and coordinated effort will certainly improve regional food security and rural livelihoods through improved agricultural productivity and regional trade.

***Donors should play a more positive role in the host and home countries***
Many bilateral and multilateral donors are providing valuable assistance to improve trade and agriculture policies, strengthen REC secretariats and relevant government ministries, improve trade facilitation and promote regional trade, increase agricultural productivity, promote multi-stakeholder consultation and coordination, and facilitate better livelihood opportunities and food security. The positive reach and impact of these assistance activities can be increased by changing some priorities and expanding their role in their home countries. Following recommendations should be considered for this purpose:

- Donors should shift from prioritising aid targeting price incentives to prioritising aid targeting land and labour productivity. This will require increasing aid in areas such as disease control, soil erosion control and development and adoption of improved seeds and animal breeds. Donors can set up funds to lend to the private sector, e.g. for investing in improved seeds multiplication.
- Donor assistance should target productivity improvements in agriculture by promoting investments such as sponsoring of producers associations and storage facilities where possible.
- Donors should collaborate in the development and smooth functioning of various Corridors to reduce the costs of imports and exports.

- Donors should purchase food aid from the region to encourage regional production.
- Lobbying their own governments to reduce market access and entry barriers for imports from project countries should also be undertaken by donors.
- Moreover, they should encourage the multinational corporations that originate from their own countries to take on social corporate responsibility by offering appropriate prices for the produce of small-scale farmers and invest in improving rural livelihoods.

***CSOs too are partners in these endeavours***

As reported in the first phase FEATS publication (CUTS, 2009) project countries have a vibrant CSO sector. CSOs in these countries have been working on issues related to trade, agriculture, livelihoods and food security both at the policy and project levels. They have proved to be effective in lobbying for fair policies on behalf of the poor and weak. Given their experience and strengths, the following recommendations are made:

- CSOs should continue strengthening the research and information dissemination to all stakeholders. Based on the informed output, the CSO must lobby for domestic policies that promote the welfare of small-scale farmers.
- CSOs could network with other CSOs in countries where out-grower scheme sponsors originate and encourage these scheme sponsors to offer fair prices to farmers in project countries.
- CSOs should work closely with the government and lobby for the creation of bodies that could act as fair arbiters between the farmers and agribusiness organisations.
- They should lobby for the increased government spending on poverty reducing oriented agricultural projects such as improvement of feeder roads, research, export promoting activities and extension services.
- Small farmers often regard agriculture as a way of life and not as a business to improve their way of life. Therefore, CSOs should design programmes targeted at sensitising the farmers on the commercial side of agriculture.

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## Endnotes

1 Moreover, Malthusian solutions regarding food security were often adopted in the project countries during the 1970s-1980s which focussed primarily on technological aspects to increase production in order to match the demands of the population, while not adequately stressing on the accessibility (equitable distribution) of food, or its affordability.

2 The Global Hunger Index is computed every year by the International Food Policy Research Institute (IFPRI). It is a comprehensive measure of hunger and malnutrition based on three indicators, i.e. proportion of people who are calorie deficient; child malnutrition prevalence; and child mortality rate. Countries are ranked on a 100-point scale, with 0 being the best score (no hunger) and 100 being the worst. The GHI values less than 4.9 reflect low hunger; values between 5 and 9.9 reflect moderate hunger; values between 10 and 19.9 indicate a serious problem; values between 20 and 29.9 are alarming; and values exceeding 30 are extremely alarming.

3 Kenya, Malawi, Tanzania, Uganda and Zambia are also in the process of negotiating reciprocal preferential trading agreements (Economic Partnership Agreements – EPAs) with the EU.

4 Both Kenya and Uganda are members of COMESA and EAC, Tanzania of EAC and SADC, and Malawi and Zambia of COMESA and SADC.

5 For informal trade points in the EAC region, please see figure 2.7 in this volume. It was also observed during the field work for Kenya country research study in this volume that much of the illegal trade takes place along porous border points and a huge percentage of that is taking place through Lake Victoria on small boats and along the beaches.

# 2 Regional Trade and Rural Livelihoods: Implications for Kenya's Food Security

– Gloria Otieno

## 2.1 Introduction

### 2.1.1 Background and Relevance

Recent developments in the world food situation have seen an increase in the world's malnourished from over 800 million in 2008 to 923 million in 2009 (FAO, 2009). The situation is not different in Kenya where close to 10 million people are in need of food aid and 3 million people are facing chronic food shortage. Food situation in Kenya has been described as "alarming". The Global Hunger Index 2008 placed Kenya among the world's most food deficient countries. The report by International Food Policy Research Institute (IFPRI), Concern Worldwide and Welt Hunger Hilfe ranks countries on a 100-point scale with 0 being the best score, on which Kenya scored 20.1 in the 2008 report, and is consequently placed 29th in the world among the countries with poor food security.

This situation in Kenya is partly due to the effects of recent droughts, rising food prices, and rising levels of poverty. Currently expenditure on food covers about 60 percent of poor household's incomes, hence food poverty seems to be on the rise as well. Maize is a staple food for most African countries, Kenya included, and it provides over half of the calories for the Kenyan population. However dependence on rain fed agriculture has seen maize output fall from a surplus of 9 million bags in 2006 to a deficit of 35 million bags in 2009. In the year 2010 however, there was a bumper harvest due to good rainfall and weather conditions countrywide. This means that Kenya has had to rely on imports from other countries in the region to meet its needs during the deficit years. Trade is, therefore, a very important tool for stabilising the national food supplies as well as food prices.

World trade continues to affect food security both directly and indirectly. Tariffs and subsidies – both domestic and foreign – may affect food production and trade as well as supply and demand of certain foods and hence impact directly on food security. Trade policies of different governments may also indirectly affect food production and security.

Some policies affect a range of agricultural inputs and outputs which in turn affect livelihoods of farmers as well as prices of food in the long run impacting food security.

***Country Context: Some Stylised Facts about Kenyan Trade, Poverty and Food Security Situation***

Kenya has a total population estimated at 38 million, growing at 2.4 percent per year, and a per capita gross national income of US$340. Economic growth fell from an annual 7 percent in the 1960s to 5 in the 1970s, 4 in the 1980s, and 2.4 in the 1990s. It rose again between the year 2003 and 2007 to 5.8 percent and then fell again to 1.3, following post election violence in 2007. Kenya is a much more industrialised country than its neighbours, with only 26 percent of GDP originating from agriculture, as compared to over 40 percent in Uganda and Tanzania.

Kenya's export contribution to GDP rose from 23.6 in 2002 to 27.4 percent in 2005. It then declined to 25.1 percent in 2006. However, the value of exports of goods and services rose from Kenyan Shillings (KSh.) 18,910mn in 1992 to KSh.69,285mn in 2000, KSh. 244.5bn in 2002 and more recently to KSh.412.4bn in 2006. During the same period, the contribution of Kenya's imports to GDP declined from 30.4 percent in 2002 to 29.8 percent in 2003, and then rose to 37.5 percent in 2006. The value of imports of goods and services rose from KSh.314.9bn in 2002 to KSh.605.1bn in 2007 and KSh.770.7bn in 2008. Major indicators of international trade show that trade deficit is widening for Kenya. While the value of domestic exports increased by 14 percent in the last two years, the value of imports grew relatively faster at a rate of 16 percent as per Government of Kenya (GoK), Economic Survey 2008. In 2009, however, there was a very low GDP growth rate at 1.7 percent and an even wider trade deficit of KSh 425.7bn in 2008 representing a deterioration of 28.8 percent.

Despite the marked increase in trade in the past few years, poverty still remains a major challenge, especially in the rural areas where 67 percent of Kenya's population lives. A 2006 nation-wide Kenya Integrated Household and Budget Survey (KIHBS) finds that 46 percent of the total Kenyan population is absolutely poor, i.e. below the poverty line, whereas 49 percent of the rural population is absolutely poor (Kenya National Bureau of Statistics, 2007). With such statistics in poverty, there has also been a markedly increase in food insecurity in the past few years.

In Kenya food security is generally linked with the availability of and access to adequate supply of maize. Maize production has been declining since 2006 from an all time high of over 34 million bags in 2006 to about 25 million bags in 2008. In 2009, the failure of about 35-45 percent of the long-rains crop led to a huge production shortfall leading to imports of the shortfall from neighboring Uganda, Tanzania and Malawi. In 2010 however an improvement in weather conditions saw a surplus of over 16 million bags.

Vulnerable groups such as pastoralists, internally displaced persons and both rural and urban poor also continue to face challenges related to rising food prices. A comparison of local and import parity prices in Nairobi over the 2000-2009 period indicates that imported maize has been more expensive than domestically produced maize up to February-March 2009. The import waiver granted in January 2009 has restrained the

increase in grain prices, with the gap between local and parity prices reducing. Under the revised humanitarian emergency plan for 2009, over 3.5 million people require emergency cash or food assistance, including 2.6 million people affected by drought, 150,000 people affected by post-elections violence, and 870,000 children benefitting from school feeding programmes in 2010. However these figures have increased dramatically with over 1 million children currently benefiting from the school feeding programmes.

***Study Coverage and Methodology***

The research study attempts to identify linkages between trade, rural livelihoods and food security in the Kenyan context. The research study attempts to address a number of issues in several areas including Kenyan participation in regional trade in agriculture both in import and export, the magnitude and composition of this trade (formal and informal) and its inherent effects on rural livelihoods and food security. An impact of international trade on livelihoods and food security in Kenya will also be analysed. Furthermore, a review of national policies related to agriculture, food security, trade, and regional integration will be carried out in order to understand the strengths and weaknesses of various policies and how a synergetic action can be achieved. In doing so, the roles of various stakeholders will be reviewed, and a framework developed to leverage regional trade in agriculture to improve food security and rural livelihoods in Kenya.

The study, therefore, involves an extensive use of secondary information which is complemented with primary information. Secondary data was obtained from various government publications, including the Kenya National Bureau of Statistics' (KNBS) Statistical Abstracts and Economic Survey publications. Other sources of secondary information included publications/reports of the Ministry of Agriculture, Ministry of Trade, Food and Agriculture Organisation (FAO), WTO, World Food Programme (WFP) and World Bank.

For primary data, a stakeholder consultation approach was used to collect data from key participants in the sector, such as farmers, traders, importers, border officials, officials of the Ministry of Agriculture, food aid agencies, policy makers and consumers. Direct interviews and focussed group discussions methods were used to collect information from farmers, farmer groups, associations and cooperatives, and public institutions. The field work was done in the month of October and November 2009 in two main parts.

The main intention of the first part of the fieldwork was to capture the extent and magnitude of informal trade in the region and its implications on livelihoods and food security. Border points visited were those between Kenya and Uganda and Kenya and Tanzania and included[1] :

1. Kenya-Uganda border points
   a. Busia Border Point – (official)
   b. Port Victoria – Lake Victoria (unofficial)
   c. Marenga Beach (unofficial)
   d. Mau Mau Beach Point (unofficial)

2. Kenya-Tanzania Border points
   a. Sirare Border point (official)
   b. Miuru Beach border point (unofficial)
   c. Kirongwe Border point (unofficial)
   d. Taveta Border point (official)

Part 2 of the fieldwork involved interviews with key informants including:

1. Officials at border points, e.g. of Kenya Revenue Authority (KRA),

2. Traders at official and unofficial border points

3. Focus group discussions with farmers in 3 main regions
   a. Taita taveta – Coast region
   b. Kibwezi – Eastern region
   c. Miuru – Nyanza region

4. Key interviews with
   a. Officials at Ministry of trade dealing with internal trade and external trade
   b. Officials at Food Early Warning System (FEWS) Net Kenya
   c. Officials at Ministry of Agriculture

This section gives the background of the study and section 2 will involve a literature review into linkages between trade, livelihoods and food security. Section 3 of the study will look at the Kenyan perspective of trade, rural livelihoods and food security and will capture trends as well as impacts related to the issues. An analysis of policy issues and concerns as well as roles of various stakeholders will also be captured in this section. Finally the last section of the study will draw some conclusions and suggest a framework to leverage regional trade in agriculture that can improve rural livelihoods and food security.

## 2.2 Agriculture Trade, Rural Livelihoods and Food Security: Exploring the Linkages

### 2.2.1 Agricultural Trade and Rural Livelihoods

Agriculture plays a central role in the lives of the poor, both as the main source of their livelihoods, and as their main consumption expenditure. Since trade and agriculture are inextricably related, trade has implications on poverty and food security. Multi-functionality of agriculture implies its multiple roles in the economy such as food production, food security, income and employment generation, development of non-farm sectors through multiplier effects, macroeconomic stability etc. Agricultural growth is seen as a necessary factor for successful economic transformation and industrialisation for two reasons: a) to ensure food supply, and prevent rising food prices and real wages from undermining industrial development; and b) to utilise a major natural resource, i.e. land as a source of growth that would not compete with other resources needed for industrial growth (Byerlee & Diao *et al* 2005: 3).

Literature on agriculture suggests that in developing countries, agriculture often contributes to a higher percentage of GDP than manufacturing and services (FAO, 2005). In addition, majority of the world's extremely poor people live in rural areas and earn their livelihoods as farmers, labourers, transporters, marketers and processors of agricultural produce, and as suppliers of non-agricultural services to households whose income is derived from agriculture . Furthermore, the poor in rural towns and larger cities are often engaged in the processing and distribution of agricultural products from the hinterland. The food needs of poor urban households and of a growing share of rural households are met through purchases, except where supplemented by supplies from rural relatives. This makes the welfare of the poor highly sensitive to fluctuations in food prices (Stevens *et al*, undated).

Trade affects rural livelihoods through imports and exports. International trade has presented opportunities for farmers to export their produce thereby providing incomes and boosting agricultural production as has been the case of horticulture in Kenya in recent years. Trade also affects household access to adequate food through its impact on commodity prices, access to markets for producers, and labour entitlements. The price a producer receives has a significant impact on his or her ability to purchase other foodstuffs and to reinvest in his or her livelihood (Otieno & Ogalo, 2009). At the national level, trade affects both the access and utilisation of food through its impact on national revenues available for agricultural assistance, social support programmes, and food distribution.

From the preceding discussion, the dynamics and linkages between agricultural trade and rural livelihoods occur in three phases (Evans, 1990):

- Rural households earn higher incomes from production of agricultural goods for non-local markets, and increase their demand for consumer goods.
- This leads to the creation of non-farm jobs and employment diversification, especially in small towns close to agricultural production areas.
- This in turn absorbs surplus rural labour, raises demand for agricultural produce and again boosts agricultural productivity and rural incomes.

Therefore, the four channels through which agricultural trade might positively affect rural livelihoods are: decrease in real food prices, increase in employment opportunities, higher real wages, and increase in incomes of small farm households.

On the other hand, trade can also have some negative impact on rural livelihoods; this is mainly through specific developed country policies such as subsidies. Subsidies dampen world prices of agricultural products which leads to low prices and hence incomes for producers in developing countries. This has had a tremendous impact on agricultural production in developing countries. In the absence of gains to be derived from agriculture, developing countries have had less incentive to invest in agricultural infrastructure, agricultural research and development, and the like. As a result, agricultural production in these countries continually declined thereby disrupting supply (Gilson, 2004). This has led to a drop in employment for farmers who form a large portion of the population. As a result, these farmers become dependent on imported food including good aid which can worsen the food security and livelihood situation.

### 2.2.2 Food Security: The Role of Agricultural Trade

***Food Security Concept in Relation to Trade***

Food security at the individual level refers to 'secure access by all people at all times to enough food for a healthy, active life' (World Bank, 1996). This includes the three elements that are widely agreed to be necessary for food security; *enough* food for an active healthy life; *access* to this food; and the *guarantee* of having access to it at any given time. However, at the national level, food security does not require individual countries to achieve food production self-sufficiency. In a globalised world connected through trade, the food security discussion tends to focus on adequate supplies of imported food. Therefore, depending on a country's factor endowments, a more lucrative and perhaps even safer option might be to produce and export high-value crops or manufactured goods, and to purchase some proportion of national staple food requirements from world markets. On the other hand, countries can be food self-sufficient at the national level but also contain some food insecure individuals because of unequal distribution of food within the country (Stevens *et al,* undated).

Access to food is not only viewed as physical access or availability of food in markets but also the ability to purchase food in quantities that are sufficient to meet the food consumption needs (Gilson, 2004). The ability to purchase food is influenced by incomes as well as food prices. Trade and the reforms that accompany it can greatly influence food prices. As already discussed in the previous section, policies related to subsidies may affect supply and demand for food in the world market.

The basic cause of rising food prices is a growing mismatch between supply of food and demand for it. Rising energy prices feeding through energy-intensive supply-chains; diversion of grains to bio-fuels production in response to concerns over global warming; drought in key producing countries (and the prospect of future "climate shocks"); and declining productivity in food production (accompanied by decreasing stocks) are the main factors inhibiting supply. Demand is rising in tandem with population growth, particularly in Asia, within which rapidly growing urban middle classes in China and India are consuming more grain-fed meat products (Panagariya A, 2002).

The consequence has been a sudden and sustained rapid rise in prices of key grain products in the world market which invariably results in food security problems, especially in developing countries due to rising food prices (Panagariya A, 2002). The main link between trade, markets and access to food is the level and variability of the price of food relative to whatever individuals are able to exchange for it. Retail food prices at a point in time and their variability over time will in turn depend on a number of factors including the total supply of food, as determined by production and imports; the degree of market integration (determined by infrastructure and marketing) that will affect the extent to which changes in production or imports are transmitted into price changes in different areas; government price controls and/or subsidies; global supply and demand in case where food is imported; and finally transport costs (domestic and international) that will be determined *inter alia* by infrastructure and the existence and performance of marketing agents, whether private or public ( Stevens *et al*, undated; Panagariya A. 2002).

***Linkages between Trade, Trade-Related Policies and Food Security***

Classical economic theory regards trade liberalisation as a win-win situation where all parties benefit from the efficiency and dynamic gains that come as a result of greater commercial integration. While trade liberalisation may in the long run bring about welfare gains, it can also cause serious injury to low-productivity sectors in poor countries. Developing countries that reduce barriers to trade can experience unforeseen surges in food imports. Such surges in food imports can have serious negative consequences on local food production in these countries, and this can lead to negative impacts on their food security, particularly for the poor segments of the society.

While several factors, as already discussed, beyond trade policy have combined to produce an upward global food price spiral, including high energy and fertiliser prices, depreciation of the US$, bio-fuel production, changes in food buffer stocks, droughts, and increased world demand (World Bank, 2008a), the current food crisis also has deep historical roots in the distortions of the world trading system.

In recent years, agricultural trade has been distorted by the existence of various trade agreements, whereby preferential tariff rates and/or market access conditions are offered on a reciprocal or non reciprocal basis to a subset of partner countries. Overall, with complex tariff and quota structures (different in-quota and out-of-quota tariff rates for agriculture products, many of them specific or compound rather than just *ad valorem*), and with a wide array of preferential bilateral tariffs in place in most countries, the trading system in agriculture is non transparent, discriminatory and restrictive across products, with richer countries having higher barriers (World Bank, 2008a). Furthermore, developed country policies such as domestic support measures, export subsidies, and tariffs have also played a major role in the distortion of markets.

Despite recent multilateral trade liberalisation measures, agricultural trade continues to face significant barriers. For instance, while high-income countries have the lowest overall barriers to trade, their overall trade restrictiveness index (OTRI) is 43.1 percent for agriculture as compared to 4.3 for manufacturing (World Bank, 2008b). These trade barriers invariably cause distortions, more specifically either an increase in world food prices and thereby impacting on food security, or making it extremely difficult for developing country producers to compete in the world market, thereby resulting in loss of incomes.

Liberalisation policies in many developing countries have left them both vulnerable to import surges and without the tools to cope with them. Structural Adjustment Programmes (SAPs) carried out in the 1980s and 1990s, and subsequent tariff and other trade liberalisation policies led to the collapse of many agricultural sectors in developing countries. Furthermore, some developing countries continued to implicitly tax agricultural sectors through taxation of inputs. This made production costs too high and consequently many in the agriculture sector could not compete. As a result, governments resorted to importing food (Anderson, 2009). These imports have continued to affect local economies especially if the prices of these imports are falling. As a result, domestic farmers are squeezed out of their local markets. These import price drops are particularly prevalent in small economies. Data for 56 developing countries between 2004-2007

shows that food import surges are commonplace. For example food import surges account for 23 percent of total agricultural imports by the Least Developed Countries (LDCs). For Small and Vulnerable Economies (SVEs) the figure is similar at 21 percent of their agricultural imports, and for other developing countries it is 15 percent. For individual countries this can amount to over 200 cases of volume import surges per year (South Centre, 2009).

In order to mitigate the effects of these import surges, the WTO Doha Round of negotiations is considering counter mechanisms to be used by developing countries. For example, the current draft negotiating text of WTO agriculture negotiations provides for the establishment of a Special Safeguard Mechanism (SSM) for those sub-sectors of the developing countries that may require protection over specified time periods so as to foster rural development, food security and livelihoods. The SSM would allow the imposition of an additional duty to counter volume import surges and price volatilities. With pressure from the G33 (a group of 46 developing countries that is the main demandeur for the SSM), negotiations on modalities for a new SSM in the WTO have gained momentum and a number of countries have already submitted concrete proposals on the features of an SSM which they consider favourable to their economies (South Centre, 2009; WTO 2008).

The Doha Round draft agricultural modalities also provide a mechanism for the exclusion of a certain number of 'special' agricultural products from full tariff liberalisation for reasons of food or livelihood security or rural development. Developing countries would be able to designate 10-18 percent of tariff lines as special products. Under this arrangement either up to six percent of products would escape all tariff cuts, or a larger percentage of tariff lines would benefit from lower than agreed cuts (WTO, 2008).

A recent phenomenon, i.e. the oil crisis has also played its part in causing a shift in policies which have led to a hike in food prices. For instance the price hike of 2008 was partly a consequence of policy changes in the US and EU, namely their decision to subsidise bio-fuels and set mandates/targets for their use domestically in response to rising fossil fuel prices. It led other governments to impose food export restrictions to insulate their consumers from the price rise, which pushed international food prices even higher and, due to domino effect, drove more exporting countries to follow suit (Anderson, 2009).

Statistics show that 70 percent of the global welfare cost of trade distortions is due to farm policies (49 percent due to high-income country policies and 21 percent to developing country policies), even though agriculture constitutes only 3 percent of global GDP and 6 percent of global trade, and that policy distortions have been halved over the previous 25 years (South Centre, 2009). These restrictions and policies tend to (1) distort prices and the allocation of resources, therefore impeding investment and supply-side response; (2) prevent developing country farmers from receiving higher world market price for their production, therefore slowing the reduction of poverty in rural areas; and (3) displace local production to crops that are not subject to export restrictions, therefore aggravating the very food security and price concern that justifies the measures in the first place (World Bank 2008c).

## 2.3 Regional Trade and Implications on Rural Livelihoods and Food Security in Kenya

### 2.3.1 Rural Livelihoods, Poverty and Food Security Situation in Kenya

***Rural Livelihoods and Poverty in Kenya***

Recent statistics on poverty in Kenya indicate that 46 percent of the 39 million Kenyans are living below the poverty line (Kenya National Bureau of Statistics (KNBS), 2007)[2]. Incidence of poverty is higher in rural areas estimated at 49.1 percent of the rural population (see table 2.1)[3]. Poverty in Kenya can be attributed, amongst others, to low agricultural productivity and poor marketing; unemployment and low wages; inaccessibility to productive assets, particularly land; poor infrastructure; gender imbalance; high costs of social services; bad governance and HIV/AIDS (Kenya Poverty Reduction Strategy Paper, 2001; KNBS 2007).

Rural poverty appears to be deeply rooted and associated with agriculture and land, whereas urban poverty is more linked to how incomes are generated. Kenya still depends directly on agriculture and livestock for 26 percent of its GDP and for 67 percent of livelihoods in the rural areas. Moreover 80 percent of agricultural production is by small-scale farmers providing their livelihoods directly and indirectly.

Poverty levels are highest in the arid and semi-arid lands of Coast, North Eastern and Eastern provinces; and in the highly populated regions of Western, Nyanza, Rift Valley and Central provinces. This is possibly because the arid and semi-arid lands (ASALs) have fewer agricultural opportunities due to poor climatic condition and increased incidence of insecurity. The region with the highest human poverty in percentage is Eastern province (50.5), followed by Coast (42.5), Rift Valley (40.5), Nyanza (37.5), Western (36.1) and lastly Nairobi (29.9). Compared to 2004, human poverty has increased marginally except for Nyanza, Western and Coast - better performing provinces are in high potential agriculture areas while worst performance are in low potential areas prone to insecurities (HDI 2006).

Rural livelihoods in Kenya depend greatly on livelihood and agro-ecological zones. There are 5 livelihood zones in Kenya namely pastoral; agro-pastoral; marginal agricultural; high potential (mixed farming); high potential (cereal and dairy); and urban (casual wages and trading). The agro-ecological zones vary from humid, sub-humid, semi-humid, semi-humid to semi-arid, and arid depending on the rainfall and climatic conditions, and hence different agro-ecological zones adapt to different livelihoods

**Table 2.1: Poverty Percentage Rates (Selected Years 1992-2007)**

| Region | 1992 | 1994 | 1997 | 2000 | 2007 |
|---|---|---|---|---|---|
| Rural | 42.0 | 46.8 | 52.9 | 59.6 | 49.1 |
| Urban | 29.3 | 28.9 | 49.3 | 51.5 | 33.7 |
| National | 46.3 | 46.8 | 52.3 | 56.8 | 46.0 |

*Source: Kenya Economic Surveys (Various Issues), KNBS 2007*

(Appendix 1a and 1b). The ASALs have fewer agricultural opportunities due to poor climatic conditions, while the high agricultural potential areas are becoming increasingly overexploited due to population pressure (KNBS, 2007).

***The Food Security Situation in Kenya***

In the pre-liberalisation period, the Kenyan government put a lot of emphasis on the development of the agricultural sector through substantial domestic production support measures and some degree of protection through quantitative restrictions and high tariff levels to curb imports. With liberalisation, this support was withdrawn and the food security situation has worsened since the mid 1990s. By 2003, the country relied more on imports to meet the food requirements of the country and used about 25 percent of the value of agricultural exports and 14 percent of the total value of exports to import food. Food imports do not necessarily help the poor when it comes to household food security considerations as the poor may not have the resources to enable them to access/buy imported food. The communities in ASALs of the country are particularly vulnerable to food insecurity because of the recurring natural disasters of drought, livestock diseases, animal and crop pests, and limited access to appropriate technologies, information, credit, and financial services (Nyangito et al, 2004).

**Table 2.2: Trends in National Food Security Indicators (1992-2008)**

| Year | Per Capita Food Production (Kg/yr) | Food self-Sufficiency Ratio | Cereal Self Sufficiency Ratio | Ratio of Food Import to Agricultural Exports | Ratio of Food Imports to Total Exports |
|---|---|---|---|---|---|
| 1992 | 626.42 | 0.98 | 0.91 | 0.21 | 0.16 |
| 1993 | 604.90 | 0.96 | 0.81 | 0.11 | 0.08 |
| 1994 | 615.45 | 1.00 | 1.00 | 0.29 | 0.19 |
| 1995 | 624.17 | 0.97 | 0.88 | 0.09 | 0.06 |
| 1996 | 602.93 | 0.94 | 0.71 | 0.14 | 0.09 |
| 1997 | 582.15 | 0.93 | 0.71 | 0.28 | 0.19 |
| 1998 | 612.41 | 0.95 | 0.76 | 0.22 | 0.15 |
| 1999 | 616.92 | 0.93 | 0.69 | 0.15 | 0.11 |
| 2000 | 561.69 | 0.91 | 0.65 | 0.18 | 0.15 |
| 2001 | 579.72 | 0.93 | 0.78 | 0.41 | 0.22 |
| 2002 | 569.88 | 0.91 | 0.71 | 0.20 | 0.11 |
| 2003 | 572.76 | 0.92 | 0.73 | 0.22 | 0.13 |
| 2004 | 581.98 | 0.93 | 0.79 | 0.37 | 0.21 |
| 2005 | 566.21 | 0.91 | 0.66 | 0.34 | 0.20 |
| 2006 | 560.76 | 0.90 | 0.67 | 0.33 | 0.19 |
| 2007 | 558.30 | 0.88 | 0.64 | 0.39 | 0.24 |
| 2008 | 554.78 | 0.87 | 0.60 | 0.42 | 0.29 |

*Source: FAOSTAT, KNBS Statistical Abstracts (various issues).*

Table 2.2 shows that the aggregate measures of the country's food security (i.e. per capita food production, self-sufficiency ratio, ratio of food imports to agricultural exports and ratio of imports to total exports) have generally worsened since 1993 (post-liberalisation period). During the pre-liberalisation period (before 1993-1994), Kenya generally had a higher food self-sufficiency ratio (>0.96) than during the post-liberalisation period (when the ratio has generally been less than 0.95). Cereal self-sufficiency has deteriorated from 0.95 in 1990 to 0.71 in 2002, and currently stands at 0.60 which is very low. Food imports have, therefore, become an important component of food security.

It is evident that Kenya is a net importer of food. The biggest deficit in absolute terms has been in coarse grains such as maize, which is the leading staple food in the country. However not all the import needs are being met through formal trade and results from our survey show substantial cross-border informal trade with the neighbouring countries, (Uganda and Tanzania in particular), especially in maize.

As shown in table 2.3, poverty in Kenya also correlates with high food poverty, for instance regions with the highest poverty rates such as coastal lowlands, western lowlands and ASALs which have poverty rates of over 75 percent also have high proportions of food insecure populations, also over 75 percent.

The national maize stocks as at mid-June 2009 were 580,000 metric tonnes against the national consumption requirement of 675,000 metric tonnes which left a national maize deficit of 95,000 metric tonnes that was met through imports. Between January and June 2009, Kenya imported a total of 108,155 metric tonnes and 56,900 metric tonnes of maize from Uganda and Tanzania respectively through informal cross border trade while the National Cereals and Produce Board (NCPB) in 2009 was importing maize from USA and South Africa for its Strategic Grain Reserve (SGR).

**Table 2.3: Food Poverty by Region (2007)**

**Food Poverty data ( 2007) by Region (millions)**

| Zone | Population | Food Secure | Food Insecure | % Below Poverty Line |
|---|---|---|---|---|
| Central highlands | 7.24 | 5.14 | 2.1 | 29 |
| Marginal rain shadows | 2.78 | 1.78 | 1 | 36 |
| High potential maize zone | 4.35 | 2.35 | 2 | 46 |
| Eastern lowlands | 4.38 | 2.28 | 2.1 | 48 |
| Western transitional | 2.5 | 0.9 | 1.6 | 64 |
| Western highlands | 3.97 | 1.07 | 2.9 | 73 |
| Coastal lowlands | 1.71 | 0.41 | 1.3 | 76 |
| Western lowlands | 1.92 | 0.42 | 1.5 | 78 |
| Arid and semi arid lands | 1.52 | 0.32 | 1.2 | 79 |
| Urban | 4.4 | 3.3 | 1.1 | 25 |
| KENYA | 31.7 | 14.9 | 16.8 | 53 |

*SOURCE: Readings in Inequality in Kenya (sectoral dynamics and perspectives, 2007)*

However, in the period between July 2009 and June 2010 there were marked improvements in the food security situation in Kenya mainly due to favourable rains and an increased area under maize production which went up by 15 percent and was mainly attributed to a reduction in prices of inputs and the fertiliser subsidy programme. In this period therefore, there is an estimated 40,000 tonnes of surplus as summarised in table 2.4 using data from Kenya Food Security Steering Group.

**Table 2.4: Maize Stocks and Availability (July 2009-June 2010)**

| Period | Source | Quantity '000MT |
|---|---|---|
| July 2009 | Opening stocks from NCPB, millers and traders | 450 |
| July 2009-February 2010 | Imports (GoK, traders, WFP) | 720 |
| January-June 2010 | Cross-border imports | 110 |
| January 2010 | Long rains output | 1850 |
| March 2010 | Short rains output | 540 |
| July 2009-June 2010 | Post-harvest losses | 230 |
| June 2009 | Total national availability | 3440 |
| July 2009-June 2010 | Total national consumption | 3400 |
| July 2010 | Surplus | 40 |

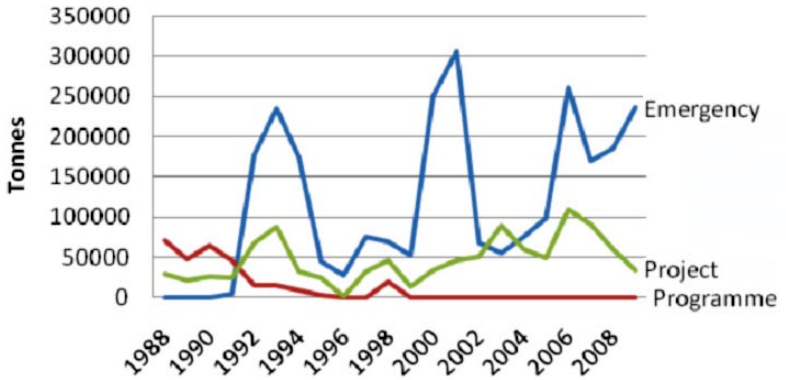
*Source: Kenya Food Security Steering Group (2010)*

***Food Aid Dependency and the Current Food Security Status***

Kenya's dependency on food aid has continued to rise over the years and had high peaks in 1993, 2001 and 2007, largely due to drought in those years. According to figure 2.1, prior to 1992, i.e, the period before market liberalisation, Kenya was not receiving emergency food aid, and generally the total levels of food aid received were lower. Some experts in the Ministry of Agriculture attribute this phenomenon to liberalisation of markets especially in the year 1991-92 which led to the removal of subsidies to farmers and, subsequently unstable markets and prices coupled with drought, that led to food insufficiency.[4] Since then, Kenya has continued to depend on food aid.

In 2009, the World Food Programme (WFP) was responsible for feeding a total of 4.2 million people in Kenya because of drought, including 3.1 million people who received monthly rations, and over 1 million children who were given school meals through the school feeding programme. The joint Kenya Food Security Update for July 2009 notes that in some areas, such as Marsabit, households rely on relief food for 60 percent of their needs, and predicts that pastoral districts in the northwest where rains were mediocre could have an exceptionally difficult dry season. In some of the drought affected southeastern lowlands, farming families are also in a precarious position, with crop losses and higher than normal prices compounding their difficulties.

**Figure 2.1: Trends in Food Aid Receipt in Kenya (tonnes) 1988-2009**




*Source: WFP Database (2010)*

Food aid, while beneficial to Kenya's food insecure by increasing the local supply of food, often depresses prices and thus undercuts the income of rural farmers. It has also discouraged local production especially in the areas which receive food aid every year thus diminishing both capacity and incentives to invest in improving agricultural productivity. And, since the poor often are concentrated in these areas, food aid in fact may disproportionately hurt the poor. In the past years and due to corruption, food aid has tended to find its way to the local market at lower prices creating a disincentive to farmers and producers while at the same time denying genuine food insecure households their right to food.

***Rural Livelihoods and Implications on Food Security in Kenya***

As mentioned earlier, more than two thirds of Kenya's population lives in the rural areas where agriculture and pastoralism are the main economic activities supplemented by various informal activities. An average of 68 percent of rural household income is derived from off-farm incomes, including remittances and around 32 percent comes from own production (crops and livestock products, with maize and wheat being the leading sources of crop incomes). However, these ratios vary from region to region and livelihood categories; with farm incomes forming a low proportion (18 percent) in Eastern province and a high proportion of 60 percent in Rift Valley province. Around 36 percent of rural households have at least one salary earner living away from the farm, and around 33 percent receive remittances.

It is evident from table 2.5 that for most of the livelihood zones, incomes from agriculture alone are not sufficient to meet food needs. Recent studies (Nyangito et al, 2004) also indicate that the regions where farms are the least significant sources of income are the poorest, and subsequently the most food insecure. This demonstrates the very important role that farm activities play, particularly in providing food and alleviating poverty in Kenya.

| Table 2.5: Proportion of Income from Various Sources by Livelihood (in percent, 2008) | | | | |
|---|---|---|---|---|
| **Livelihood** | **Characteristics** | **Income from Crop Production** | **Income from Livestock Production** | **Income from Off-Farm Sources (remittances, petty trade and wages)** |
| Pastoral | Low rainfall, poor crop productivity, dependence on livestock, poor access to markets hence most food insecure and at least 65 percent of food needs are purchased | 5 | 78 | 17 |
| Agro-Pastoral | Moderate but highly variable rainfall. Food purchases account for about 60 percent of total food needs | 31 | 50 | 19 |
| Marginal Agricultural | Low erratic rainfall, low productivity and drought prone. | 41 | 30 | 29 |
| High Potential (mixed farming) | High rainfall, high population density and small holdings between 1-5 acres. Predominantly fruit and vegetable growers for commercial purposes such as horticulture. | 50 | 31 | 19 |
| High Potential (cereal and dairy) | Maize is the predominant crop, highly productive with high rainfall. Considered most food secure with surplus for sale | 60 | 28 | 12 |
| Urban (casual wages, trading) | Incomes mainly from wages and trade. More than 40 percent of urban households are food insecure; they purchase more than 95 percent of their food needs. | 9 | 10 | 81 |
| *Source: Kenya Food Security Steering Group (KFSSG) (2009)* | | | | |

***Land as a Factor of Production and its Implications on Food Security***

Land is central in promoting rural livelihoods because access to it and security of tenure are the main means through which food security and sustainable development can be realised. Therefore, the debate on food security cannot be concluded without the mention of land as a factor of production and highlighting how land issues in Kenya have

influenced food security. Kenya covers an area of approximately 582,646 sq. km. comprising 97.8 percent land and 2.2 percent water surface. Of this land only 16 percent can be classified as medium to high potential and the remaining land is mainly arid or semi-arid. Approximately 75 percent of Kenya's 39 million people live in the medium to high potential areas. The size and distribution of land varies in different areas with the ASALs having as low as 2 persons per square kilometer, and high potential areas having as high as 2000 persons per square kilometer. The rural-urban balance also stands at 78-22 percent respectively (GoK – 2009: Kenya National Land Policy).

Over the years, Kenya has pursued a land tenure system in which ownership of land has evolved from customary land to individual and private ownership. Under the individualised tenure system, land is privately owned by individuals and this has led to fragmentation of land to very small uneconomical portions, especially in the medium to high potential areas, and a dominance of production by smallholdings. The average of about 4 million farms has been reduced to less than an acre due to fragmentation. These small holdings have led to low yields in the high potential areas.

Land is also a political issue in Kenya, starting from the days of colonial rule. During that time, many indigenous communities' land across the central uplands of Kenya, the so-called "White Highlands" and adjacent rangelands were usurped and given to European settlers. As much as 20 percent of Kenya's land, most of which were prime agriculture lands, was seized in this process. This colonial land policy was legalised by colonial legislation, supplanting the customary land tenure systems with the implementation of an individual freehold title registration system, thereby taking away the local inhabitants' guaranteed claims over their land. After independence, however, Kenya's first President gave major political posts as well as much of the fertile central highlands to a small group of Kikuyu (an ethnic group to which the President belonged) at the expense of other ethnic groups. The land tensions were further aggravated by his successor who remained in office until 2002 and used public lands as patronage resources, and hence land was traded for political support. To restore stolen land, the Kikuyus were evicted from these areas, which led to post-election violence at the end of 2007. This scenario further exacerbated the food security situation because when farmers got displaced, the lands in question were unused, leading to a deficit in production.

A National Land Policy was passed by the Parliament in December 2009. It aims to put an end to unscrupulous land appropriation by central and provincial government officials and its subsequent arbitrary distribution. Instead an independent National Land Commission has been tasked with registering land transfers and resolving disputes. New regulations also place limits on rights acquired by foreign buyers and even on the size of private holdings.

### 2.3.2 Agricultural Trade, Rural Livelihoods and Food Security in Kenya

***Magnitude, Composition and Direction of Kenya's Trade***

Kenya's exports are dominated by the agricultural sector, with horticulture accounting for about 22 percent of total exports, tea 17.9 percent, and others including petroleum

and manufactured exports about 45 percent. The main destinations for Kenya's exports include the EU, which accounts for about 22 percent. Most other exports are destined for African countries, including countries in the Common Market for Eastern and Southern Africa (COMESA) and the East African Community (EAC). Uganda is the most important African export destination for Kenya accounting for about 60 percent of the exports to COMESA and EAC combined. Most of the exports to Uganda are manufactured consumer goods and petroleum. Kenya's imports by value mainly consist of petroleum products (14 percent of total imports); crude petroleum (9 percent); industrial machinery (11 percent); and motor vehicles (6.4 percent). Main sources of Kenya's imports include Middle and Far East, EU, and South Africa. Kenya also imports food, specifically maize, from EAC and COMESA countries to meet shortages.

Exports destined to Western Europe, particularly the UK and Germany, have increased considerably from US$437mn in 1992 to US$672mn in 1997, and currently stand at US$1.42bn. Similarly, in 1992, Kenyan exports to Africa equaled US$330mn. Five years later, in 1997, this figure jumped to US$971mn and is currently US$1.4bn. This phenomenal increase is largely the result of the EAC treaty signed with Uganda and Tanzania in 1996, and later joined by Burundi and Rwanda. In 1996, the total value of Kenyan imports equaled US$2,928mn, US$727mn of which comprised capital goods and US$1,719mn intermediate goods. Imports from Western Europe, more particularly Germany and the United Kingdom, increased significantly from US$715mn in 1994 to US$1,048mn in 1997. Imports from African countries only increased marginally from US$59mn in 1994 to US$136mn in 1997, and currently stand US$540mn. The balance of trade surplus with Africa signifies Kenya's relative economic strength in the continent. Japan and the US are also important exporters to Kenya, exporting goods and services equaling US$245mn and US$261mn respectively in 1997 (Economic Surveys, Various Issues).

***Trends in Regional Trade: Imports vs. Exports in COMESA and EAC***

Kenya belongs to two main regional trading arrangements (RTAs), i.e. COMESA and EAC. RTAs such as the EAC[5] , may offer the benefits associated with trade while providing a more level playing field since member countries are more likely to be at a similar level of development. Still, more relatively developed countries might benefit disproportionately, which seems to be the case with Kenya in the EAC. Kenya is also a member of the 21-country COMESA[6] which has a population of about 430 million and a GDP per capita of US$1,811. Both COMESA and EAC have recently launched Customs Unions which allow for a common external tariff and common valuation system for all members with duty free and quota free trade among members.

**Table 2.6: Size of COMESA and EAC (2010)**

| Trading Bloc | GDP US$ (mn) | Population '000 | GDP per capita US$ |
|---|---|---|---|
| EAC | 74,512 | 133,504 | 490 |
| COMESA | 345,775 | 430,103 | 1,811 |

*Source: COMESA and EAC websites*

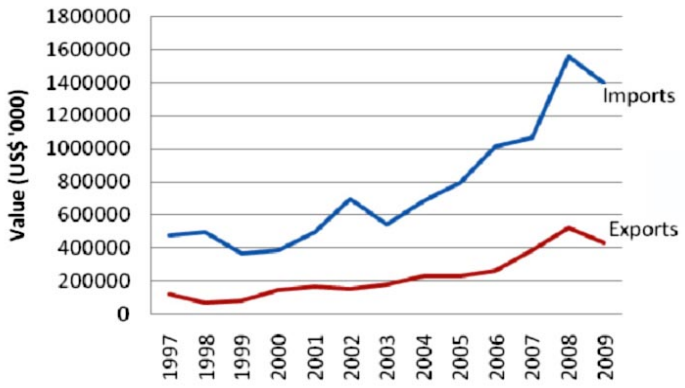
**Trends in Trade: Kenya – COMESA Region**

COMESA stretches from Libya to Zimbabwe. It was formed in December 1994, replacing a Preferential Trade Area (PTA), which had existed since 1981. Nine of the original COMESA member states formed a free trade area in 2000 (Djibouti, Egypt, Kenya, Madagascar, Malawi, Mauritius, Sudan, Zambia and Zimbabwe), with Rwanda and Burundi joining the FTA in 2004, and the Comoros and Libya in 2006. In 2008, COMESA agreed to work towards an expanded free-trade zone including member states of two other African trade blocs, the EAC and the Southern Africa Development Community (SADC). In 2009 a COMESA Customs Union was launched, and this meant that member states that join the Union adopt an agreed Common External Tariff (CET) to be charged to third parties. The agreed CET rates are zero percent on capital goods and raw materials, 10 percent on intermediate goods and 25 percent on finished goods. The CET came into effect in 2010.

Due to Kenya's steadfast implementation of COMESA integration programmes, it has become Kenya's leading export destination, i.e. accounting for 36.6 percent of total Kenyan exports. Kenya's exports to COMESA countries grew by 19.9 percent in year 2007-2008. Furthermore Kenya's exports to the COMESA region principally consist of manufactured products such as fermented tea (35 percent) cement (4.5 percent), cigarettes (4.2 percent) amongst others. The main destinations for export include Uganda (35 percent), Egypt (15percent), Sudan (13 percent) and Democratic Republic of the Congo (10 percent). Imports from COMESA on the other hand consist of raw materials and parts used in assembly and manufacture of finished products – mainly petroleum products (10 percent), aircraft and unladen weight (4 percent), crude palm oil (2.5 percent) amongst others (details are given in tables in Appendix 2.6.3).

Recent statistics indicate that trade in food staples are currently 27 percent of total intra-COMESA trade (2008-2009). Trade in food staples not only brings about agricultural growth, it is also a powerful instrument in stabilising food supply and food prices in the region. For instance in the year 2008 Kenya imported 270,000 tonnes of duty-free maize

**Figure 2.2: Kenya-COMESA Trade 1997-2009 (US$000)**




*Source: GoK Statistical Abstracts (various issues) and COMSTAT*

from COMESA, and in 2009, 100,000 tonnes and 80,000 tonnes from Zambia and Malawi respectively, in addition to imports from Tanzania and Uganda. Imports of wheat from Egypt have also increased in the past year.

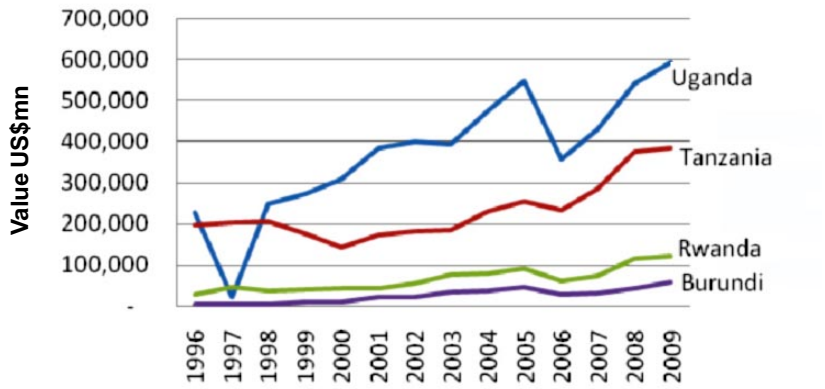
**Trends in Trade: Kenya – EAC**

Originally founded in 1967, the EAC collapsed in 1977, but was revived in 1999. The Treaty for the re-establishment of the EAC was signed on November 30, 1999 and entered into force on July 07, 2000 following its ratification by the original three partner states: Kenya, Uganda, and Tanzania. The republics of Rwanda and Burundi acceded to the EAC Treaty on 18 June 2007 and became full members of the community with effect from July 01, 2007. Currently this is a regional block of 133.5 million people, a land area of 1.85 million square kilometers, and a combined gross domestic product (GDP) of about US$74.5bn (EAC 2010).

The EAC in 2004 signed a treaty to establish a Customs Union which commenced in January 2005. Under the terms of the treaty, Kenya, the region's largest exporter, continued to pay duties on its goods entering the other four countries until 2010, based on a declining scale. The EAC common market protocol identifies food crops like sugar, maize, rice and wheat among the items that need protection from imports because they can be produced locally. For instance, the protocol imposes a common external tariff of 50 and 75 percent on maize and rice respectively.

Trade between the EAC countries is carried out through both formal (regulated and recorded) and informal (unregulated and unrecorded) channels (Regional Agricultural Trade Expansion Support 2003). Informal trade accounts for over 95 percent of trade in livestock and up to 60 percent for staple grains (Ackello-Ogutu and Echessah 1997; Little 2007; International Food Policy Research Institute 2009). Trade within EAC grew by 47 percent in 2008 despite earlier fears that a regional free trade area would negatively affect economies of some partner states. An evaluation of the impact of the Customs

**Figure 2.3: Kenya's Exports to the EAC (1996-2009) US$mn**



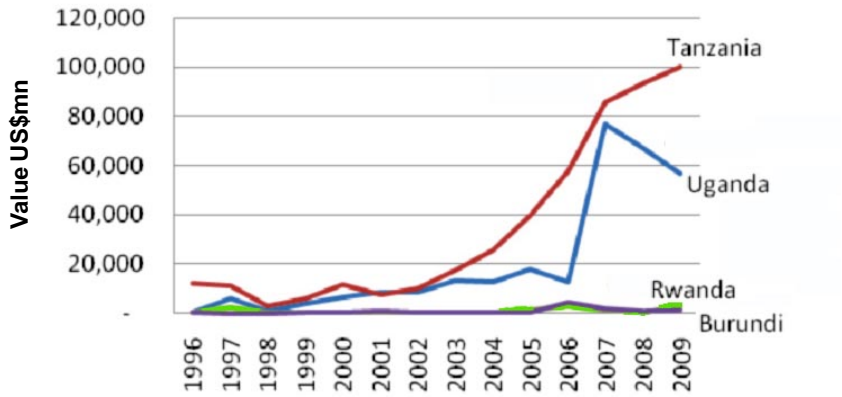

*Source: Statistical Abstracts (various issues)*

Union has revealed that intra-EAC trade moved from US$1.85bn in 2005 to US$2.72bn in 2008.

Trends in trade over the past few years have seen an increase in Kenyan exports destined to the EAC from about US$423mn in 1997 to about US$747mn in 2007 and US$1.018bn in 2008 (see figure 2.3). As is evident, Uganda is the main destination for Kenya's exports to the EAC and exports to Rwanda and Burundi still remain low and are increasing only marginally.

Imports on the other hand have remained lower than exports and hence led to a positive balance of trade between Kenya and the EAC countries. Since 2007, however, there has been a sharp increase in imports especially from Uganda and Tanzania (figure 2.4).

**Figure 2.4: Kenya's Imports from the EAC (1996-2009) US$mn**



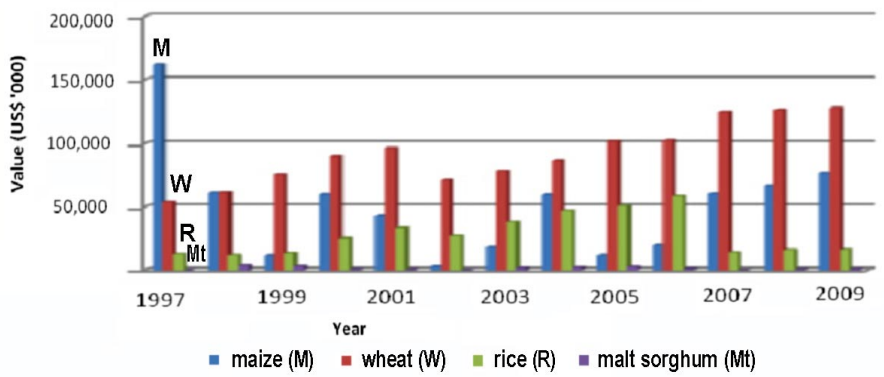

*Source: Statistical Abstracts (various issues)*

***Trends in Food Imports and Exports***

As mentioned earlier, Kenya's main food crops are maize, rice, wheat, beans and potatoes, which are the most significant items in terms of food security. Thus food trade is centered around the grain market consisting of cereals - wheat, rice and most importantly maize - and including other grains such as sorghum, millet and beans.

The country imported rice largely from Pakistan, Thailand, China, India and Vietnam to help meet the local production deficit. Other grains imported include un-milled wheat and maize and wheat flour. These imports are mainly from the US and Australia. However, maize imports are largely from EAC and COMESA regions. Figure 2.5 gives trends in imports of major cereals in the period 1997-2007. The figure shows that imports of wheat have continued to surpass those of other grains over the years. Imports of maize on the other hand have been fluctuating and were highest in the years 1997, 2000-2001 and 2007 which can be attributed to drought and poor weather conditions. Rice imports have been increasing over the years mainly because of lower production.

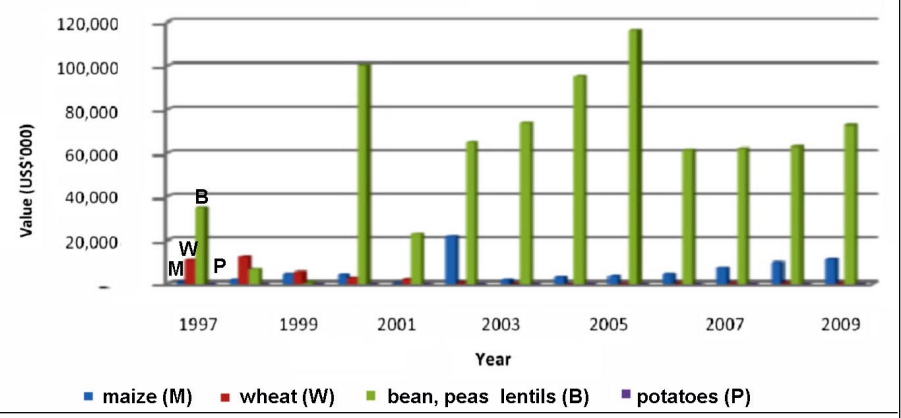
**Figure 2.5: Trends in Kenya's Imports of Major Food Products US$000 (1997-2009)**




*Source: Statistical Abstracts (various issues)*

Kenya's exports of grains on the other hand have been declining. This is mainly attributed to drought and poor weather conditions which have continued to persist over the years. As shown in figure 2.6, Kenya's grain exports have largely consisted of raw maize and wheat products. The period between 1999 and 2001 saw Kenya export less than 50,000 tonnes. In 2002, Kenya's exports of maize grew but declined again due to drought and food shortages. In the year 2007-2008 the main destination for maize and wheat product exports was southern Sudan, with some of the exports being re-exports as confirmed by officials from the Ministry of Agriculture. On the other hand, beans and lentils are major foreign exchange earners especially in the European Union, hence the relatively high value as depicted in figure 2.6.

**Figure 2.6: Trends in Kenya's Exports of Major Food Products US$000 (1997-2009)**




*Source: Statistical Abstracts (various issues)*

### 2.3.3 Informal Trade in the EAC and Implications for Food Security

Informal trade takes place in different forms or is known by different names (e.g., illegal unofficial, underground, parallel market activities, black market activities, over and under-invoicing, smuggling or hoarding). It is characterised by not being entered in national accounts and has recently become an important aspect of cross-border trade especially among small traders (Akello-Ogutu & Echessah, 1997). Many studies have explored the reasons why informal trade is carried out (Akello-Ogutu1997; Little 2007). These studies have pointed out that, in general, the restrictive policies such as import tariffs, quotas, exchange controls, state trading monopolies, and export restrictions followed in many countries create incentives for illegal trade. High tariffs and export taxes encourage mis-invoicing of imports and pre-tax price, primarily as a means to evade taxes. If the risks of evading taxes are not prohibitive supply will meet demand at a price that is less than the tax paid price.

Much of cross border trade takes place at the Kenya-Uganda and Kenya-Tanzania borders through various border points as illustrated in figure 2.7. The official border points between Kenya and Uganda are Malaba and Busia whereas those along Kenya-Tanzania borders are Lunga-lunga, Vanga, Taveta, Namanga and Sirare. However fieldwork carried out in October and November 2009 identified various undesignated border crossing points, which were very busy and largely used for illicit trade including:

1. Kenya-Tanzania border at Kirongwe near Sirare, at Miuru bay along Lake Victoria and at Chala near Taveta
2. Kenya-Uganda borders at Busia- Malaba border, at Marenga Beach along Lake Victoria and at Mau-Mau beach along Lake Victoria (near Port Victoria)

**Figure 2.7: EAC Cross Border Trade – Border Points Illustrated**

It was observed during the field work that much of the illegal trade takes place along porous border points and a huge percentage of that is taking place through Lake Victoria on small boats and along the beaches.

Informal cross border trade involves both small amounts of food products moved over short distances, e.g., Ugandan traders with two sacks of beans on a bicycle selling in Kenya (see Akello-Ogutu 1997) – and large volumes over vast distances (see WFP/ FEWS-Net 2006) – for instance diverting rice from Zambia meant for DRC into Tanzania eventually finding its way into Kenya being transported by large trucks.

The survey conducted under this study attempted to determine the composition of Kenya's informal trade. Findings indicate that the quantities involved in informal trade are usually small but significant, and in the long run an exchange of substantial quantities of agricultural and industrial goods takes place between Kenya, Uganda and Tanzania. Various categories of transporters and couriers serve a small group of entrepreneurs, while public officials often combine their official duties with active participation in the informal trade. Rent-seeking practices among public officials at the major border crossing points and cumbersome import/export procedures encourage both large and small traders to pass their goods through undesignated routes. Most of the goods are also transported using boats and sold along the beaches. This is also partly due to lack of patrolling of the Lake (figures 2.8 and 2.9).

**Figure 2.8: Boat Transportation of Produce on Lake Victoria**

**Figure 2.9: Market Day at Marenga Beach on Lake Victoria**

Along the Kenya-Uganda border, most of the produce coming from Uganda included maize, beans, bananas, fresh fruits and vegetables, such as tomatoes, onions avocados and pineapples. In addition to food stuffs, clothing and textiles were also observed to be among the top 10 products coming from Uganda as also batteries (counterfeits) and cheap cigarettes. On the other hand, goods going from Kenya to Uganda largely included manufactured and industrial goods and household products including sugar, cooking fat, soaps, tea and other beverages which are also transported via boats, bicycles, on foot, in trucks and public transport. The main participants in this kind of trade included small traders, farmers and fishermen as well as large traders and truckers carrying goods surreptitiously. Along the Kenya-Tanzania border, the main products coming from Tanzania included maize, rice, millet, sorghum, onions, bananas, mangoes, poultry and in some instances livestock (live animals) especially along the Taveta border. A large amount of hides and skins as well as clothing and textiles were also observed to be among some of the illegally traded products from Tanzania. Sugar was the main product going from Kenya into Tanzania, besides mattresses, salt, match boxes and other household items.

Some of the main reasons for illicit trade cited by many respondents included delays at the border which in some cases (for example, along Busia-Malaba border) was up to 7 hours. Besides, administrative costs are high for some items of trade given the numerous requirements such as trade licenses, business and road license, phyto-sanitary certificate required for fresh produce and foodstuffs, and a livestock clearance certificate in cases of livestock trade. In addition, the level of corruption in terms of payment of bribes at the various border points within the EAC was quite high. Over half the traders and transporters gave bribes in order to overcome various trade barriers. This coupled with numerous road blocks and police checks made the situation worse.

**Magnitude of Informal Trade**

It is difficult to quantify the magnitude of informal trade mainly due to the fact that this trade is informal and therefore unrecorded. However a survey carried out between July-October 1997 showed that there was at least 84,000 tonnes of maize valued at KSh12.4mn which was imported from Uganda mainly to meet the needs of the food deficit regions of Western Kenya. This represented about 5 percent of the total official imports of maize in that year but was far more than the official imports of maize from Uganda. The unofficial maize imports from Uganda over this period amounted to less than 3 percent of Kenya's total production of the crop, but they were important in meeting the food security needs of the surrounding areas (Akello-Ogutu & Echessah, 1997).

Recent surveys of the International Food Policy Research Institute (IFPRI), 2009 also indicate that cross border trade between Kenya and Uganda has resulted in the imports of other grains such as, sorghum, sim sim, millet, groundnuts and rice among others which are useful for attaining food security. These amounted to about 12,700 metric tonnes valued at close to US$5mn. However, the level of cross border trade in these grains was less than that of maize as they have better on farm storage capacity, and therefore experience a lower variability in supply. Considering the fact that illicit trade takes place in small but consistently significant figures, an attempt to quantify these would require months of close monitoring of porous borders.

The implications of informal trade on food security and livelihoods is both negative and positive. Informal trade contributes positively in improving food security because of cheaper food products that come into the deficit areas. On the other hand, as is corroborated by interviews from traders and farmers, cheaper imports from neighbouring countries drove down food prices and hence acted as a disincentive for farming. Other disadvantages of informal trade include lost revenue from taxes and licencing and risk of unsafe or contaminated foods as the imports are not passing through the border posts and disease control points.

### 2.3.4 Exploring the Implications of Regional Trade on Livelihoods and Food Security

As already discussed, trade can have both positive and negative effects on livelihoods and food security. In the Kenyan scenario, many aspects of trade are increasingly shaping the economy as well as livelihoods and food security; more so because close to 70 percent of the Kenyan population are market-dependent and net buyers of food, largely constituting urban, pastoral and marginal agricultural households. Trade impacts food security, either positively or negatively, in three ways by influencing: livelihoods and incomes; food production and availability; and prices.

***Implications of Regional Trade on Employment, Livelihoods and Incomes in Kenya***

Recent droughts and poor weather conditions have also led to low productivity which has resulted in low incomes for farmers. Focus group discussions with farmers in various regions of the country cited failed rains and drought as the major causes of low productivity, and hence farmers are forced to look for other means to feed their families which has resulted in many rural folk engaging in petty trade and other off-farm activities for survival. In addition to this, remittances have also played a major role in providing alternative sources of incomes, and some farmers have also resorted to selling portions of their land and investing in small businesses. In the regions around lake Victoria, fishing has increasingly become an alternative source of income for both men and women, as women are increasingly becoming involved in fishing activities, including fish trade and fish mongering. Around the Central highlands, farmers are increasingly taking part in farming of horticulture and other export crops at the expense of growing of food crops.

**Table 2.7: Wage Employment by Sector by Region (numbers) 2007**

| Region | Agriculture | Trade | Services* |
|---|---|---|---|
| Nairobi | 10229 | 67038 | 45709 |
| Central | 7059 | 7495 | 4176 |
| Coast | 1150 | 3120 | 15817 |
| Eastern | 115 | 1045 | 737 |
| Nyanza | 539 | 7535 | 4038 |
| Western | 643 | 3281 | 385 |
| Rift Valley | 11580 | 20841 | 9054 |
| North Eastern - No data available | | | |
| *Services* Finance, insurance, real estate and business services* | | | |

Statistics show that more and more people in the rural areas are involved in services (mostly petty trade) and the number of people directly involved in agriculture is gradually reducing. From the table 2.8, it is apparent that in areas of high productivity like Central and Rift Valley regions, there are high numbers of people employed in the agricultural sector whereas areas of low productivity like Eastern and Nyanza exhibit lower numbers.

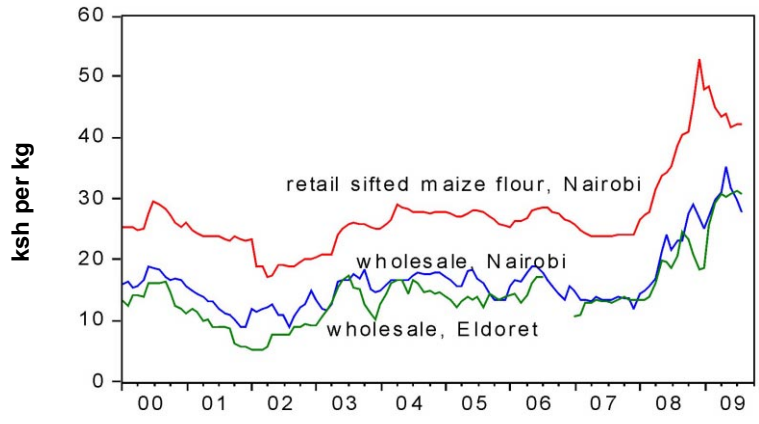
***Implications on Food Availability and Prices***

Kenya is a net importer of most food commodities. Further, food availability, security and markets are largely dependent on regional disparities in production (already captured in tables 2.3 and 2.4) determined by substantial variability in agro-climatic, socio-economic, infrastructural, geographic and cultural characteristics. Maize specifically moves from surplus to deficit markets. Therefore deficit markets (largely arid areas and urban centers) source their produce from surplus markets as well as through cross-border trade.

The past few years have seen an increase in food prices, a phenomenon which was not only global but national and regional as well. Continued high prices in Kenya could be attributed to a combination of factors: a) sustained high level of effective demand in the country, especially in main urban centers; b) accelerated appreciation of the Kenyan currency in recent years; c) the impact of increased internal production costs, given the increasing cost of inputs and other production outlays; d) the overall rise in inflation (rising to 31.5 percent in May and 29.4 percent in June 2008); and e) overwhelming dependence on maize as the key staple for the majority of the population. As the figure 2.10 shows, retail prices have been much higher in Nairobi which is a disadvantage to the urban poor.

There is evidently a sharp increase in both wholesale and retail prices from the year 2008 to 2009 which is partly attributed to: a) drought and poor weather conditions; b) rising food prices which is a global phenomenon; and c) the post election violence which

**Figure 2.10: Trends Whole Sale and Retail Prices of Sifted Maize (2000-2009)**




*Source: Kenya Food Security Steering Group (KFSSG)*

occurred in January 2008 and was intense in high productivity areas such as the Rift-Valley province and led to disruption of production of maize in these areas. It is also observed from import data that these are the years in which maize imports were highest and also food aid received was highest. It is, therefore, evident that the current rise in prices is one of several compounding factors that have caused current deterioration in food security, especially among the traditionally food insecure livelihood zones, i.e., the pastoral, agro-pastoral, marginal agricultural and the urban dwellers. Production decisions and shocks that occur in the largely food secure high potential livelihood zones have also accentuated the vulnerability of food insecure households.

## 2.4 Policy, Institutional Frameworks and the Interplay of Stakeholders

### 2.4.1 Policy Issues and Implications on Food Security

***Trade Policy Issues***

Kenya's trade policy development has evolved through the following distinct policy orientations: import substitution policies (1960s-1980s), which were aimed at safeguarding local agricultural production and protecting infant industries; trade liberalisation through Structural Adjustment Programmes (SAPs) in 1980s; and export oriented policies in 1990s. The current international trade policy regime and institutional arrangements in Kenya include international trade agreements, import policies and procedures, export policies and procedures, and other measures affecting production. This trade policy regime has transformed the country into a more open, competitive and export-led economy. In the past 15 years, Kenya has pursued an export led strategy in which the government implemented export promotion incentives such as Manufacturing Under Bond (MUB) and Export Processing Zones (EPZs) underscored in the Sessional Paper No. 1 of 1986 entitled Economic Management for Renewed Growth. More recently in its National Export Strategy of 2003 Kenya has outlined various sectors to support for exports in order to increase incomes. These include horticulture, cotton textiles, fisheries, tea, coffee and tourism.

Kenya's commitments under the EAC, COMESA and WTO and more recently under the negotiations for Economic Partnership Agreement (EPA) with the EU influence Kenya's trade policies. They create a strong push to increase openness and reduce tariffs. While COMESA and EAC aim to have duty free and quota free trade among their members, both have also established a common external tariff for goods coming into COMESA and EAC. Commitments under the WTO mean that tariffs have to be gradually removed to eventually lead to free trade, which is not often the case as developing countries exports still encounter high tariffs in developed country markets, especially for manufactured goods. EPA on the other hand is controversial because it encompasses reciprocal arrangements between the EU and EAC countries; which is often seen by many as detrimental, because EAC countries are not at the same level of development as their EU counterparts and may invariably lead to flooding of their markets with cheaper imports leading to the collapse of many sectors.

Kenya's trade policy was originally based on the need to safeguard local agriculture and domestic manufacturing sector against adverse competition This trade regime tended to unfairly tax agricultural exports, thus denying the country of vital foreign exchange with

which it could access food imports (Nyangito, 1999). Even after the trade regime was liberalised, cheap food imports have suppressed domestic food prices and therefore food production (Nyangito, 1999). Competing uses for land have tended to reduce the land area dedicated to food farming. The government has under-invested in infrastructure that could be vital in encouraging cross border trade in food commodities, which can reduce food insecurity (Ackello-Ogutu et al, 1997). Until recently, the high tariff regime on intra-regional trade reduced the potential of regional trade to help in alleviating food insecurity through food imports from the region (Weeks et al. 1998). However with the implementation of both COMESA and EAC agreements, tariffs that originally affected regional trade have been removed, and hence, this will lead to stimulation of imports from the region - a phenomenon which has the advantage of not only providing cheap food and hence ensure food security, but also has the disadvantage of discouraging local production of foodstuffs.

Despite the removal of tariffs and the setting up of duty free and quota free trade, both under COMESA and EAC, there still exist numerous non tariff barriers (NTBs) that hinder trade in the region. NTBs include cumbersome administrative procedures and licensing requirements, cumbersome customs formalities that lead to delays, unnecessary police road blocks that harass traders, and lack of information to exporters and importers. These NTBs raise the costs of doing business which is consequently transferred to the consumer making the prices of goods higher and less affordable, especially for the poor.

***Agricultural Policies and Recent Developments in the Sector***

Since Independence, the strategy for the development of agriculture as outlined in the Sessional Paper No. 10 of 1965 was to revolutionise agriculture through provision of extension services, training, and introduction of modern farming techniques. This philosophy therefore influenced subsequent agricultural policies as reflected in various policy documents. A number of special development programmes were initiated largely with donor support to enhance the development of agriculture and the rural areas in general. A careful review of the initiatives however shows that they suffered from a number of weaknesses. These include insufficient attention to involve the stakeholders and lack of coordination among different actors. Another factor is that most of these initiatives were donor-driven and were, therefore, not fully owned into the long term development of country's agriculture (Alila and Atieno, 2006).

**1. The Economic Recovery Strategy for Wealth and Employment Creation and the Strategy for Revitalising Agriculture 2003**

Recent developments since NARC (National Alliance of Rainbow Coalition) government came to power in 2003 saw the emergence of the Economic Recovery Strategy for Wealth and Employment Creation (ERSWEC). This led to the launching of the Strategy for Revitalisation of Agriculture (SRA) in response and as a contribution to the ERSWEC. The SRA addressed policy issues in the agricultural sector and was developed through widespread stakeholder consultations with parliamentarians, donors, trade unions, professionals, financial institutions, industrialists, ASAL representatives amongst others.

This strategy emphasised a sector-based approach implemented by three ministries[7], providing an umbrella legislation to replace the existing pieces of laws and legislations,

rationalising roles and functions of agricultural institutions, strengthening extension services, increasing small holder access to credit, and revamping the cooperative movement.

Recent times have also witnessed an emergence of various parliamentary committees, for instance, caucuses have been created comprising Members of Parliaments (MPs) from areas growing three commodities, namely, the Coffee and Tea Parliamentary Group (COTEPA) and the Sugar Parliamentary Group (SUPA). They influence policy on these commodities, especially when put under pressure by their constituents to change or improve policy guiding the production of the affected commodity.

Along the same lines have emerged various civil society interest groups which include many farmers. These include: SUCAM (Sugar Campaign for Change in Western Kenya), NGOMA ("Ng'ombe na Mahindi") to cover maize and milk in the North Rift, SAWA ("Sauti ya Wafugaji") for North Eastern pastoralists, and MAMBO ("Matunda na Mboga") for horticulture in the Eastern province. Currently efforts are underway to unite the sub-sectors into a national umbrella body with representation from all the groups to enable them to deal with issues that are cross-cutting with a common voice in the policy-making process.

Several other recent developments are also worth noting. For example, the Fertiliser Subsidy Programme that was rolled out in the past two years, has seen farmers benefit from reduced prices of fertiliser. This was done by the Ministry of Agriculture in order to try and encourage production. Another recent initiative is the "Njaa Marufuku" programme which targets poor people dependent on food aid and gives grants to farmer groups and schools to produce their own food. The government, in collaboration with FAO, has disbursed KSh327.6mn to assist 1,866 groups, 40 schools and 35 organisations to undertake food security projects.

Further, there is National Accelerated Agricultural Input Access Project (NAAIAP) with two components. The first component called Kilimo Plus targets the resource poor farmers who are provided with a package of seeds, fertiliser and training to cultivate at least one acre of land to meet household needs and surplus for sale. These inputs are provided free of charge through voucher system for at least 2 years. The second component called Kilimo Biashara targets the more endowed farmers providing them with low cost credit to purchase inputs. To date the government has disbursed KSh605mn which has benefited 121,000 farmers under Kilimo Plus. In the next financial year, KSh1bn is expected to be spent to reach another 100,000 farmers. The government has also made arrangements with development partners and the Equity Bank to provide KSh4bn for Kilimo Biashara. The Equity Bank is in the process of developing an insurance scheme for crop and livestock farming.

**2. The Agricultural Sector Development Strategy (ASDS) 2010-2020**

The Government of Kenya in recognition of the challenges that are still being faced in meeting food security needs of the Kenyan population is intent on transforming agriculture from subsistence to commercial farming and agribusiness. The ASDS has recently been formulated to position agriculture as the key driver for delivering 10

percent annual economic growth rate envisaged in the vision 2030. The overall growth and development of the sector is anchored in two strategic thrusts: increasing productivity, commercialisation and competitiveness of the agricultural commodities and enterprises; and developing and managing key factors of production.

The strategy also realises the importance of linking trade with agricultural production and food security, and hence outlines key measures the government will take in order to improve trade in agricultural sector, such as; 1) simplifying trading procedures, especially protocols related to cross border trade; 2) improving farmer capacity to add value to produce, thereby making them more competitive and increasing farmer's incomes; 3) improvement of infrastructure such as roads and railways to reduce costs of transportation and to enable produce to move smoothly from areas of surplus to those of deficit; 4) increasing private sector participation in agricultural production, thereby making agriculture a profit-driven venture; and 5) facilitating and organising cooperatives that would benefit smallholders. These measures would be undertaken in tandem with enabling factors that are external to the sector but nevertheless very important, such as macroeconomic stability, taxation, governance, infrastructure, education, training and technology, and human and social development.

Institutional frameworks are clearly provided for in this strategy through the Agricultural Sector Coordination Unit (ASCU) established in 2005 to spearhead the implementation of the SRA. ASCU is to link sector players and provide an enabling environment for sector-wide consultations along various levels of implementation as well as monitoring and evaluation of the ASDS. Through the ASCU, the private sector, NGOs, cooperatives, farmer organisations research institutions, development partners and other stakeholders would participate in the Thematic Working Groups (TWGs)[8] . The strategy also pursues agricultural development in line with the Comprehensive African Agricultural Development Programme (CAADP)[9] launched in Kenya in 2005.

***Food Security Policy***

The government has had a specific food policy since 1981. Prior to this, the government pursued the goal of food self sufficiency which would be met through the pursuance of broader policies on agriculture, as it was assumed that agricultural growth would directly translate into food self sufficiency at the national and household levels. Kenya's food policy since independence has, therefore, been centred on improving domestic supply of basic foodstuffs, mainly grain crops and more specifically, maize.

The goal of food self-sufficiency was largely attained in the early years of independence until the late seventies after which massive food shortages set in. Since then, the goal of food self-sufficiency and food security has not been attained despite significant policy pronouncements to reform the sector. Food insecurity in the country is caused by many factors, which are mentioned in the literature. Among them are policy failures in areas of agricultural pricing, marketing of inputs and output, distribution and extension that have introduced inefficiencies and lowered agricultural production, and the inability to cope with drought conditions (Nyangito 1999). Furthermore, a poor implementation record by the government has lowered farmers' incentives to produce.

National policy documents such as Sessional Paper number 1 of 1986 on Economic Management for Renewed Growth and Sessional Paper number 2 of 1994 on Food Policy emphasised self-sufficiency in maize, beans, rice, vegetables, milk, beef and meat products with little emphasis on traditional crops such as millets and cassava. Market liberalisation policies of early 1990s led to increased cheap food imports in the country affecting farmers' market and, therefore, reducing their level of income. Lack of support policy to private traders coupled with trade policies that are not coherent with food security policies[10] has limited their engagement in trade. Consequently these policies coupled with poor infrastructure, poor planning and distribution have led to a failure to distribute food from surplus to deficit areas. The general decline in agricultural production has consequently led to reduced food availability and decreased incomes which make the country more vulnerable to food insecurity.

However recent developments in the sector have seen the development of the National Food Security and Nutrition Policy (NFNP) in 2006-2007 which is still in a draft form. This document highlights the nutritional effects on a population primarily fed on maize and advocates diversification of eating habits. It thus emphasises production of rice, wheat and potatoes as key crops aimed at tackling food insecurity in Kenya, as well as livestock and fish production. The paper identifies irrigation as a key aspect in improving productivity, increasing production and diversification.

Further, the proposed National Food Security and Nutrition Policy identifies gaps in the distribution of surplus production to deficit areas and therefore calls for strengthening of the Strategic Grain Reserve (which is to be renamed Strategic Food Reserve) and investment in infrastructure.

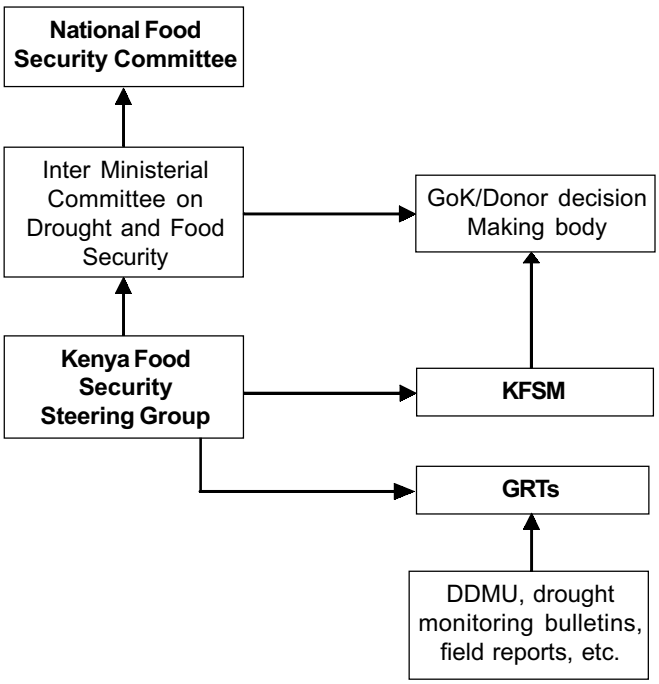
### 2.4.2 Institutional Frameworks

The existing institutional frameworks for trade and food security are not distinctly linked as will be discussed below. While the Ministry of Trade handles all issues pertaining to trade, the Ministry of EAC also handles issues pertaining to trade and integration within the five East African countries. Other issues pertaining to food security are handled by different institutions under an integrated system as will be discussed below.

***The Integrated Food Security Phase Classification***

Significant changes in the institutional and operational framework of food security structures within Kenya began in early 1999 with an Integrated Food Security Phase Classification (IPC). The IPC is an innovative tool for improving food security analysis and decision-making. It has been adopted by the government and is implemented through the following institutions: the Kenya Food Security Meeting (KFSM) - the main food security coordination body; the Kenya Food Security Steering Group (KFSSG); and the Data and Information Sub-committee of the KFSSG (DISK), which focusses on improving food security and disaster management information. Equally important to the system was the establishment in June 1999 of the Inter Ministerial Committee on Drought and Food Security (IMCDFS)

**Figure 2.11: Organogram Showing Current National Level Food Security and Drought Management Institutional Linkages**




Under these structures, the government and other institutions e.g. Kenya Red Cross Society, Drought Monitoring Centre, The Kenya Meteorological Department, African Medical and Research Foundation (AMREF), and UN Agencies among others are involved both in decision-making and response to disasters. Line ministries are directly involved in disaster risk reduction at all levels. The key among these are Ministries of Water, Agriculture, Health, and the Office of the President/Special Programmes and Ministry of State for the Development of Arid Lands under the Arid Lands Resource Management Project.

**The Kenya Food Security Meeting (KSFM)**

KFSM is an advisory group at the national level with the objective of responding to drought and food insecurity. The membership includes line ministries, donors, UN agencies and non-governmental organisations, Department of Drought & Disaster Emergency Response Coordination (GOK) and Meteorological Department.

KFSM functions are to:

- build trust, shared purpose and understanding and enhance institutional memory among key national actors in drought management and food security.;
- collect, collate and synthesise Early Warning System (EWS) information and translate it into response outputs;
- advise the Kenya government during declaration of disaster emergencies;

- invoke emergency appeals for quantified relief aid assistance;
- promote inter-agency collaboration, coordination, and cooperation; and
- harmonise GoK and donor efforts and increase effectiveness through improved targeting of emergency assistance.

The KFSM meets monthly. However, it meets more often during droughts and other emergencies. The KFSM is currently co-chaired by the Department of Drought & Disaster Emergency Response Coordination (GoK) and the UN-World Food Programme.

**The Kenya Food Security Steering Group (KFSSG)**

The Kenya Food Security Steering Group (KFSSG) is a sub-committee of the Kenya Food Security Meeting (KFSM) and is made up of representatives from NGOs, UN agencies, donors and Kenyan government. Membership of the KFSSG is restricted to institutions and organisations which have demonstrated clear commitment to collaborative approach, and which possess technical, policy or administrative capability in the area of food security and drought management. Current membership includes: Department of Drought & Disaster Emergency Response Coordination (GOK); Ministries of Livestock Development, Agriculture, Water Resources, Health and Works; and WFP, United Nations Children Fund (UNICEF), DFID, UK, European Commission (EC), Oxfam-GB, Medicin Sans Frontiers (MSF)-Spain, USAID/FEWS.

KFSSG acts as a technical think-tank and advisory body to all stakeholders on issues of drought management and food security. It plays a central role in both guiding the KFSM and informing on decisions taken, and organises multi-sectoral rapid assessments during emergencies. The KFSSG has gradually taken on increased responsibility for a number of tasks related to food security, drought stress and potential emergencies, including the development of a methodology for geographical targeting of assistance in Kenya. The sub-committee provides effective guidelines on methods and approaches for the coordination of both information and appropriate response measures for droughts and other potential emergencies.

***The National Cereals and Produce Board (NCPB)***

In 1979, the government established the National Cereals and Produce Board (NCPB) by merging the Maize Produce Board with the Wheat Board of Kenya in order to streamline the management, handling and marketing of all grains. The NCPB Act that made NCPB a corporate body, was enacted in 1985. Under the Act, the Board was given monopoly powers to purchase, store, market and generally manage cereal grains and other produce in Kenya. As a legal monopoly, NCPB was empowered to regulate and control the collection, movement, storage, sale, purchase, transportation, marketing, processing, distribution, import, export, and supply of maize, wheat and other scheduled agricultural produce under a controlled price system. During this period of monopoly, the NCPB worked very closely with other established agricultural institutions to ensure that the needs of the farmers were met. These institutions included the Agricultural Finance Corporation (AFC), which was the main provider of credit, and the Kenya Farmers Association (KFA) which was the main provider of farm inputs (NCPB, 2009).

However, due to increased food production, the cost of managing such a subsidised cereal marketing system turned out to be a heavy burden on the Exchequer. This led to the need to undertake revolutionary reforms aimed at restructuring the grains sub-sector through deliberate policy reforms on importation and domestic marketing of grains, as well as improving the operational performance and efficiency at NCPB. Therefore, in 1988, the government commenced the Grains Sector Reform Programme in which the monopoly powers of NCPB were reduced and the grains sector was fully liberalised in 1993. This liberalisation was also part of the Structural Adjustment Programmes (NCPB 2009).

The last of these reform processes was undertaken during the implementation of Kenya government/World Bank funded NCPB Commercialisation Project that commenced in 1996 and ended in April 1998, and included enhancement of the private sector participation in grain trade while de-linking NCPB from dependence on the Exchequer as from 1st July 1997 (NCPB 2009).

Interviews with key informants also corroborate that grain marketing is currently fully liberalised in Kenya allowing producers to dispose their produce to willing buyers at market prices for different regions depending on supply and demand. Commercialisation has given the NCPB a new charter and vision that focusses on a commercial business role. In addition, the NCPB is occasionally contracted by the government to carry out certain social functions. However, there are clear demarcations between the commercial and social roles, with the former being transacted at commercial rates. Therefore, throughout its transformation process, NCPB has continued to have some social functions more specifically with regard to food security. These include: facilitating famine relief food distribution; school feeding programmes; and import and export of staple cereals to meet local demand or widen market outlets during times of shortage or surplus production respectively.

### 2.4.3 The Stakeholders and their Roles

In Kenya, many stakeholders are involved in different capacities in production, research and extension, information provision, milling and processing, transporting and trading, as well as in policy and regulation making and implementation. Major stakeholders include government agencies such as the Ministries of Agriculture and Trade and the National Cereals and Produce Board; smallholders who are the majority food producers; traders and middlemen; transporters; NCPB and the policy makers and regulators. Donors and Overseas Development Agencies (ODAs) have also continued to play a major role in food aid or programmes aimed at providing some intermediate solutions to food insecurity.

***Input suppliers and Smallholders***

These are stakeholders involved at the production level. The production of food for consumption begins with input suppliers of mainly seeds and fertilisers. Input suppliers consist of seed companies who sell their products through retail traders. Seeds are easily available in retail shops all over the country. However other inputs such as fertilisers are available through NCPB at subsidised rates since 2007. The agricultural sector in Kenya comprises of smallholders who produce more that 75 percent of food for

exports and local consumption. In times of good rainfall and bumper harvest they sell their surplus to middlemen and other small traders and transporters. Small holders face problems related to production as well as marketing and information.

According to information from focus group discussions (FGDs) with farmers, the costs of inputs - mainly seeds and fertilisers – are prohibitive for most poor farmers hence resulting in low productivity. Further, this is exacerbated by the drought and weather conditions and over reliance on rainfall. Another major problem for smallholder farmers is the lack of access to timely and accurate market information, often resulting in exploitation by middlemen.

***Millers, Traders and Transporters***

Over the years private sector participation in the marketing of maize and other grains has increased substantially, although its impact has been limited by policy unpredictability. For instance, the government still influences maize prices and imports, albeit sporadically. The private sector is thus left with great uncertainty, particularly about the pattern of seasonal and spatial prices. As a result, storage activities have been limited to largely those on farm by small and medium producers in anticipation of better prices. On the other hand, the private sector participation in the movement of maize is tremendous. Currently, private commodity dealers and millers serve most parts of Kenya, unless the area lacks purchasing power, such as in the current situation in Turkana and other areas in the ASALs.

Interviews from various private millers, traders and transporters indicate various constraints that are related to poor infrastructure which increase the costs of production thus leading to highly priced flour. Further, uncertainty in prices as a result of government control of prices is another problem faced by traders. Cheap imports were also cited as a problem facing millers and traders mainly because costs of production are slightly higher in Kenya than in Uganda and Tanzania, and thus, maize meal produced in Kenya is slightly more expensive than that produced in the neighbouring countries.

The East African Grain Council (EAGC) was formed in the year 2006. EAGC is a membership-based organisation registered in Kenya as a Company Limited by Guarantee and without share capital. It was registered at the request, and through the efforts of, key stakeholders in all three sections of the grain value chain; producers, traders, and processors. Service providers are associate members. It operates as a non-profit, non-political, non-denominational organisation, which prepares, disseminates, and promotes the exchange of information on matters affecting the regional grain industry.

***Policy Makers and Government Agencies***

As already discussed in the previous section, there is a lack of coherence in food security policy and trade policy, a factor which negatively affects not only the country's food security situation but also the state of rural livelihoods and poverty in general. At the national level, the government Ministries involved such as Ministry of Trade, Ministry of Agriculture and NCPB are not well coordinated or linked in formulation of polices or legal frameworks directly related to achieving better food security, improved trade performance, and better rural livelihoods.

Interviews with various stakeholders indicate that the government's response to food security issues in the country has not embraced long term initiatives at finding permanent solutions to the problem but has always been based on short term emergency requirements and donor funded projects, including distribution of food aid to drought prone areas. Many stakeholders feel that the government has not used trade and/or trade policies to enhance trade in food both at national and regional levels, a factor which may greatly improve rural livelihoods and food. Regional trade is viewed by many as a key to improving rural livelihoods and food security because Kenya imports (albeit informally) food from the neighbouring countries and trade in food stuffs also provides livelihoods for many rural folk.

***Donors and Overseas Development Agencies (ODAs)***

The role of donors and ODAs has evolved over the years from purely food aid to project and programme funding. Most of the projects and programmes are often implemented in liaison with the government, and often involve short and medium term projects targeted at various groups, e.g. farmers, and are aimed at improving productivity in target areas such as the arid and semi-arid lands. Donor funding has also been heavily concentrated on the Famine Early Warning Systems (FEWS) and other forms of drought prediction as well as emergency response in times of severe food scarcity.

As already discussed in the previous sections on institutions, donors such as USAID, FAO, WFP UNICEF, DFID, and other NGOs such as OXFAM and MSF-Spain have also participated in collaborative approaches together with government departments in various initiatives aimed at food security and drought management, such as FAO's FEWS ( Famine Early Warning Systems) and WFP's VAM (Vulnerability Assessment and Mapping). In such collaborative work, the donors and NGOs offer financial and technical capacity for various government departments dealing with issues related to drought management and food security. They also help in disseminating information to government departments and other agencies involved in drought response and distribution of food aid.

## 2.5 Conclusions and Policy Recommendations

### 2.5.1 Conclusions

Food prices in Kenya are among the highest in sub-Saharan Africa, and the poorest quarter of the population spends close to 50 percent of its income on food alone. Close to 70 percent of Kenyans reside in the rural areas where agriculture is the main source of livelihoods and incomes. However, inefficient production and marketing in various agricultural subsectors contribute to economic stagnation, food insecurity and consequently poverty in Kenya. Increased productivity and efficient markets, in conjunction with rational government policies, can dramatically alter the economic contribution of agricultural sector to food security and livelihoods. However, it is clear from the study that food security and livelihoods are interwoven with trade at global, regional and national levels.

Globally there are factors that affect and continue to affect trade, and hence affect livelihoods and food security in Kenya. Developed country policies such as subsidies,

tariffs and other NTBs which lead to distortions adversely impact free and fair trade and hence livelihoods and food security in developing countries like Kenya. Whereas some attempts have been made to address these issues through agricultural negotiations in the WTO Doha Round, e.g. through proposals regarding the Special Safeguard Mechanisms and Special Products, not much progress has been made in terms of finalising the negotiations with concrete commitments.

Food aid is another global phenomenon that affects food security; while it provides immediate relief for the hungry, it is not a long or even medium term solution for food security or livelihoods. Food aid is also seen to create imbalances in markets by lowering prices of agricultural produce and therefore acting as a disincentive to farmers which consequently affects livelihoods. These together with other global phenomena such as rising oil prices, rising use of bio-fuels and climate change have caused imbalances which have since affected agricultural production, livelihoods and food security.

It is, therefore, important to have a global system that addresses these concerns. First, an open, equitable global food system has the best chance of meeting all of the food challenges the world faces. Neither self-sufficiency nor food assistance is up to the task. They are too costly in pursuit of food security and largely antithetical to the changes needed to ensure greater food safety and security. Trade reforms, buttressed with additional institutional and resource commitments, are less costly, more reliable and congnisant of the needs of the poor. Trade policies that cause distortions must be removed and a more equitable trading system adopted.

At the regional level, trade is playing an extremely important role not only in providing food security but also in providing opportunities for livelihoods diversity and enhancement for rural populations as they participate in trade through providing markets of produce from areas of plenty to areas of scarcity. As is evident from this study, regional trade pacts between Kenya and her partners in the region are becoming stronger. Establishment of Customs Union in both EAC and COMESA and the development of a Common External Tariff have made several aspects of trade much easier. Statistics also show that trade between Kenya and the rest of Africa has increased by more than 26 percent in the past ten years. While Kenya has a comparative advantage in exporting manufactured goods, it depends heavily on its neighbouring countries for food imports. Further, unofficial trade plays a major role in providing both food security as well as livelihoods to those participating in these ventures. However, some NTBs still exist between the countries. These NTBs have to be removed and other processes, e.g. licensing should be harmonised. The Agricultural Sector Development Strategy recognises the need to strengthen regional trade so as to explore markets for farmers' produce as well as providing food from surplus to deficit areas.

It also emerges from the study that there are many issues at the national level that have led directly or indirectly to the problem of food security. First, it is important to note that there are regional disparities in food security as Kenya has both areas of plenty as well as areas of deficit. Poor planning, poor infrastructure and lack of incentives to farmers have created a lack of distribution of food especially from the Central Highlands and Rift Valley to the ASALs. Secondly, food aid which is regular in the ASALs has also tended

to hinder production and has lowered prices acting as a disincentive for redistribution and marketing of produce in those areas. Thirdly, the Kenyan government has continued to liberalise its trade through the SAPs since 1990s. These reforms have led to the collapse of parts of the agricultural support system and the invasion of the country by cheap imports acting as a disincentive for production. In the past 10 years, there has been an intensive pursuit of export oriented policies which has seen the rise of horticulture sector, which although successful has led to a shift from food production to horticulture production. These policies have created imbalances in the food system leading to higher prices due to lower supply.

Finally, other government policies have also tended to exacerbate the situation, for instance there seems to be a disconnect between trade policies and food security policies, a phenomenon which is clearly evident by the lack of representation of Ministry of Trade or any other trade-related institutions in the policy and round table discussions on food security. This is detrimental because it tends to largely ignore the fact that food security is highly dependent on imports which are an integral part of trade. Food and trade policies also do not directly tackle the issue of rural livelihoods.

### 2.5.2 Recommendations

***Policy Recommendations***

At the global level, it is time for agricultural trade policy to leave its autarchic past and get in step with the needs and realities of the marketplace. An equitable global agricultural trade system as well as an equitable global food system is required. However, it is unlikely that an open, equitable global food system can be constructed through GATT/WTO-style negotiations alone. That approach is too confrontational and mercantilist to achieve the degree of collaboration or comprehensiveness needed. Moreover, creating an open, equitable global food system requires bringing trade, investment and technology together in a much more coordinated way than is possible in traditional trade negotiations.

At the regional level, there are still a number of constraints including NTBs that need to be addressed such as harmonisation of rules and regulations, harmonisation of licensing requirements, and general improvement of trade facilitation in order to avoid informal trade. Moreover, support to small traders and entrepreneurs who are increasingly becoming an integral part of trade flows would lead to an improvement of rural livelihoods and a subsequent reduction in poverty, thereby creating positive outcomes for food security.

However the most significant policy recommendations are at the national level. First there is need for a clear and comprehensive trade policy that takes into account the importance of regional trade for livelihoods as well as linking it to food security policy and/or agricultural policy. Secondly, the government must also pursue trade policies that attempt to address the issue of food insecurity and rural livelihoods. Over concentration on export-oriented policies at the expense of local agricultural sector has proved to be detrimental to the country. Thirdly, there is a great need to address internal bottlenecks such as infrastructural constraints and deal more with distribution mechanisms from areas of surplus to areas of deficit through the National Cereals and Produce Board. Fourthly, rethinking food aid and its dynamics on the Kenyan food

economy is paramount as food aid causes certain imbalances which act as a disincentive to production. Lastly, a comprehensive institutional framework to address the issue of trade and rural livelihoods as well as food security is urgently required.

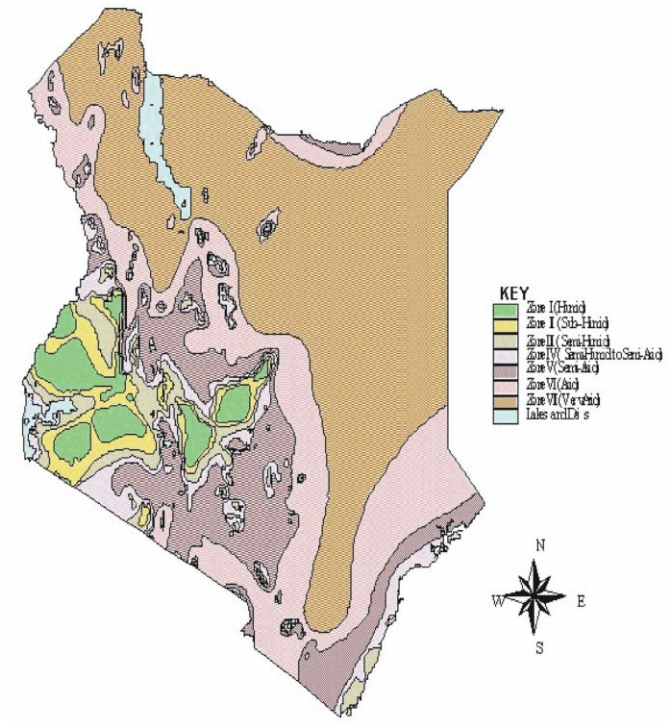
***Recommendations for Various Stakeholders***

To address the current situation as well as the current food crisis, the following is recommended:

1. The Ministry of Agriculture should involve all stakeholders, including Ministry of Trade and the Ministry of EAC on policy issues relating to food security and trade. This would in effect plug the existing gaps between trade, rural livelihood and food security issues. They should also involve the East African Grain Council in view of its role as an honest broker by virtue of it being a regional grain organisation whose private sector membership includes farmers, traders, millers, input suppliers and other stakeholders.
2. All traders, millers and NCPB should purchase maize from the farmers at market prices, and the Ministry of Trade and Ministry of Agriculture through the NCPB should ensure that the sector is regulated and that farmers are receiving fair prices for their produce. This can be done through a price discovery mechanism[11] in which prices of maize would be determined not only by supply and demand but also by quality of the produce, quantity, location and delivery point. This initiative should have the support of the GoK and other local partners/stakeholders for market information collection, verification, consolidation and dissemination.
3. EAGC should take lead by working with COMESA and EAC in pursuing the following regional policy options:
    - Developing a regional mechanism for accurate estimates of available regional maize stock and preparing a regional maize balance sheet;
    - Establishing a regional crop forecasting system;
    - Developing a transparent regional mechanism for management of seasonal export/ import restrictions (this mechanism can be accompanied by a trigger stock based on a threshold pegged to the regional maize stock); and
    - Harmonisation of the COMESA and EAC trade facilitation measures so as to reduce illicit trade and encourage formal cross border trade which would help improve livelihoods and will also generate revenue for governments through customs receipts.

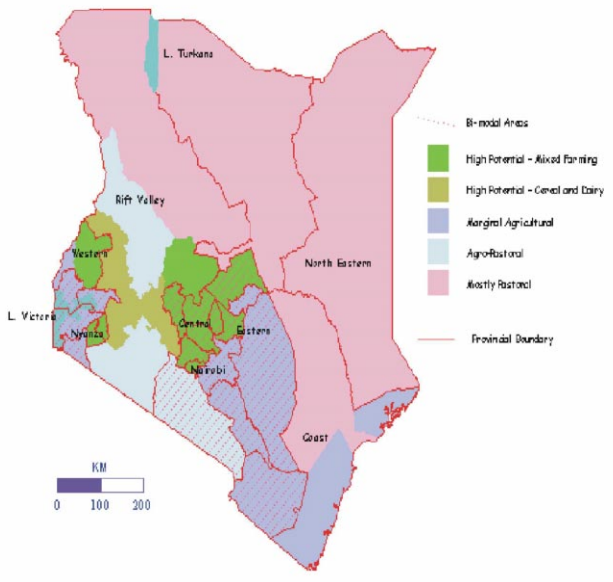
## 2.6 APPENDICES

### Appendix 2.6.1: Agro-Ecological Zones in Kenya




### Appendix 2.6.2: Kenya's Livelihood Zones

**Figure 1: Kenya's Production/Livelihood Systems**



## Appendix 2.6.3: Kenya COMESA Trade Statistics

| Table 2.6.3.1: Trends in Kenya's Trade Statistics with COMESA – 1997-2008 (US$) | | | |
|---|---|---|---|
| **Year** | **Exports** | **Re-exports** | **Imports** |
| 1997 | 547674704 | 49296961 | 99884621 |
| 1998 | 561722847 | 59015868 | 36639696 |
| 1999 | 562731595 | 62314576 | 48253185 |
| 2000 | 445536833 | 150109555 | 77331053 |
| 2001 | 464497961.9 | 207496421 | 144321017.1 |
| 2002 | 625489572.6 | 201242010 | 117226635 |
| 2003 | 430091410 | 350854152 | 144640785 |
| 2004 | 529144508.6 | 414567853 | 173671181.2 |
| 2005 | 866943189 | 463706119 | 175744938.3 |
| 2006 | 911248622.1 | 130435695 | 243324978.8 |
| 2007 | 1114269374 | 189249768 | 428333439.2 |
| 2008 | 1427626071 | 228957858 | 410851667.6 |

| Table 2.6.3.2: Top Ten Exports to COMESA – 2008 (US$) | | |
|---|---|---|
| | **Product (2-digit HS)** | **Value** |
| 1 | Tea, coffee, spices and related products | 258580901.2 |
| 2 | Manufactured products and industrial goods | 9856589 |
| 3 | Milk and milk products | 8750538 |
| 4 | Cereal flours | 5429992 |
| 5 | Cereals | 4557659 |
| 6 | Meat and meat products | 2260865 |
| 7 | Vegetables, bulbs and flowers | 1891287 |
| 8 | Potatoes, onion, cabbages and legumes | 876292 |
| 9 | Fruits, coconuts, dates and other nuts | 523856 |
| 10 | Fish and fish products | 434534 |

| Table 2.6.3.3: Top Ten Imports from COMESA – 2008 (US$) | | |
|---|---|---|
| | **Product (2-digit HS)** | **Value** |
| 1 | Cereals | 13604506 |
| 2 | Dried vegetables | 3936215 |
| 3 | Fresh vegetables | 3727081 |
| 4 | Soya beans and nuts | 3548086 |
| 5 | Industrial goods and spare parts | 1898491 |
| 6 | Dried vegetables | 3936215 |
| 7 | Fresh vegetables | 3727081 |
| 8 | Animal products | 129830 |
| 9 | Coffee and vanilla | 1289754 |
| 10 | Fish and fish products | 123078 |

**Appendix 2.6.4: Kenya EAC Trade Statistics**

| Table 2.6.4.1: Top Ten Exports from Kenya to EAC – 2008 (US$mn) | | |
|---|---|---|
| | **Product (2-digit HS)** | **Value** |
| 1 | Coffee, tea and spices | 862.92 |
| 2 | Live trees and other plant products incl. cut flowers | 441.61 |
| 3 | Edible vegetables and root tubers | 256.93 |
| 4 | Mineral fuels | 163.51 |
| 5 | Tobacco and related products | 126.78 |
| 6 | Salt, sulphur, earth and cement | 115.91 |
| 7 | Preparations of vegetables and fruits | 108.73 |
| 8 | Inorganic chemicals | 100.22 |
| 9 | Plastics and related articles | 99.05 |
| 10 | Sugar and confectionery | 64.53 |

| Table 2.6.4.2: Top Ten Imports to Kenya from EAC – 2008 (US$mn) | | |
|---|---|---|
| | **Product (2-digit HS)** | **Value** |
| 1 | Tobacco unmanufactured; tobacco refuse | 36.61 |
| 2 | Uncoated kraft paper& paperboard, in rolls/sheets | 16.33 |
| 3 | Furnishing articles | 12.44 |
| 4 | Oil seeds | 6.64 |
| 5 | Oil-cake | 6.19 |
| 6 | Dried vegetables, shelled | 5.55 |
| 7 | Maize (corn) | 4.69 |
| 8 | Leguminous vegetables, shelled or unshelled, fresh or chilled | 3.78 |
| 9 | Cotton, not carded or combed | 3.44 |
| 10 | Wood in the rough | 3.43 |

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## Endnotes

1 Visits were undertaken to both the official (where formal trade regulatory and monitoring infrastructure, i.e. customs and other governmental check points related to imports and exports, exists) and unofficial (where formal trade monitoring and regulatory infrastructure does not exist) border points

2 The poverty line is established at US$1 per capita per day. Any income level below this poverty line is insufficient to meet the minimum daily needs for food, shelter, clothing and transport and other essential non-food items.

3 Poverty in Kenya is largely a rural phenomenon but the proportion of the poor who live in urban areas is also substantial, and rose to more than 50 percent in 2000 before declining to 34 percent in 2007.

4 Based on stakeholder interviews

5 Comprising five countries, namely Kenya, Tanzania, Uganda, Rwanda and Burundi

6 COMESA countries include Kenya, Burundi, Rwanda, Comoros, Democratic Republic of Congo, Djibouti, Libya, Egypt, Eritrea, Ethiopia, Malawi, Madagascar, Mauritius, Seychelles, Swaziland, Sudan, Tanzania, Uganda, Zambia and Zimbabwe

7 Ministry of Agriculture, Ministry of Livestock and Fisheries, and Ministry of Cooperative Development

8 Thematic Working Groups include: Legal Regulatory and Parastatal Reforms; Research and Extension; Agribusiness, Value Addition and Marketing; Inputs and Financial Services; Food and Nutrition Security Policy and Programmes; Environment; and Land and Natural Resources.

9 CAADP is a common strategic framework for agricultural policy and development in Africa.

10 Kenya's trade policies have in the past 15 years continued to emphasise the importance of exports especially tea and horticulture at the expense of production of food crops hence making it more and more difficult to achieve food self sufficiency.

11 Price discovery mechanism generally sends the price up when supply is below demand, and down when supply exceeds demand. Price mechanism also restricts supply when suppliers leave the market due to low prevailing prices, and increases it when more suppliers enter the market due to high obtainable prices.

# 3 Agricultural Trade, Rural Livelihoods and Trade Facilitation in Malawi

– Lawrence Mapemba (Ph.D.)

## 3.1 Introduction

International trade can foster economic development and reduce poverty in developing countries provided it, among others, generates employment opportunities, particularly in labour intensive agriculture and the agri-business sectors. Such initiatives are possible when necessary flanking policies are in place. Many developing countries need better awareness of the issues involved in order to forge an improved coherence between development and trade policies. Developing countries, including their civil society, are cognisant of the positive role that trade can play in development and poverty reduction and have made efforts to improve their capacity to constructively and effectively participate in the World Trade Organisation (WTO) and to take advantage of the opportunities that international trade offers.

This study has been undertaken under the Fostering Equity and Accountability in the Trading System (FEATS) project implemented by CUTS. The analysis in the study primarily relies on literature reviews comprising reports from CUTS Geneva Resource Centre, the Ministry of Agriculture and Food Security, the Ministry of Development Planning and Cooperation, the Ministry of Trade and Private Sector Development, and the National Statistical Office. Other experts within and outside the country were also consulted for the study. The reviewed documents provided the needed quantitative data for the analysis of various productivity and trade variables. To substantiate the literature review, a field survey was conducted in which farms, companies and organisations that are involved with production, processing and exporting of tradable crops were visited to collect information on their operations, constraints and policy issues that affect them. List of persons interviewed and their organisations are available in the annexure.

### 3.1.1 The Economy

Malawi, a landlocked and least developed country (LDC) situated in Southern Africa, has a population of 13.1 million (National Statistics Office, 2008). With a per capita Gross National Product (GNP) of approximately US$290, Malawi is one of the poorest countries

in the world. The country's economy is dominated by agriculture which accounts for about 34 percent of its Gross Domestic Product (GDP) and over 90 percent of its export earnings. The manufacturing sector accounts for only 11 percent of Malawi's GDP and about 14 percent of the manufacturing products are exported.

Other key contributors to the country's GDP are wholesale and retail trade, construction, financial and insurance services. More than 85 percent of its 13.1 million people depend upon agriculture for livelihood, either directly through farming or indirectly through processing, transportation, and marketing. The high dependence on agriculture makes the country extremely vulnerable to weather changes and world economic shocks. This is aggravated by the country's reliance on a few export commodities which include

**Table 3.1: Main Features of the Malawi Economy**

| | |
|---|---|
| Population in 2008 (million): | 13.1 |
| Population Annual Growth Rate from 1998 – 2008 (%): | 2.8 |
| Population Living Below the Poverty Line (%): | 40 |
| Life Expectancy (years): | 48 |
| Surface Area (thousands of sq km): | 118.5 |
| Agricultural Land (% of land area): | 48.8 |

| Economic Profile | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
|---|---|---|---|---|---|---|---|---|---|
| GDP (current US$bn): | 1.74 | 1.72 | 2.67 | 2.42 | 2.63 | 2.86 | 3.16 | 3.59 | 4.27 |
| GDP Growth (annual %) | 2 | -5 | -4 | 6 | 6 | 3 | 8 | 9 | 10 |
| GNP per capita Atlas method (US$) | 150 | 140 | 150 | 180 | 220 | 220 | 230 | 250 | 290 |
| Gross Capital Formation (% of GDP): | 14 | 15 | – | 18 | 20 | 23 | 23 | 26 | 32 |
| Inflation, GDP Deflator (annual %) | 31 | 26 | 73 | 9 | 15 | 15 | 18 | 7 | 9 |
| Foreign Direct Investment (BOP, US$mn) | 26.0 | 19.3 | 59.0 | 39.0 | 10.8 | 26.5 | 29.7 | 54.6 | – |
| Agriculture, Value Added (% of GDP) | 40 | 39 | 38 | 38 | 37 | 33 | 34 | 34 | 34 |
| Industry, Value Added (% of GDP) | 18 | 17 | 17 | 19 | 19 | 21 | 20 | 20 | 21 |
| Services, Value Added (% of GDP) | 43 | 45 | 45 | 44 | 44 | 47 | 46 | 45 | 45 |
| Exports of Goods and Services (% of GDP) | 26 | 28 | 34 | 30 | 25 | 20 | 19 | 24 | 23 |
| Imports of Goods and Services (% of GDP) | 35 | 39 | 59 | 52 | 43 | 44 | 43 | 45 | 51 |
| Merchandise trade (% of GDP) | 59 | 41 | 54 | 54 | 59 | 55 | 58 | 58 | – |

*Source: World Bank, World Development Indicators (2009)*

tobacco, tea, sugar, and cotton. In 2008, tobacco alone accounted for 64 percent of the country's export earnings (Ministry of Development Planning and Cooperation, 2009). As a result of low prices for the major crops, new export crops have emerged. These include macadamia nuts, soybeans, chilli, and paprika. Table 3.1 gives a summary of the major economic indicators.

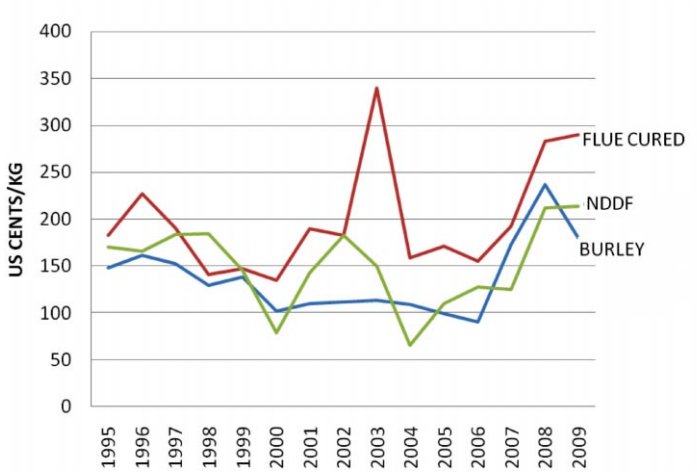
After a prolonged period of poor economic growth, Malawi started to register a high growth in 2006, averaging 7.5 percent between 2006 and 2007 (Ministry of Economic Planning and Development, 2008). In comparison, between 1998 and 2004 the economy grew by less than 2 percent (WTO, 2004). Improvements in the economic growth followed the implementation of policies ushered by the new government in 2004 which restored macro-economic stability to the economy. In spite of the global fuel crisis, the inflation rate reduced to 8 percent in 2007 and stood at 8.7 percent in 2008 (Ministry of Development Planning and Cooperation, 2009).

The value of the Malawi Kwacha against the US$ has also stabilised, although there is a concern that it is over-valued. This concern has been present for a while; however, it has gained prominence in the wake of the foreign exchange shortage that the country has been experiencing since 2008. In January 2010, the government succumbed to local and international pressures and devalued the currency. The official exchange rate now stands at MK152.00 to US$1.00 from MK140.00 to US$1.00. The devaluation of the Malawi Kwacha may improve the level of exports for the country especially since demand has declined due to the recent world financial crisis.

Improvements in the economic growth of Malawi have resulted in the alleviation of poverty. According to the Ministry of Development Planning and Cooperation (2008), the number of people living below the poverty line has decreased from 52 percent in 2004 to 40 percent in 2007. The reduction in poverty is mainly attributed to the increased performance of the agricultural sector following the farm input subsidy programme that the government reintroduced in 2005[1] (Ministry of Economic Planning and Development, 2008). According to the 2009 annual economic review, the percentage of food secure households increased from 97 percent in 2006-2007 to 99.5 percent in 2007-2008.

Despite the impressive economic performance of Malawi in the past five years, the country's economic development prospects still seem precarious. The reduction in global commodity prices as a result of the global economic crisis and weather uncertainties with the forecast of an *El Nino* pose a threat to Malawi's economic growth prospects. In addition, the low tobacco prices paid to the farmers in 2009 as compared to previous season's prices may negatively affect tobacco production in 2010 as some farmers will reduce production. As can be seen in figure 3.1, the price of burley tobacco, the major type of tobacco grown by farmers in Malawi, hovered below US$2/kg during the 2009 buying season compared to 2008 when the average price for burley tobacco was US$2.37/kg. Furthermore, the high input costs that the farmers experienced in the 2008-2009 growing season, due to the global increase in the fertiliser prices, may drastically erode the farmers' take-home income. This may adversely affect the farmers' production decisions in the 2009-2010 growing season.

**Figure 3.1: Average Tobacco Prices from 1995-2009**




*Source: Tobacco Control Commission (www.tccmw.com)*

As a result of these factors, the government has projected the economy to grow by 7.9 percent in 2009, a reduction from 9.7 and 8.6 percent attained in 2008 and 2007 respectively (Government of Malawi 2009). Agriculture is projected to grow by 10.2 percent in 2009 down from 11.3 percent in 2008 (Ministry of Development Planning and Cooperation, 2009). The mining and quarrying sector is expected to be the major contributor to the 2009 projected economic growth. The sector is projected to grow by 9.3 percent, up from 6.3 percent in 2008. These projections seem to be rather optimistic.

### 3.1.2 Agriculture and Trade

The agricultural sector comprises of the smallholder and the estate sub sectors. It is dominated by the smallholder sub sector which contributes 75 percent of food crop production in the country. The importance of agriculture to the Malawian economy and to the livelihoods of most Malawians is the central reason behind continued government support and prioritisation since independence. Agricultural development is considered synonymous to rural and national economic development, although it is constrained by a number of issues within and outside the sector. The lack of investment and development of the sector has resulted in poverty and productivity traps that have further constrained input and output market development and the ability of rural poor people to protect themselves from wider economic shocks. This lack of investment and development of the agricultural sector has resulted in the inability of Malawi to attain its potential in trade performance.

It is believed that increased investment in the agricultural sector will increase agricultural productivity thereby increasing its competitiveness and trade performance. Increased agricultural productivity and trade will assist the Government of Malawi in attaining its goal of transforming the country's economy from a predominantly importing and consuming nation into a predominantly producing and exporting country thereby achieving sustainable economic growth and poverty reduction. The overriding objective

of the National Export Strategy is to reduce poverty, generate employment and raise living standards for the people of Malawi. Similar to other least developed countries (LDCs), Malawi's trade development strategy, has focused on trade-related development issues, which include improved market access, preservation of existing preferences and the reduction of technical barriers to trade (TBT), non-tariff barriers (NTBs) and other distorting measures that hamper Malawi's trade performance.

The linkage between trade, economic development and poverty reduction has recently been a topic of much debate. Several studies have attempted to show the positive linkage between trade, economic development and poverty reduction (Dollar: 1992; Dollar and Kraay: 1998; Edwards: 1992; Edwards: 1998; and Frankel and Romer: 1999). This theory emanates from evidences from some Asian countries such as China, India, and Vietnam. A number of developing countries reformed their trade policies by becoming more open to international trade with the aim of attaining economic growth. However, contrary to the experiences of China, India, and Vietnam, some open economies have experienced economic stagnation while others have experienced a shrink in the economy. Some studies have shown that economies that create a balance between being open and closed grew much faster than those which were on one extreme.

In addition, some studies found that trade policy should be coupled with other domestic policies in an attempt to distribute the benefits of trade to the disadvantaged populations within the country (Razzaque and Selim, 2008). Using trade as a tool for development will not produce meaningful results unless it is coupled with supporting policies and strategies. One of the benefits of trade in an agricultural based economy is an increase in employment opportunities leading to an increase in agricultural investments. As employment increases and small and medium enterprises (SMEs) continue to develop, poverty decreases. Razzaque and Selim (2008) reported that in economies where the majority of the population is dependent upon agriculture, poverty alleviation efforts require a dynamic, productive, and vibrant agricultural sector. This may require identifying alternative primary products for exports, the processing of traditional items, and improving productivity.

## 3.2 Policies and Strategies

Since agriculture plays such a dominant role in Malawi's economy, the government sought to promote productivity and encourage trade through exports. Internationally, Malawi trades in cotton, tobacco, coffee, tea, sugar, cashew nuts, macadamia, sesame, paprika, and chilli. Malawi has national and sector policies and strategies in place that are aimed at promoting productivity and agricultural trade hence improving livelihoods (Ministry of Agriculture and Food Security, 2008a).

### 3.2.1 Overview of the Country's Strategies and Policy Frameworks

***The Millennium Development Goals (MDGs)***

The United Nations General Assembly of Heads of States, along with the governments, adopted the Millennium Development Declaration, of which Malawi is a signatory. The Millennium Development Goals (MDGs) are long term development tasks to be achieved by 2015 (Malawi: renewed maize surplus report, 2008). They are aimed at creating an

enabling environment that will facilitate socio-economic development and the promotion of human rights. The MDGs comprise of eight goals. One of the goals is to eradicate extreme poverty and hunger by the year 2015. This task has two targets. The first is to halve the proportion of people earning less than a dollar a day; and the second is to halve the proportion of people who suffer from hunger. Malawi aims to achieve this goal through the implementation of several strategies. These include Farm Input Subsidy Programme; Greenbelt Initiative (GBI); establishment of MK5bn Malawi Rural Development Fund (MARDEF) loans; One Village One Product (OVOP) scheme; MK3.0bn Youth Fund; rehabilitation of abandoned irrigation schemes; and promotion of advocacy for proper storage of food crops (Malawi MDG report, 2009).

***The Vision 2020***

In 2000, the Vision 2020, a policy framework for long-term development for Malawi, was developed. It aims to make Malawi secure, democratically mature, environmentally sustainable, and self reliant, with equal opportunities for an active participation by all, having social services, vibrant cultural and religious values and technologically driven middle-income economy by the year 2020. These goals were designed to be achieved by increasing food crop production, developing irrigation farming, improving efficiency, reducing post-harvest losses, promoting off-farm income generating activities, economic empowerment of vulnerable groups, and improving policy analysis (Vision 2020, 2000). If the policy is well implemented it could raise the country's economic status.

***The Malawi Poverty Reduction Strategy***

In May 2002, the Malawi Poverty Reduction Strategy (MPRS) was launched as a first attempt to translate the Vision 2020. This became the overarching strategy of the government's attempts to reduce poverty in the country. The goal of the MPRS was to achieve "sustainable poverty reduction through empowerment of the poor". The MPRS was built around four strategic pillars of which the first one put emphasis on the promotion of sustainable pro poor growth. Pro poor growth ensures that food is available for all and that all people live on at least a dollar or more a day. This programme promoted agriculture and various business activities that would empower the poor. The MPRS also had four key cross cutting issues: HIV/AIDS, gender, environment and science and technology. The implementation period for the MPRS was three years and it came to an end in the 2004-2005.

***The Malawi Economic Growth Strategy***

In July 2004, Malawi Economic Growth Strategy (MEGS) was developed to complement the MPRS through investments that directly impact economic growth. Since tobacco, cotton, tea, and sugar were the main exports, the MEGS prioritised mining, tourism, agro-processing, and textile manufacturing in order to boost production. In the tobacco sector, the MEGS highlighted the need to take advantage of the short to medium production gaps in the region and increase production of Northern Dark Fired (NDF), burley and Flue Cured to meet market requirements. In addition, the MEGS addressed constraints in the tobacco industry and sought to increase production by engaging smallholder farmers. The priorities of the tobacco industry included: clear tobacco policy and the Tobacco Act; review of the taxation of the tobacco industry including the withholding tax; review factors that influence informal cross-border trade; and steps to encourage the export of processed tobacco.

In the tea sector, the government strategised to reduce the production costs, increase production, review the negative effects of certain taxes on the industry, and encourage investment in high yielding varieties. It also aimed at revitalising the smallholder tea growers to improve rural incomes and address the constraints identified in the tea industry, including investment. For the sugar sector, the government called for closer liaison between Ministry of Commerce and Industry and Sugar Corporation of Malawi (SUCOMA) in the negotiation of trade agreements and protocols that directly or indirectly affect sugar. The emphasis for the sugar sector was to develop smallholder growers and improve productivity of Dwangwa smallholder sugar scheme.

A special strategy revolving around cotton, being one of the potential sectors to boost manufacturing in the country, was devised. The government strategised to reduce the cost of production and increase productivity through high yielding technologies; increasing the coverage of extension services; and improving availability of inputs for the cotton industry. It also devised strategies to improve the marketing of cotton to encourage large scale production; encourage investment in textile industries to stimulate the demand for cotton; encourage the establishment of the Cotton Council to improve the organisation of cotton farmers; and review the tax system in relation to the cotton industry.

In the MEGS, the textile and garment sector had strategies to encourage spinners, weavers, knitters and dyers to invest in the industry. These included the revitalisation of David Whitehead and Sons as a spinner and weaver and the improvement of economic and social infrastructure, as well as reliability of transport services. The strategies also focussed on improving availability of credit including: export financing; improving human capital productivity; and the support of companies in the Export Processing Zones (EPZs) as well as the scope of EPZs.

To promote trade, the MEGS encouraged the agro-processing of crops such as fruits, vegetables, rice, macadamia nuts, and cassava to complement the existing export crops. The government strategised to ensure the availability of affordable capital for investment and specific investment incentives for agro-processing. To promote trade further, MEGS highlighted the need to improve marketing and distribution by providing information for better market accessibility and organising farmers into co-operatives. As a way of improving productivity in the smallholder sub-sector, MEGS also focussed on developing technologies that could be made available at low cost (Malawi Economic Growth Strategy, 2003).

***The Malawi Growth and Development Strategy***

In 2006, after MPRS was phased out, the Malawi Growth and Development Strategy (MGDS) was created. This initiative was formed to help develop the Vision 2020 while crafting a strong link to the MDGs. Lessons drawn from the MPRS and MEGS helped to formulate the MGDS. This policy framework has six key priority areas including agriculture and food security. To increase agricultural productivity, the MGDS strategy is to strengthen the linkage of farmers to markets by connecting rural communities, targeting the development of rural roads, developing farmer organisations and market information systems, encouraging the expansion and intensification of staple food production by

smallholder farmers. Other strategies include: providing effective extension services with more decentralised service delivery for agribusiness skills; increasing use of pest resistant varieties and promotion of pest management; promoting soil and water conservation and farming techniques; promoting irrigation farming and ensuring that existing land rights are recognised, clarified and secured by appropriate legislation.

The MGDS promotes food security through improving agricultural productivity. This focusses on implementing policies to improve the functioning of maize and other food crop markets and improving the ability to import and distribute food through better domestic and regional connectivity. To further food security, the MGDS aims at implementing policies that do not distort the market and which reduce dependency on food aid, putting in place an effective early warning system, promoting income generating activities, and improving the coordination and management of food aid and imports.

The MGDS also promotes agro-processing through improving infrastructure for agro-processing, reviewing the policy and regulatory frameworks impacting on agro-processing, building capacity for small scale enterprises, and improving productivity of smallholder farmers. In the past years, the agricultural sector was dominated by tobacco, tea, and sugar as the primary foreign exchange earners. To promote the tea sector, the industry must focus on increasing tea estates, smallholder profitability and reinvestment, as well as value addition. The MGDS strategises to promote clonal tea variety to increase productivity, refurbish factories, promote market oriented processing of tea, and improve the marketing systems.

To promote the tobacco sector, the main strategy is to increase production of flue cured, NDF tobaccos by the rationalisation of fees, creating a more efficient and fair system between farmers and auction floors, strengthening contract farming, and exploring additional markets for tobacco and tobacco products. The MGDS also strategised to establish cooperatives, promote the processing of tobacco products, provide farmers with inputs, and enhance extension services. To promote the sugar sector, the MGDS strategised to negotiate Economic Partnership Agreements (EPAs) with the European Union (EU) to ensure fair trading of sugar, promote out-grower schemes for smallholders, and improve inter modal transport for effective linkages to ports (Malawi Growth and Development Strategy, 2006).

### 3.2.2 Overview of Policies and Strategies in the Agricultural Sector

Before the 1970's, Malawi experienced a growth in the economy which occurred at an average annual GDP growth rate of 5.8 percent along with real GDP per capita growth rate of three percent. This growth was due to the expansion of estates (farmland), which meant more land was allocated for large scale commercial farming taking advantage of the high world market prices for exports. Towards the end of the 1970's, the economy of Malawi experienced external shocks such as high fuel prices, external transport problems due to the war in Mozambique, and deteriorating terms of trade.

Due to these conditions, in 1980, Structural Adjustment Programmes (SAPs) were introduced. The main objectives of the SAPs were to stabilise the economy, accelerate agricultural growth, diversify the export base, increase the efficiency of import

substituting enterprises and parastatals, and improve the mobilisation and management of public resources. SAPs were implemented as a three year rolling programme. This programme led to a slight positive change in agricultural productivity and marketing due to product liberalisation in high valued crops such as burley tobacco by smallholder farmers and market reforms.

In 1991, the World Bank pushed for the elimination of farm input subsidy based on the theory that farmers should shift to growing cash crops for export. Agricultural commodities were negatively affected through exorbitant prices for inputs making them inaccessible to smallholder farmers. Smallholder Agricultural Credit Administration (SACA), established in 1988 by the government in order to deliver subsidised seed and fertiliser collapsed due to a decline in credit repayment in the drought years of 1991 and 1992. In 1995, SACA was replaced by Malawi Rural Finance Company (MRFC) which provided credit to smallholder farmers, particularly to tobacco farmers, on a commercial basis.

From mid 1994, market liberalisation was implemented together with the Poverty Alleviation Programme (PAP). The programme emphasised the need to raise national productivity through sustainable broad based economic growth and socio-cultural development. However, the programme suffered from the absence of a well articulated action plan to ensure a holistic approach to the implementation process, especially inadequate linkages to the government budget, low prioritisation, and poor targeting.

Since 1995, Malawi has implemented three Fiscal Restructuring and Deregulation Programmes (FRDP), another form of SAP supported by the World Bank. The major goal of these SAPs was to stimulate the economy to achieve sustained economic growth and development. In the agricultural sector, the reforms centred on price decontrol, market liberalisation, and the repealing of the Special Crops Act. Price decontrol meant that the government move out of the markets and allow market forces to drive resource allocation in production.

Market liberalisation was intended to foster competition and ensure that smallholder farmers received adequate input and producer prices through the deregulation of the state controlled sole input seller and produce buyer, the Agricultural Development and Marketing Corporation (ADMARC). This was designed to bring in macroeconomic stability through targeting inflation, employment, balance of payment and income distribution. This makes the environment conducive to trade which will permit economic growth. The repeal of the Special Crops Act lifted restrictions on smallholder production of burley tobacco. This allowed many farmers to participate in tobacco farming and increase the product available on the market.

Although SAPs aimed at economic reforms to permit the economic growth for developing countries, evaluations indicate that the reforms were confronted with tremendous difficulties. These reforms were partial and did not always produce the expected economic benefits, allowing subsidies to be re-introduced in Malawi to improve productivity and marketing of produce. In 1998 the Starter Pack Scheme programme was introduced by the government and its cooperating partners. In order to increase productivity at household level, smallholder farmers were given free seed and fertiliser adequate for 0.1

hectare. Being a two year programme, it was meant to reduce production costs through free seed and fertiliser. Concurrently with the Starter Pack Scheme, the Agricultural Productivity Improvement Programme (APIP) funded by the EU, was introduced in 1999. APIP provided inputs on credit to resource poor farmers.

In 2000, SPS was re-introduced as the Target Input Programme (TIP) where targeted farmers received the same package as what was offered in Starter Pack Scheme. This was a way to promote the production of selected farmers and later double the inputs that the farmer received. The few targeted individuals received enough to have sufficient food to feed their families and were expected to produce additional food for sale. With low fiscal conditions, the programme was phased out in 2002. In 2005, the government re-introduced the Farm Input Subsidy Programme with a larger number of targeted smallholder farmers. The targeted farmers were provided with coupons to buy hybrid seed and fertiliser at subsidised prices.

To complement the MPRS and MEGS and to encourage the country's development, the Ministry of Agriculture in 2005 developed two policy frameworks termed as the New Era Agricultural Policy and the Food and Nutrition Security Policy. These policies are intended to fulfil the mandate of the Ministry which is to promote and facilitate agricultural productivity so as to ensure food security, increase incomes, create employment opportunities through the sustainable management and utilisation of natural resources, use research and effective extension delivery systems; and promote value-addition, agribusiness and irrigation development.

In the New Era Agricultural Policy, the Ministry of Agriculture aimed to develop a technology driven competitive agricultural sector which has the primary goal of producing food for its people. As a result, maize was at the core of its agenda with the primary aim of changing the country from being a net importer to being self-sufficient and even going as far as exporting within and outside the region. The Ministry sought to: (i) enhance uptake of improved technologies for increased agricultural production through development of appropriate technologies such as high yielding, drought tolerant and disease tolerant crop varieties; (ii) create a provision of pluralistic extension services through improved extension methodologies; (iii) promote the agriculture extension services through Parliamentarians and the District Agriculture Services System; (iv) increase the number of field extension staff by conducting a crash training programme; and (v) rehabilitate the farmer training centres to start conducting intensive farmer training programmes.

The Ministry also promoted access to agricultural inputs to improve production through the introduction of the targeted farm inputs subsidy programme to promote the use of hybrid and OPV maize seeds and fertilisers. Apart from inorganic fertiliser, farmers were also encouraged to use organic manure and other soil management and agro-forestry technologies. To reduce post harvest losses, the focus in the New Era Agricultural Policy was to establish land banks for the agricultural sector at concessional rates. Through this policy, the safety net programmes were done through the promotion of public works programmes targeted for agricultural production, such as distribution of inputs and construction of agricultural infrastructure.

In order to promote trade in agricultural commodities, the Ministry of Agriculture commercialised maize production through liberalisation of the maize market. This introduced competition and resulted in an increase of the grain reserves to ensure an adequate supply for exporting. The Ministry also promoted the concept of processing agricultural products to add value in order to create jobs and increase farmers' incomes. This was to be achieved through the introduction and promotion of agro-processing equipment in local communities and the development of the appropriate agro-processing skills through training programmes. This initiative was supported by the Malawi Rural Development Fund, and One Village One Product Programme.

In the New Era Agricultural Policy, the Ministry of Agriculture promotes regional and international trade on agricultural commodities by conducting extensive promotional campaigns for Malawi's agricultural products abroad through foreign missions and trade fairs. In addition, they create positions for agriculture attachés in foreign missions to strengthen Malawi's negotiating capacities in world trade issues and to comply with international protocols and agreements on trade (e.g. on sanitary and phytosanitary issues). The policy framework promotes crop diversification through target crops with high market potential as well as alternative cash and food crops. It also promotes the implementation of special programmes to intensify cotton and cassava production, which have high international market potential, and advocate for the development of rice production under irrigation (New Era Agricultural policy, 2005).

The Ministry accomplishes its social protection mandate through the Food and Nutrition Security Policy. Through the agricultural input subsidies, social protection has become an element of the Food and Nutrition Security Policy. This is designed to promote agricultural production by making inputs more accessible to local farmers and at a lower cost. To ensure food and nutrition security, the policy sets out measures to promote sustainable food availability, in terms of quantity and quality, that is accessible to all households at all times. Hence, the government promotes contract farming for agricultural production development, strengthens management, maintains adequate stocks of the strategic grain reserves, and ensures the diversification of the types of food stored in strategic food reserves at the community and national level.

The policy also promotes irrigation development and integrated water resources management. The government strategised to create a conducive environment for private sector investment and local community participation in the development of irrigation. They also hoped to facilitate investments in rainwater harvesting and water management, encourage use of lakes, rivers, and underground water resources for irrigation, and encourage sustainable utilisation of wetlands for agricultural use. The policy was designed to increase access to agricultural inputs by ensuring stability of fertiliser supply (e.g. maintain a fertiliser buffer stock as necessary), encouraging domestic production of high quality improved varieties, and promoting the establishment of community seed banks for easy access and sustainability.

The food security policy promotes crop protection by encouraging farmers to follow appropriate cultural and management practices, encouraging Integrated Pest Management (IPM) for crop protection as a way of safeguarding farming systems,

maintaining a productive economy, and facilitating storage pest management. It also promotes animal power and farm mechanisation by increasing access to drought animals and animal drawn implements, expanding training and utilisation of animal power and facilitation of access to tractors and tractor-mounted implements especially for farmer organisations and groups. To ensure food availability, the policy promotes access to credit by both female and male farmers by supporting and empowering micro-finance institutions (MFIs). These institutions provide financial services to farmers and encourage the formation of farmers' associations and cooperatives to benefit from financial services. MFIs also develop a legal and regulatory framework for the financial services sector and other MFIs.

The policy promotes environmental-friendly land management for sustainable agriculture development by guaranteeing security in land tenure and transparency in the land transfer system. This ensures implementation of the land re-distribution programme to relieve land pressure and encourage utilisation of arable land, promoting conservation of land and proper utilisation based on applicable instruments. Such instruments include the Environmental Impact Assessment (EIA), audits, and land use plans, which enforce the regulation that requires tobacco estates to allocate a proportion of their land for forestation, developing appropriate technology and extension methods aimed at improving and maintaining soil fertility and preventing water, soil and air pollution from agro-chemicals.

The food policy also develops and promotes the adoption of appropriate technologies by strengthening demand-driven research and research based extension systems. It adopts participatory approaches to facilitate capacity building of extension workers, farmers and other stakeholders, strengthen farmer based organisations, improve extension service delivery and marketing of appropriate technologies (Ministry of Agriculture and Food Security, 2005b). All these approaches are implemented to promote agricultural production and ensure the sustainable availability of food.

In relation to trade, the food security policy aims at improving access to domestic, regional, and international markets. To achieve this, the government strategised to strengthen private sector participation to ensure timely provision of inputs and the purchase of sufficient produce. They also tried to regulate and facilitate the agricultural markets of inputs and outputs at national, regional and international levels to ensure fairness, transparency, and competitiveness. By strengthening the private sector this would expand and strengthen the development and rehabilitation of rural infrastructure and establish an operational integrated market information system (Ministry of Agriculture and Food Security, 2005b).

Similar to the MPRS and the MEGS, the MGDS heavily targets agriculture as the driver of economic growth and recognises that food security is a pre-requisite for economic growth and poverty alleviation. In line with the MGDS, the Ministry of Agriculture formulated the Agricultural Development Programme (ADP) in 2008 as a strategy to support priority activities in the agricultural sector in order to increase agricultural productivity, improve food security, and integrate smallholder farmers into commercial agricultural activities. Initially the ADP had a narrow view of the agricultural sector, but in 2009 it was developed further into the Agriculture Sector Wide Approach (ASWAP)

with a broader development strategy for the sector. The ASWAP is a policy framework to accelerate achievement of the MGDS and implement the regional Comprehensive African Agricultural Development Programme (CAADP) at the national level.

The goal of ASWAP is to achieve sustainable staple food self-sufficiency, improve nutrition at household and national levels, and increase food production stability by implementing the targeted farm input subsidy programme for vulnerable smallholder farmers. The focus of the framework is not only on promoting the efficiency of the farm input subsidy programme for increased maize productivity (through improved seeds; adapted fertiliser formulation, time of application; and cropping practices), but also on reduced on-farm storage losses.

The ASWAP aims at improving nutrition at household level by stimulating the diversification of food production and increasing the productivity of other nutritious crops especially pulses, beans, soybeans, pigeon peas, and groundnuts, and by developing drought resistant crops, (cassava and millet) and horticultural crops (fruits and vegetables). To promote marketing of produce, ASWAP also aims at supporting market-based mechanisms for (i) risk management and (ii) for increased stability of maize availability and prices at national level, especially when weather shocks strike.

In order to increase commercial farming revenues at national and household levels and contribute further to the targeted sectoral growth, the ASWAP will also focus on promoting higher productivity. An increase in productivity will lead to an increase in production volumes of key export commodities[2] . Another priority is promoting higher unit values of export crops by improving product quality, processing, and compliance with market demand and standards. The ASWAP also looks to promote high value crops, livestock and fish production, leverage agro-processing investments (mainly addressed at the best opportunities for import substitution), and improve access to input markets.

Further the ASWAP indicates the need to provide financial and non-financial services to increase the unit value of commodities through vertical (agro-processing) and horizontal (market information and infrastructure) market integration, and facilitate access to credit by small and medium agro-processors. Strategies to facilitate the access to credit include assistance with credit/grant applications, business plan preparation and matching grant schemes, promoting producer organisations (such as cooperatives, associations, and clubs) and building partnerships and alliances with local and regional markets for inputs and outputs (ASWAP, 2009).

The Government of Malawi also launched the Greenbelt Initiative (GBI) in 2009 to consolidate greenbelts (i.e. a stretch of well-managed integrated enterprises aimed at sustainably maximising food, nutrition and income security) in different locations within the country. It provides a ground for creating interventions in support of greater efficiency by getting farmers organised for effective action in the market. The GBI focusses on two aspects of irrigation schemes, namely, rehabilitation and development. The first is to rehabilitate and develop the schemes owned by smallholder farmers and hand the rehabilitated schemes back to them, and the second is to rehabilitate and develop irrigation schemes owned by corporate companies.

The government will liaise with communities to consider three different options for the use of available land. One option is to register cooperatives covering all farmers who own land within the identified area so that the company can enter into a joint venture agreement with the cooperative to use the land. Another option is to lease the land for a specified period of time. The third option is to contract production and marketing where farmers will be assisted to develop irrigation schemes, are given inputs and are able to sell the products to the company at a flexible pre-determined premium rate. All this will be implemented to ensure that food is available throughout the year which will in turn bring food security both at national and household level.

The GBI also focuses on infrastructure development through public and private partnership. The infrastructure development includes processing plants, storage facilities and others. Malawi exports most of its commodities as raw materials which yield low prices. Value addition through infrastructure development is required to enable agricultural commodities to get higher prices on the international markets. The GBI provides start up inputs and equipment for crops in the form of matching grants and concession loans which help commercialisation (The Greenbelt Initiative, 2009).

## 3.3 Agricultural Productivity

### 3.3.1 Irrigation Development

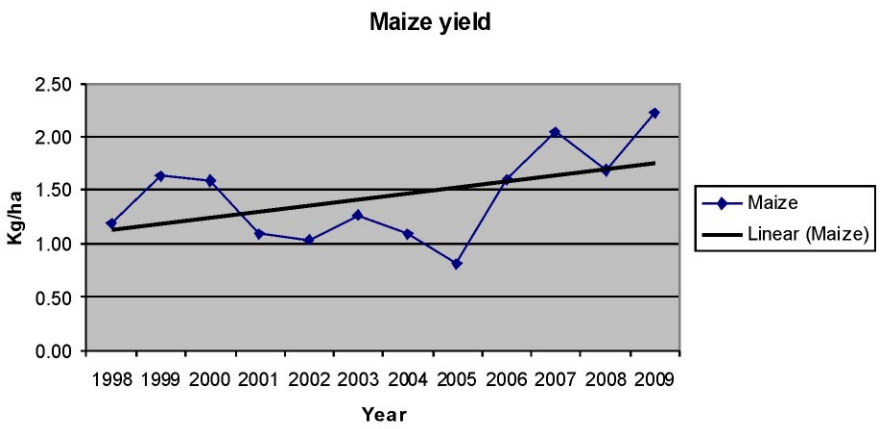
The mandate of the Ministry of Agriculture Fisheries and Food Security is to promote and facilitate agricultural productivity. In addition to the farm input subsidy programme, government policy on irrigation of crops has also had an effect on the annual land productivity. Through various programmes, the government is rehabilitating old irrigation schemes and developing new irrigation schemes to promote multiple crop cultivation and harvesting per year. An increasing number of farmers are growing maize twice a year while others have begun cultivating vegetables, which are grown more than twice a year. This has increased the annual crop production thereby improving household food security and incomes. Most of the crops that are being grown enter the domestic market through either direct selling at the market or selling to vendors on a farm.

In addition to the external market the domestic market appears to be important to the majority of smallholder farmers because it is easily accessible. However, there is need to train farmers in business skills and marketing, especially on grading and product presentation at the market. This section discusses a 10 year brief overview of productivity in terms of land (yield) in the agricultural sector. As the sector aims at commercial farming, only major crops are referred in this section.

### 3.3.2 Maize Productivity

Figure 3.2 gives a summary of maize productivity over an 12 year period. From 1998 to 2000, productivity mainly increased due to policy interventions like the Starter Pack Programme and the APIP and target input programme. These programmes distributed inputs, like seed and fertiliser, for free or on credit. During the period of 2001 to 2005, maize productivity was relatively low as a result of bad weather conditions and the removal of subsidies. However, productivity rose again from 2006 due to various

**Figure 3.2: Maize Productivity from 1998-2009**



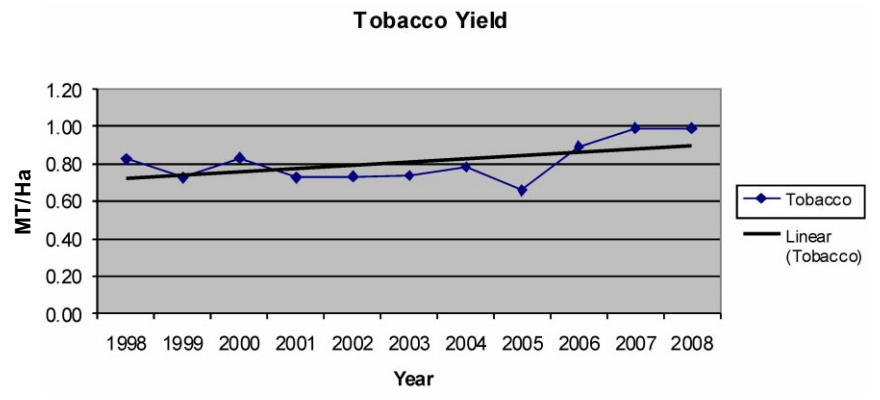

*Source: Ministry of Agriculture and Food Security*

interventions. These include: the targeted farm input subsidy programme, the promotion of organic manure, and the introduction of MARDEF and OVOP.

### 3.3.3 Tobacco Productivity

Figure 3.3 gives a summary of tobacco productivity over a 11 year period. Since MEGS prioritised tobacco production as an export in 2004, productivity was higher than the preceding years. With a clear tobacco policy, the Tobacco Act, and the farm input subsidy programme, farmers were encouraged to produce more on the available land. The promotion of contract farming among smallholder farmers also influenced the increased productive levels after 2005. From 1998 to 2005, yields fluctuated between 0.6 and 0.9 MT/ha. As a result of bad weather conditions, the 2004-2005 productivity was low. With the farm input subsidy programme and intensive extension methods, productivity increased to 1 MT/ha in 2007 and 2008.

**Figure 3.3: Tobacco Productivity from 1998-2008**

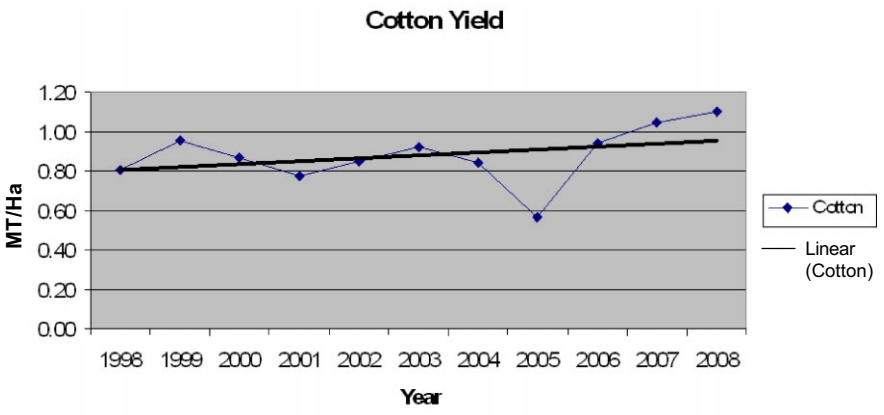



*Source: Ministry of Agriculture and Food Security*

### 3.3.4 Cotton Productivity

Figure 3.4 gives a summary of cotton productivity over a period of 12 years. From 1998 to 2003, cotton yields were relatively low as compared to the succeeding years because there was no deliberate policy of the government to improve productivity. However, the later years saw the effects of the Farm Input Subsidy Programme. The promotion of cotton production in the MEGS from 2004 influenced the increased productivity. MEGS strategised to reduce the cost of production and increase productivity through high yielding technologies; increasing the coverage of extension services and improving availability of inputs for the cotton industry. Despite these efforts, bad weather conditions in the 2004-2005 growing season resulted in low productivity. In 2008, production was at the peak due to Bingu wa Mutharika's campiagn for cotton growing which was encouraged by the US through the African Growth and Opportunity Act (AGOA).

**Figure 3.4: Cotton Productivity from 1998-2008**




*Source: Ministry of Agriculture and Food Security*

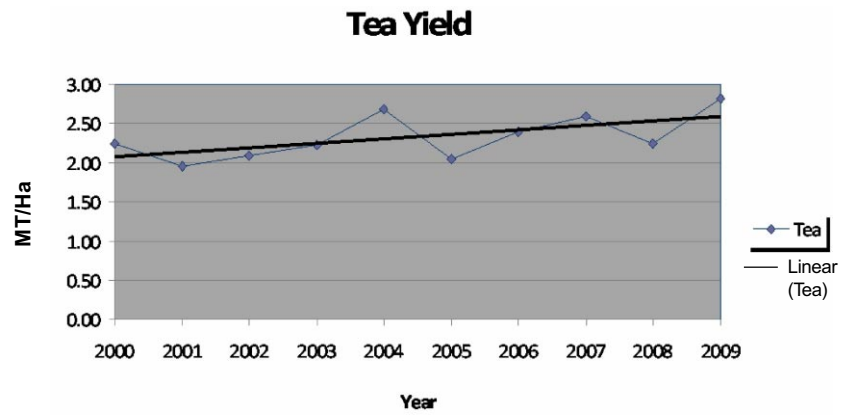
### 3.3.5 Tea Productivity

Production of tea in Malawi was introduced prior to 1900 and until 1968 it was a major foreign exchange earner for the country but it has since been surpassed by tobacco. Due to low prices on the international market, tea has been put into third place behind sugar. Nevertheless, tea continues to contribute between 11 and 18 percent towards Malawi's foreign exchange earnings. In terms of hectarage, tea in Malawi occupies about 18600 hectares of which 8740 hectares is in Thyolo, 6200 hectares in Mulanje and 660 hectares in Nkhata Bay. Of the 18600 hectares of tea, some 15,600 hectares (84 percent) is under commercial estates and the remaining 3,000 hectares (16 percent) under smallholder growers in the Mulanje and Thyolo districts of southern Malawi.

The UK and South Africa currently provide the main outlet for Malawian tea, accounting for 44 and 15 percent, respectively of total tea exports. Malawi has recenlty diversified its tea market and now exports to over thirty countries worldwide.

Figure 3.5 gives a summary of tea productivity over a period of 10 years. In an effort to improve the export base for the country, tea has become a priority. Since 2004, the government has strategised to reduce the production costs of the tea industry and increase production through the generation of high yielding varieties and revitalising the smallholder tea growers. With the growing popularity of the clonal tea variety on the world market, farmers are in the process of replacing the low yielding Indo-China tea variety with the clonal high yielding variety, which accounts for slightly increased productivity after 2005. Among smallholder farmers, the government subsidised the inputs to reduce production cost which resulted in high production and productivity from 2005. Of the 52,558 metric tonnes of tea produced in 2009, about 5700 metric tonnes, (11 percent of total production) was from smallholder farmers and the remaining 89 percent was from commercial estates. This is an improvement from the 3700 metric tonnes produced by smallholders out of a total of 48,141 metric tonnes, (only 8 percent) in 2008. However, following an unfavourable and short rainy season in 2007-2008, there was a decline in productivity in 2008. In 2009, the rainy season came early and was very long, which contributed to the increase in tea productivity.

**Figure 3.5: Tea Productivity from 2000-2009**

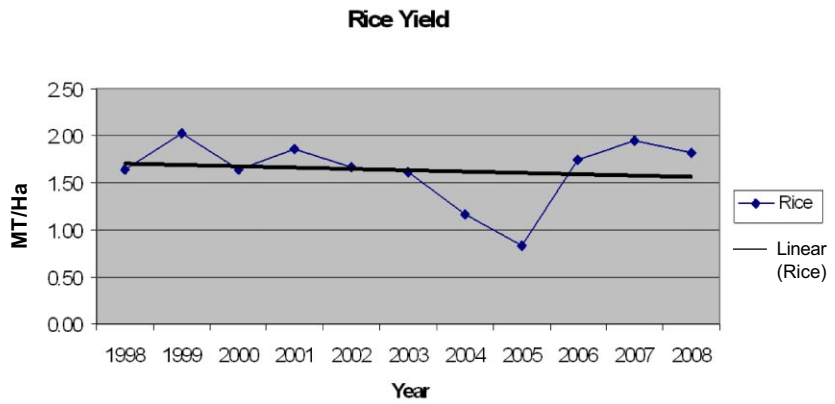



*Source: Tea Association of Malawi*

### 3.3.6 Rice Productivity

Figure 3.6 gives a summary of rice productivity over a period of 11 years. Rice productivity was high from 1998 to 2001 but started to dwindle from 2001 to around 2005 as a result of low rainfall. Although the farm input subsidy programme did not include rice, farmers took advantage of the available inputs in the market to boost rice productivity. The availability of inputs coupled with good weather conditions led to an increase in rice productivity starting in 2005.

**Figure 3.6: Rice Productivity from 1998-2008**

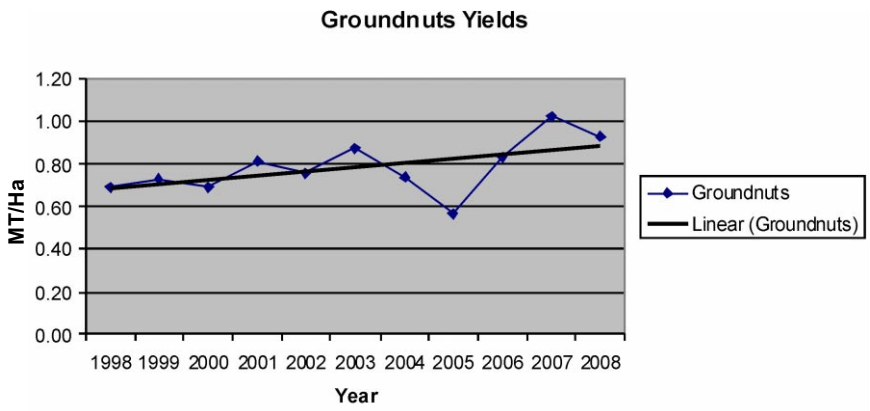



*Source: Ministry of Agriculture and Food Security*

### 3.3.7 Groundnuts Productivity

Figure 3.7 gives a summary of groundnuts productivity over a period of 11 years. The graph shows a linear trend with a slight overall increase in productivity from 1998 to 2008. The SPS, APIP and input subsidy programmes led to this small increase in yields. Although the overall trend shows an increase, groundnut productivity reduced from 2003 to 2005 as a result of low rainfall and lack of high quality seeds. Considering the value of groundnuts in food security and the export market, the government also introduced the legume subsidy to provide quality seeds to farmers, resulting in an increase in productivity from 2006.

**Figure 3.7: Groundnuts Productivity from 1998-2008**

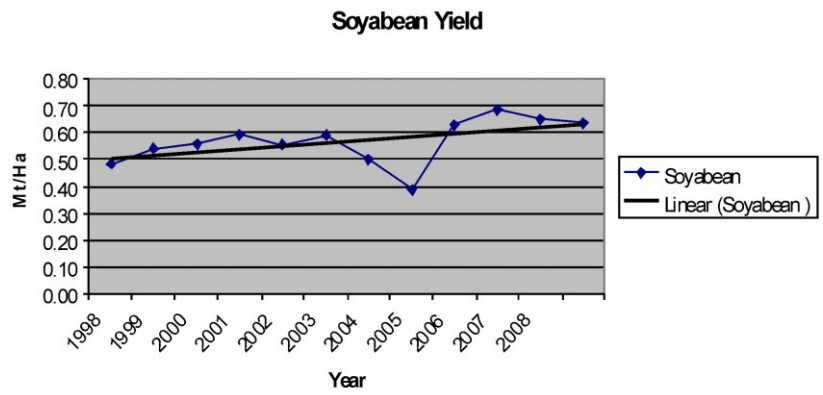



*Source: Ministry of Agriculture and Food Security*

### 3.3.8 Soybean Productivity

Figure 3.8 gives a summary of soybean productivity over an 11 year period. From 1998 to 2002, soybean yields varied between 0.6 to 0.7 MT/ha with a slight increase during the period of 2003-2004. From the New Era Agricultural Policy and the Food and Nutrition Policy, intensive services were made available to train farmers to increase soybean productivity but bad weather conditions led to a decrease in productivity in 2005. However, the availability of quality seed in the Farm Input Subsidy Programme has influenced the increase in soybean productivity from 2005.

**Figure 3.8: Soybean Productivity from 1998-2008**

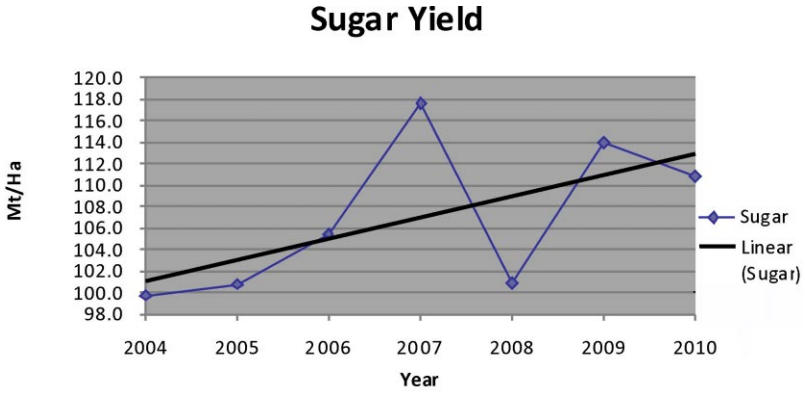



*Source: Ministry of Agriculture and Food Security*

### 3.3.9 Sugar Productivity

Figure 3.9 gives a summary of sugar productivity from 2004 to 2010. From 2004 to 2006, there was a general steady increase in sugar productivity before recording a sharp increase and reaching a peak of about 118 MT/Ha in 2007. Following the short rainfall

**Figure 3.9: Sugar Productivity from 2004-2010**




*Source: Illovo Sugar Company*

period in 2008, there was a drastic reduction in sugar production and productivity. However, the trend improved in 2009 when sugar productivity registered another sharp increase reaching 114 MT/Ha, although 2010 has recorded a reduction of about 4 MT/Ha.

Overall, productivity of the major tradable crops discussed above indicates an increase in production over the past decade. The availability of policies and strategies that targeted smallholder farmers and the agricultural sector as a whole have influenced the increase in crop productivity. The alignment of the New Era Agricultural Policy and the Food and Nutrition Policy to boost productivity and the farm input subsidy programme have led to the overall increase in crop yields. Low rainfall in 2005 affected almost all the crops, resulting in low productivity that year. Both tea and sugar production are very weather-dependent, and their yields were significantly impacted due to poor rainfall in the 2007-2008 season. The productivity of the two major crops, maize and tobacco, have positively responded to the Farm Input Subsidy Programme.

### 3.3.10 Constraints to Increased Productivity

There are a number of supply-side constraints related to various crops produced in Malawi. For a number of crops, Malawi is considered a high cost producing country compared to its neighbours (Tchale and Keyser, 2010). The high cost of producing crops is partly due to the fact that the country is landlocked, which makes the cost of agricultural inputs higher as compared to other countries in the region. The other important reasons for increased cost of agricultural inputs are government policy (especially tax policy) and the low rates of adoption of good crop husbandry practices. This has resulted in the largest number of smallholder farmers being categorised as low input farmers or as largely subsistent.

***(a) Constraints to Tobacco Productivity***

Tobacco is produced by more smallholder farmers than any other cash crop in the country. It is produced in almost all 29 districts in Malawi. Reports from tobacco marketing have revealed that most tobacco (especially burley) that is sold by the smallholder farmers is of low quality due to low input usage. Most farmers do not apply the recommended rates of fertiliser and chemicals to their crop, highly compromising the yields and quality of the crop. The reasons for low input usage by smallholder farmers are largely due to the lack of access to credit and to some extent, negligence. While some farmers would like to have the necessary inputs to put in their fields, others have been reported to sell the subsidised farm inputs they obtained.

Current reports have indicated that tobacco farmers are being exploited by some tobacco dealers, especially buyers. Initially there was the concern that buyers at the auction floors colluded to price tobacco low, which resulted in losses to farmers[3] . Consequently, some farmers went out of tobacco production while others diverted inputs to competing enterprises resulting in reduced tobacco productivity. This forced the government to create a minimum pricing of tobacco each year. It has recently been reported that tobacco farmers are being exploited in other ways by the same tobacco dealers, due to their low literacy levels[4] .

***(b) Constraints to Tea Productivity***

There are more than 11,000 smallholder tea farmers in the districts of Mulanje, Thyolo, and Nkhata-Bay in Malawi. According to the meetings with commercial and smallholder tea growers, the following were reported as constraints to increased productivity:

(i) Most of the tea was grown in 1965 using government loans. Since establishing a tea plant is expensive and due to termite infestation, most smallholder farmers' fields are lying uncultivated, which lead to low yields.

(ii) Such vacant fields allow weeds to grow which further reduce productivity.

(iii) Researchers have come up with new high-yielding, drought-resistant, and disease/ pest resistant clones. However, smallholders cannot purchase these products due to the high cost of tea uprooting and re-planting.

(iv) Research has shown that tea plants can be planted closer together to produce higher yields. Commercial farmers are able to replant since they are uprooting the old variety and planting the new variety. But, unfortunately, the smallholder farmers cannot afford this operation.

(v) Most smallholder farmers lack modern tea crop husbandry skills and, therefore, their shrubs are conical compared to the flat top shrubs on big farms. Tea requires to be picked every seven days in order to protect the tea bush and improve quality, but smallholder farmers can go up to thirty days without picking.

(vi) Most smallholders use small amount of inputs, usually putting in one third of the recommended rate. They look at the cost of the inputs not at the output they will get in the end.

***(c) Constraints to Sugar Productivity***

For the financial year 2010-2011 Illovo has planned to cultivate an area of 20,483 hectares of sugarcane. 2,979 hectares of this cane is to be cultivated by out-growers. There are a number of constraints that were listed by Illovo management during the field visit that could directly or indirectly affect productivity. They include:

(i) Non-availability of land for expansion: Due to high population density availability of land has become an issue. Illovo reported that there are plans underway with the government to obtain more land. Land has been identified past Nchalo, which used to belong to the late ex-President Dr. H. Kamuzu Banda. The company would like to raise production from 320 tons per year to 450 tons per year.

(ii) Interrupted power supply: Illovo occasionally experiences power outages. Therefore, they use biogases to generate electricity when power is interrupted or inadequate.

(iii) Inadequate local labour with good skills: Even though the company trains its staff, they would like Bunda College to train students on technical skills that would benefit the company.

(iv) Difficulty in obtaining foreign currency: The company uses a lot of fertiliser and petroleum, both of which require foreign currency for import.

(v) High cost of transportation. The high cost of transportation affects the cost of production.

(vi) Lack of contractual arrangement with the EU: It affects the market assurance for the company and smallholder growers and also the level of production.

## 3.4 Agricultural Trade

### 3.4.1 Landlockedness and Trade Facilitation

Since it gained independence, Malawi has made considerable efforts to integrate the country into the global economy as a means to strive for economic development and poverty reduction. The efforts picked up pace in the 1990s when the government adopted market oriented economic policies under the World Bank/International Monetary Fund's (IMF) sponsored Structural Adjustment Programmes (SAPs). Implementation of the reforms gained momentum in the 2000s following the adoption of the MGDS, the country's medium term development strategy.

However, efforts towards integrating the country into the global economy are undermined by structural weaknesses in the economy and the country's landlocked position, making its exports less competitive in the international market. High transaction costs have been singled out as one of the major factors that contribute to the uncompetitive nature of Malawi's exports to the international market. Malawi depends on road and railway transport for its international trade. The country's exports have to travel a minimum of 948 km, through neighbouring countries, to the nearest sea port (Beira in Mozambique). As a result of the high transport costs and the administrative requirements, Malawi is a high cost producer.

Although railway transport is cheaper than road transport, the Malawi railway system is unreliable, making road transport the preferred mode of transportation. This has forced the private sector in Malawi to use longer trade routes which are easily accessible by road. The situation is aggravated by the country's lack of diversification of exports and imbalances between imports and exports. Given the seasonality of the country's exports, it is difficult for transporters to arrange return loads, which would help to reduce the transport costs.

According to a study done by the TERA International Group Inc. (2005), there is a wide variation in transport charges for single haulage and return haulage. For example, it costs US$35 per tonne to transport sugar to Beira with backhaul as compared to US$60 without backhaul. This demonstrates that Malawi could benefit substantially if there were more backhauls.

Since Malawi's exports have to travel long distances before reaching seaports, there is a need for proper logistical arrangements for road transport in place, for example, an efficient loading and offloading system to reduce waiting time for transporters to minimise transportation costs. However, a study by TERA International Group Inc. discovered that there is an inefficient use of vehicles arising from delays in offloading. Consequently, there have been shortages of vehicles during some periods of the year, particularly during the tobacco marketing period when almost all the vehicles are committed to transporting tobacco. Industries like cotton have complained of lack of vehicles as the industry cannot offer competitive rates as those offered by the tobacco industry (TERA International Group Inc, 2005).

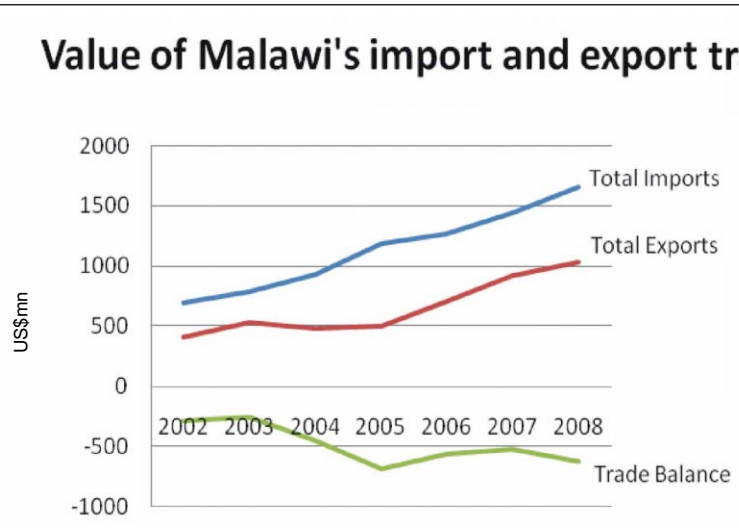
It has been estimated by TERA International Group Inc. that in 2003 Malawi paid US$60.7mn for the transportation of exports. Time costs add about 3 percent to the transport cost making the total transaction cost US$78.9mn. This translates to 35 percent of Malawi's total export value in that year. On the other hand, transport cost for imports was estimated at US$129.3mn. The bulk of Malawi's imports are raw materials and machinery. This means that a large proportion of this cost was on raw materials and machinery used in agricultural production. Taking all of this into consideration, transportation costs play a huge role in contributing to Malawi's high production cost.

For these reasons, the government has made trade facilitation a major element of its economic policy. Even at the WTO Doha Round negotiations, trade facilitation is one of the areas where the Malawi government has shown particular interest. Their goal is to have the WTO put in place mechanisms for provision of assistance for addressing trade facilitation problems that the country is facing. Similarly, under the Regional Trade Agreements (RTAs), that Malawi is a party to, trade facilitation has been one of the issues that have been prioritised.

### 3.4.2 General Trends in Malawi's Trade Flows

Malawi's exports are dominated by agricultural commodities which on average constitute about 84 percent of the value of the country's export trade. Despite the government's frantic effort to promote the manufacturing sector, its contribution to export trade is still low. Only 14 percent of the manufactured output is exported (Record and Davies, 2007). In terms of volume, from 2002 to 2008, Malawi's exports increased on average by 14.7 percent per year while imports increased on average by 15.1 percent over the same period. As can be seen from figure 3.10 below, the country has been experiencing an increasing trend in trade imbalances.

**Figure 3.10: Trends of Malawi's Imports and Exports**



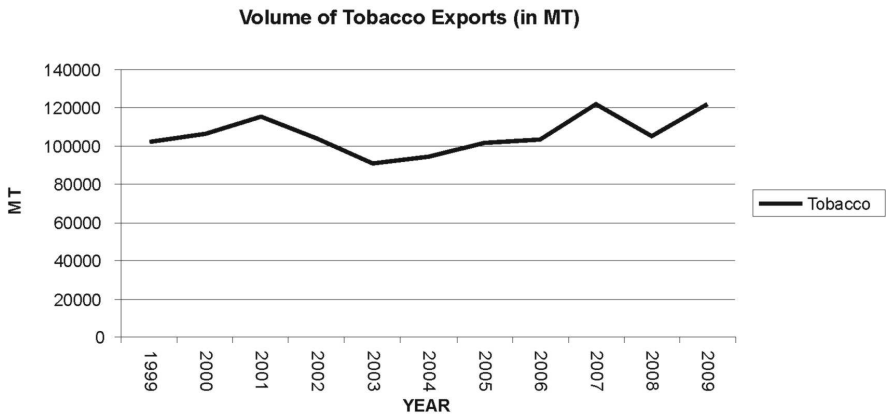

*Source: Malawi Annual Economic Report (2009)*

Below is a description of the performance of country's major exports over the past ten years.

***(a) Tobacco***

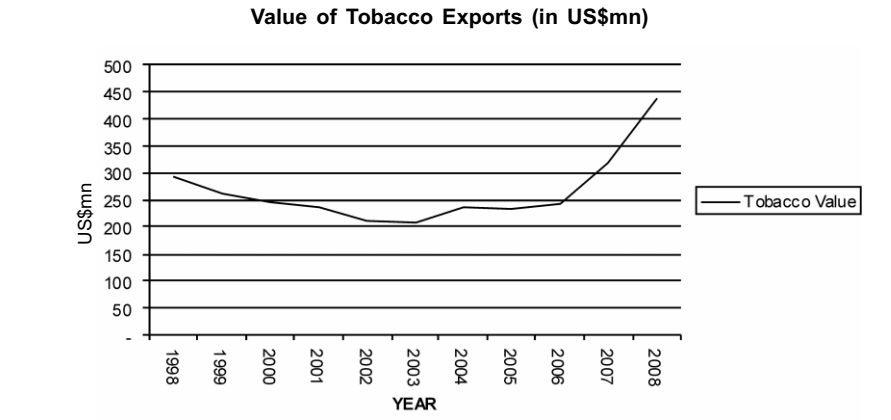
Tobacco remains the country's main foreign exchange earner whose contribution to export earning averaged 56 percent between 1999 and 2008 (figures 3.11 and 3.12). The export performance of tobacco has been varied. In 1990s, there was a substantial increase in tobacco exports both in terms of value and volume. However, in the early 2000s, the exports levelled off due to a number of factors including a decline in prices and productivity. As can be noted from figures 3.11 and 3.12, the volume of tobacco exports showed a declining trend from 2002 to 2004, the period before the Farm Input Subsidy Programme and other government policies that promoted agricultural productivity. The loss in volume of exports led to a decline in the value of exports.

**Figure 3.11: Tobacco Export Volumes**




*Source: Tobacco Control Commission*

**Figure 3.12: Tobacco Export Value**




*Source: Tobacco Control Commission*

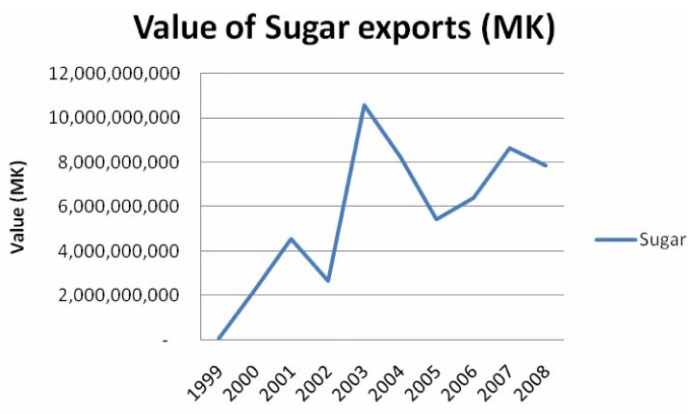
Between 2004 and 2006, there was a sharp increase in exports both in terms of value and volume. This increase coincided with a pickup in productivity in 2005 following the introduction of the targeted farm input subsidy programme. According to the WTO Diagnostic Trade Integrated Study Report (2004), smallholder burley production accounted for 70 percent of total burley production in 2001. The Farm Input Subsidy Programme, therefore, helped smallholder farmers to use fertiliser and increase production per hectare. Consequently, the country increased its tobacco exports and the smallholder farmers' incomes increased.

However, in the subsequent years the volumes went down while the revenue continued to increase. The decline in volume of exports in the 2007-2008 season was mainly due to rains that came late and finished early in other parts of the country. The introduction of the Farm Input Subsidy Programme that led to increased productivity resulted in increased exports of tobacco. The increased level of production resulted in a decline in tobacco prices. Studies done on the tobacco market revealed that there was a cartel among tobacco buyers that resulted in fixing prices at lower levels. This forced the government to intervene and declare a price floor on all tobacco auction floors. As a result, buyers bought less resulting in a slight decline in tobacco exports.

***(b) Sugar***

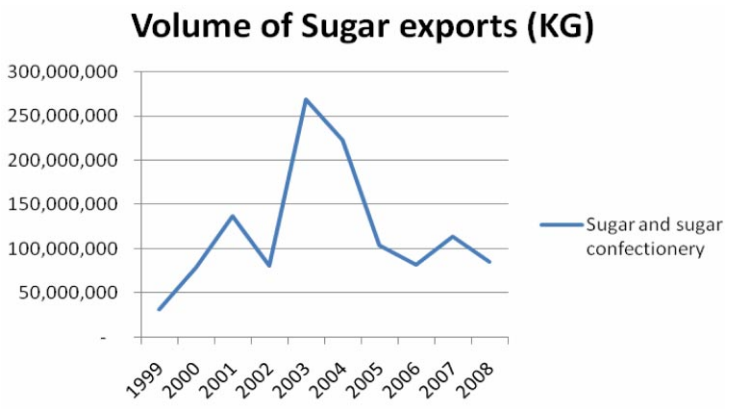
Sugar is the second most important foreign exchange earner for Malawi, accounting for 11 percent of the country's export earnings. Between 1999 and 2004 the contribution of sugar to export earnings registered an increase (figures 3.13 and 3.14). However from 2005 the contribution started to decline reaching as low as 6.8 percent in 2008 from a high of 21.4 percent in 2003. The year 2003 recorded the highest export of sugar both in terms of volume and value. From 2004 both the volume and value of sugar exports went into a steep dive but picked up in 2005 before beginning another downward trend in 2007. This decline in sugar exports coincided with the removal of subsidies on sugar by the EU under the reform of the Common Agricultural Policy. The price of Malawi sugar

**Figure 3.13: Value of Sugar Exports**




*Source: Ministry of Industry and Trade Data*

**Figure 3.14: Volume of Sugar Exports**



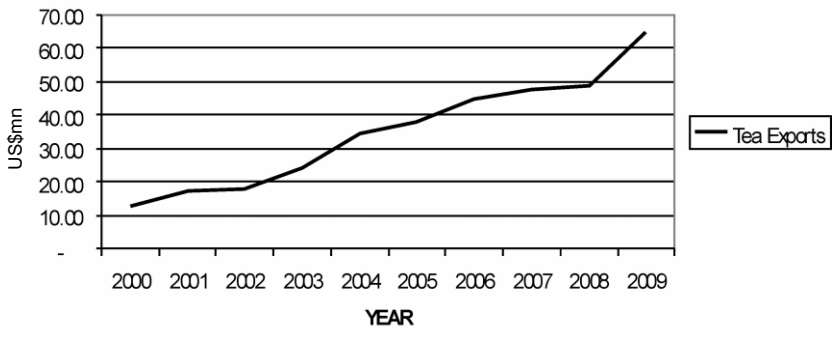

*Source: Ministry of Industry and Trade Data*

imported into the EU was linked to the subsidies which the EU gave to its sugar producers and was, therefore, higher than the world price. Malawi is now exporting to the EU at the world price following the completion of the EU sugar regime reform in September 2009. Despite this development, prospects for sugar exports are still considered to be promising as Malawi is the second low cost producer of sugar in the world (TERA International Group, 2004).

***(c) Tea***

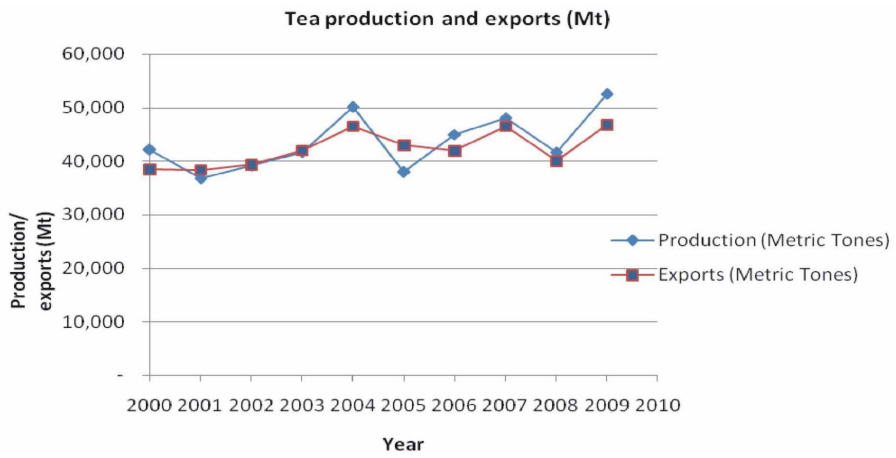
Tea accounts for about 8 percent of the country's revenue from exports, making it the third most important export commodity for Malawi. From 2000 to 2008 there was a steady increase in the value of tea exports before registering a sharp increase in 2009 (figure 3.15). The steady increase in the export value of tea followed the improvement in the price of tea in the international market. However, in terms of volume, tea exports have

**Figure 3.15: Value of Tea Exports**




*Source: Tea Association of Malawi*

**Figure 3.16: Production and Volume of Tea Exports**




*Source: Tea Association of Malawi*

been unstable, as demonstrated in the figure 3.16. For example, in 2006 and 2008, tea production and export volumes experienced sharp decline; however, the value of exports continued to increase mainly as a result of rising tea prices in the international market.

The trend of the volume of tea exports traces the tea productivity trend given in figure 3.5. This means that the slow increase in the volume of tea exports can be attributed to the low tea productivity. Despite the ups and downs in the export volumes of tea, the revenue generated from tea exports still registered an increasing trend, which suggests that the negative variability was compensated by improvement in the world tea prices and the depreciation of the Kwacha particularly during 1999 and 2004.

***(d) Maize***

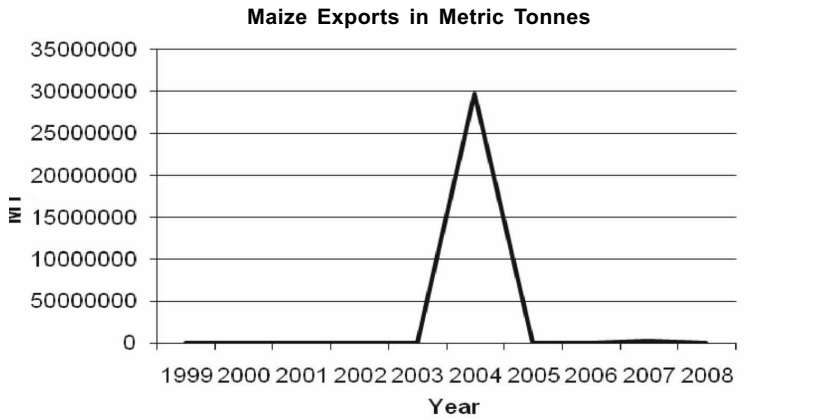
Maize production is mainly promoted for the purpose of achieving food security. However, the experience of last three years has shown that maize is a potential export commodity for Malawi. Following the introduction of the targeted Farm Input Subsidy Programme in 2005, the amount of maize being exported has increased and Malawi has managed to transform from a net food importer to a surplus producer. The introduction of the Farm Input Subsidy Programme has resulted in the improvement in maize productivity, as depicted in figure 3.17, which has made it possible for the farmers to produce beyond their subsistence requirements despite the land shortage problem.

However, the export of maize has been constrained by the introduction of a maize export ban in 2007, triggered by fears of maize shortage. Yet, it turned out that farmers had a lot of maize which they did not have a market for. Similar to tobacco, the increased productivity of maize resulted in high production leading to depressed market prices. Although, the aim of government support to smallholder farmers is to raise household food availability and incomes, the decreased prices threatened to undo the government's objectives. As a result, the government has been announcing minimum (floor) prices for maize each year.

Figure 3.17 shows the quantities of maize exports from 1999 to 2008. The chart might appear rather strange; however the data used in this analysis has not been verified for accuracy. Like most data on trade in this report, the data was obtained from Ministry of Trade and Industry but requires checking for accurate recording. The lowest quantity exported was zero in 2005 followed by 4 metric tonnes in 1999. The highest quantities of maize exports were reported in 2004 to be 297 million tonnes, yet a year before (i.e. 2003) the exports were just 125,649 tonnes and in 2005 there were zero exports. Therefore, the figures do not make sense.

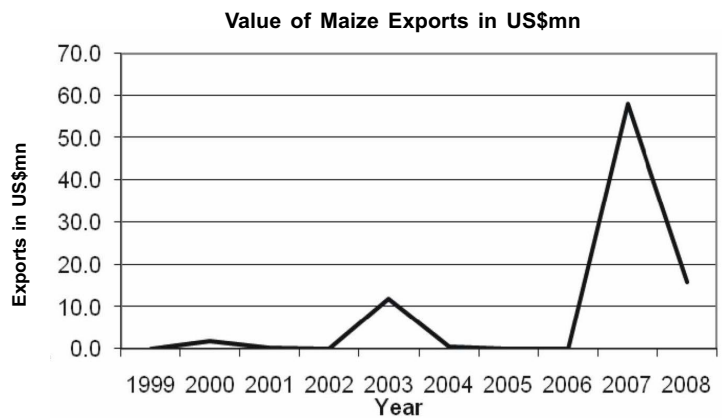
Similarly, results summarised in figure 3.18 may have some error. The highest value of exports of US$58mn looks like an outlier. Furthermore, the value of exports does not agree with the quantities exported by year. The 2004 highest quantities exported correspond to an export value of US$0.6mn and the second highest maize export quantities of 1.9 million correspond to the highest export value of US$58mn.

**Figure 3.17: Quantities of Maize Exports**




*Source: Ministry of Trade and Industry*

**Figure 3.18: Value of Maize Exports**



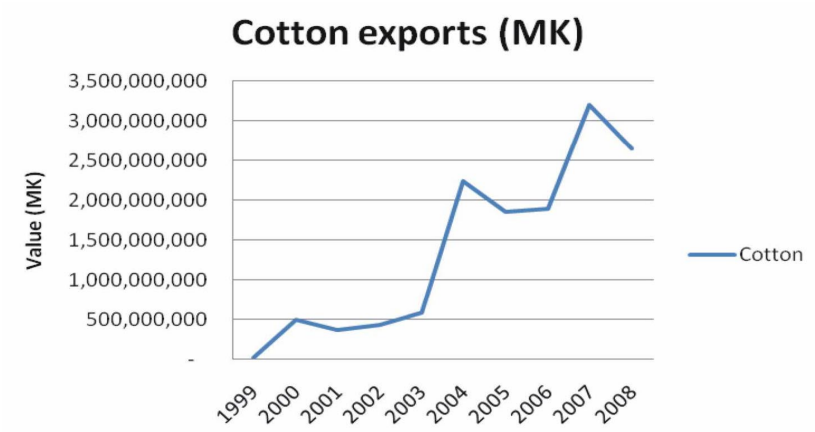

*Source: Ministry of Trade and Industry*

***(e) Cotton***

Cotton is another commodity which has been on Malawi's export list for a long time. Although cotton is a commodity which is highly related to rural livelihood (predominantly grown by smallholder farmers), its export performance has been little. In 1970s its contribution to export earnings averaged 2.9 percent. However, from 1980 to the late 1990s its contribution remained below 2 percent. Lately, there have been some improvements in the performance of cotton exports as its contribution to export earnings has been above 2 percent since 2004. This is attributed to the government farm input support that has resulted in improvement in productivity, as depicted in figure 3.4. Despite the increase in competition in the world market created by the expiration of the multi-fibre agreement in 2005 and the proliferation of synthetic fibre, cotton still remains a commodity with high export potential for Malawi. However, the fall of world cotton prices in 2008 posed a threat to the industry in Malawi. Buyers wanted to buy the crop from farmers at a price which was considered by the government as exploitative, which led to the introduction of a minimum price for cotton.

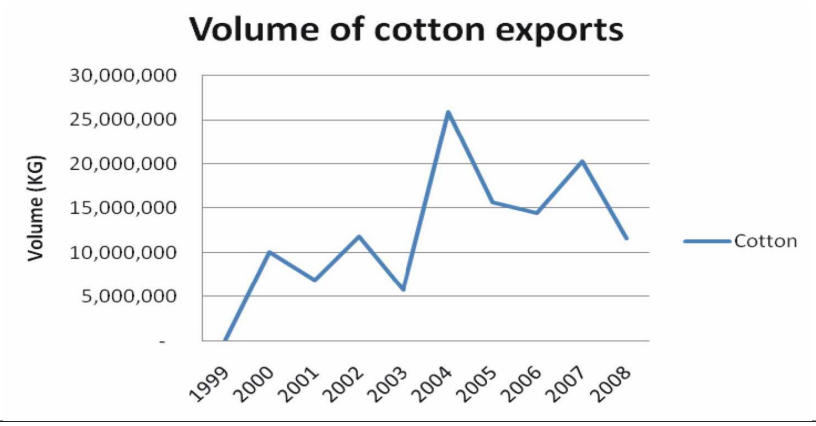
The minimum price was considered by the buyers as being higher than the world market price for cotton. As a result, buyers shunned buying cotton from farmers. Consequently, farmers have accumulated stock piles of unsold cotton from last year. This is depicted in the figures 3.17 and 3.18. While the nominal value of cotton exports has registered an increasing trend albeit with sharp drops in 2004 and 2008, the volume of exports have been declining since 2004. The decline in the volume of exports shows the failure of farmers to find markets for cotton. This is likely to affect cotton production in the 2009-2010 season.

**Figure 3.19: Value of Exports of Cotton**




*Source: Ministry of Industry and Trade*

**Figure 3.20: Volume of Cotton Exports**




*Source: Ministry of Industry and Trade*

***(f) Other Crops***

There are a number of crops which have shown export potential. These include soybeans, groundnuts, macadamia nuts, pigeon peas, rice, and coffee. As noted in figures 3.6, 3.7, and 3.8 on pages 102-103, having experienced declining productivity, rice, groundnuts and soybeans have registered improvement in productivity since 2005. Although the exports of these commodities show variability, the volumes exported in some years demonstrate the huge export potential of these products (table 3.2).

**Table 3.2: Exports of Other Crops (Tonnes)**

| Commodity | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
|---|---|---|---|---|---|---|---|---|---|---|
| Oil Seeds and Fruit | 871 | 6,398 | 7,628 | 4,801 | 23,259 | 26,050 | 25,856 | 13,347 | 21,317 | 6,009 |
| Soy Beans | 4,285 | 8,316 | 21,718 | 21,738 | 3,408 | 861 | 3,247 | 2,749 | 10,654 | 146 |
| Ground nuts | 672 | 510 | 665 | 225 | 3,657 | 8,450 | 3,992 | 5,844 | 7,546 | 13,502 |
| Coffee | 4,811 | 4,691 | 6,846 | 3,047 | 3,148 | 2,034 | 1,833 | 1,311 | 1,649 | 982 |
| Rice | 4,792 | 15,903 | 3,787 | 1,513 | 1,666 | 5,553 | 1,710 | 4,134 | 21,264 | 870,143 |

*Source: Ministry of Industry and Trade*

The export of soybeans increased from 1999 and reached the highest volume in 2002. Except for the increase in 2007, there has been a decline ever since. Groundnuts and rice have shown a similar trend. The major problems with these crops have been market instability.

Table 3.3 gives a summary of Malawi's major export crops from 1999 to 2008. Malawi's trade structure is highly skewed and has remained unchanged since its independence.

| Table 3.3: Malawi's Major Commodity Exports (percent of total merchandise trade) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Description | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
| Tobacco | 53.17 | 60.60 | 59.42 | 61.47 | 49.01 | 44.16 | 53.40 | 61.74 | 52.58 | 64.41 |
| Sugar | 3.36 | 9.85 | 14.79 | 9.22 | 21.41 | 16.30 | 9.16 | 7.07 | 7.95 | 6.81 |
| Tea | 4.38 | 10.86 | 7.96 | 9.71 | 7.05 | 10.16 | 9.98 | 7.45 | 7.12 | 4.58 |
| Cotton | 1 | 2.2 | 1.2 | 1.5 | 1.2 | 4.4 | 3.1 | 2.1 | 2.9 | 2.3 |
| Oil seeds and Fruit (macadamia nuts, soya beans etc.) | 1.69 | 0.85 | 0.29 | 0.21 | 1.25 | 1.89 | 2.75 | 2.04 | 5.30 | 2.51 |
| Cereals (maize and rice) | 1.63 | 1.85 | 0.49 | 0.33 | 4.00 | 0.37 | 0.09 | 0.88 | 8.28 | 2.47 |
| Vegetables and Tubers | 5.79 | 1.38 | 0.77 | 0.93 | 1.12 | 1.54 | 0.71 | 0.87 | 2.08 | 2.05 |
| Edible Fruit and Nuts | 1.59 | 0.90 | 1.00 | 1.25 | 1.43 | 1.87 | 2.13 | 1.11 | 0.96 | 0.67 |
| Beverages and Spirits | 0.71 | 0.37 | 0.05 | 0.03 | 0.01 | 0.02 | 0.10 | 0.26 | 0.30 | 0.58 |
| Spices (pepper) | 2.14 | 0.37 | 0.25 | 0.77 | 0.29 | 0.35 | 0.33 | 0.69 | 0.19 | 0.42 |
| Coffee | 1.17 | 1.78 | 1.46 | 0.69 | 0.53 | 0.46 | 0.70 | 0.42 | 0.45 | 0.25 |
| *Source: Ministry of Industry and Trade Data Base* | | | | | | | | | | |

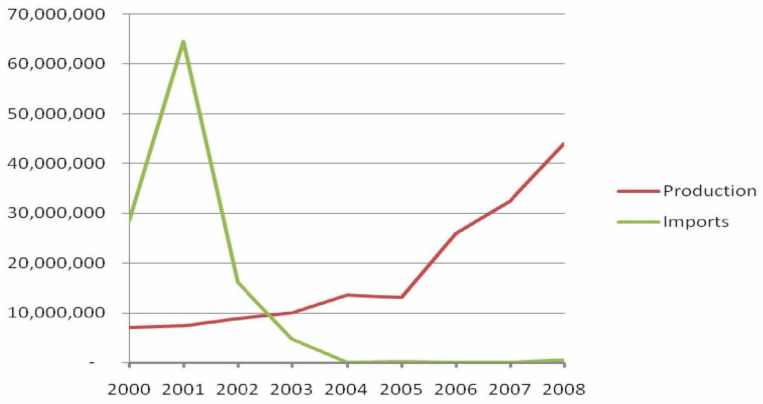
***(g) Livestock Trade***

The livestock is another sector which the government is seeking to promote. The sector is dominated by smallholder production making it a potential sector for improving people's livelihood. The government has instituted a number of measures aimed at supporting the sector. These include provisions of technical support to livestock producers through intensification of extension services and the designation of the livestock products as sensitive sectors. For example, import of table eggs, dressed chicken, and fresh milk is subject to import licensing. This was initially introduced as a means of monitoring import of these products.

However, in 2001 the Ministry of Industry and Trade started imposing restrictions on the import of dressed chicken, eggs and milk by limiting issuance of import licenses. Following this measure, imports of dressed chicken reduced from MK65mn in 2001 to MK16mn in the following year and reduced further to about MK4000 in 2004. Since then, imports of dressed chicken have been close to zero. This signifies the intensification of the restrictions on the import of dressed chicken and eggs and policy support that has seen an increase in the productivity of chickens and eggs. The restriction was imposed to protect the domestic poultry and dairy industries.

According to the Ministry of Industry and Trade the introduction of the restriction has helped Malawi to develop its poultry industry, making it able to export some poultry products to neighbouring countries. This claim is supported by the poultry production statistics provided by the Department of Animal Health and Industry. Production of chickens increased from 10 million birds in 2003 to 13 million birds in 2004 and doubled in 2006. Figure 3.21 shows trend of imported dressed chickens and the production of chicken.

**Figure 3.21: Trends in Imports and Production of Chicken**




*Source: Ministry of Industry and Trade and Department of Animal Health and Industry*

As the figure 3.21 illustrates, the reduction in imports of dressed chicken was accompanied by a substantial increase in the domestic production of chicken. This suggests that imports of dressed chicken were negatively affecting the domestic production of poultry. From this, one can conclude that trade liberalisation should not be wholesale. Sectors that have growth potential need to be protected from import competition. This has a direct effect on the livelihoods of rural and other small livestock farmers.

While production of livestock has been increasing over the years, there has not been a corresponding increase in exports of livestock except for eggs, particularly hatching eggs. Since 1999 exports of livestock and livestock products have accounted for less than 1 percent of Malawi's total trade. Most of the livestock products are consumed domestically. Table 3.4 shows Malawi's exports of livestock. Between 2001 and 2008 the country's exports of eggs, particularly hatching eggs, and day old chicks increased substantially. This followed the establishment of hatcheries which export to the neighbouring countries.

However, the exports of livestock and livestock products are not consistent. This trend may be a demonstration of variability in demand in the export markets. Fish is another product whose export has been increasing since 2001. The exported fish are mainly ornamental. Most of the livestock products are exported to neighbouring countries, namely Zimbabwe, Zambia, Tanzania and Mozambique. The country has yet to witness substantial changes in exports of livestock products such as meat.

For a decade international commodity prices have been going up, reaching a climax in mid 2008. The impact of the commodity price boom on Malawi's exports has been less pronounced (Briancon and Lightfoot, 2009) as there has been no substantial increase in commodity exports. Nonetheless, the high prices helped to mitigate the impact of high fertiliser and fuel prices which accompanied the commodity boom.

| Table 3.4: Exports of Livestock and Livestock Products 2001-2008 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Description** | **2001** | **2002** | **2003** | **2004** | **2005** | **2006** | **2007** | **2008** |
| Live Animals | 12,627,659 | 12,375,761 | 12,000 | 892,386 | 3,459,938 | 2,710,668 | 23,560,864 | 185,969,884 |
| Meat and Edible Offal | 26,000 | - | - | 5,000 | 305,979 | 1,926,531 | | 61,565,146 |
| Fish and Crustaceans Mollusks and other Aquatic Invertebrates | 4,445,212 | 9,341,896 | 55,141,555 | 79,914,531 | 41,932,241 | 210,900,775 | 36,296,570 | 145,652,258 |
| Dairy Products; Birds' Eggs; Natural Honey; Edible Products of Animals Nests | 2,260,942 | 491,426 | 4,472,677 | 255,385 | 2,869,174 | 22,448,125 | 28,269,474 | 1,574,349,557 |
| Products of Animal Origin | 895,588 | - | 144,852 | 123,029 | 248,637 | 1,000 | 42,000 | 56,096,661 |
| Total Livestock Exports | 20,255,401 | 22,209,083 | 59,771,084 | 81,190,331 | 48,815,969 | 237,987,099 | 88,168,908 | 2,023,633,506 |
| Percentage of Total Exports | 0.07 | 0.08 | 0.12 | 0.16 | 0.08 | 0.26 | 0.08 | 0.61 |
| *Source: Ministry of Industry and Trade* | | | | | | | | |

The skewed export structure has remained in place since the 1960s despite government's efforts to diversify its agricultural exports through the promotion of other cash crops such as spices, nuts, horticulture and pulses. The continued dependence on a few export commodities signifies the fragility of Malawi's economy and the serious challenges that the government is facing in its effort to diversify the economy.

### 3.4.3 Malawi's Imports

Malawi's imports are dominated by fuel and machinery, which constitute 11 and 7 percent of the country's total imports, respectively. Fertiliser is another mostly imported product which in 2008 accounted for 18 percent of the country's imports. As indicated above, Malawi faces a growing trade imbalance as growth in imports outpaces growth in exports. This poses a serious challenge to the country's balance of payments as it has to increasingly depend on debt and aid to finance its import trade. The challenge has become more apparent following the poor prices of tobacco at the auction during the 2008-2009 season, which led to an acute shortage of foreign exchange. In early 2010, the economy was surviving on less than three months import cover of foreign exchange. This negatively affected the country's propensity to import; including essential commodities like fuel.

Apart from the formal trade, there is a high degree of informal trade that takes place between Malawi and its neighbours. The informal trade mostly involves agricultural commodities. As can be seen from the table 3.5, Malawi imports substantial quantities of maize through informal trade. Most of the maize imported into Malawi informally comes from Mozambique. It is worth noting that even in the past four years when Malawi has been producing surplus maize, very little is exported through informal trade. With the ban on formal exports of maize one would expect that most of the maize would be exported through informal channels. However, this is not the case. This may be attributed to the fact that the neighbouring countries may have also experienced a good maize harvest.

**Table 3.5: Informal Imports of Selected Agricultural Commodities**

| Years | Maize | | Rice | | Beans | | G/nuts | |
|---|---|---|---|---|---|---|---|---|
| | Imports (Kg) | Exports (MT) | Imports (MT) | Exports (Kg) | Imports (Kg) | Exports (Kg) | Imports (Kg) | Exports (Kg) |
| 2004 | 76,206 | 687 | 2,523 | 672 | 3,908 | 509 | 405 | 3,569 |
| 2005 | 165,451 | 1,205 | 2,952 | 124 | 5,413 | 156 | 243 | 7,942 |
| 2006 | 79,525 | 3,766 | 217 | 1,352 | 6,699 | 589 | 144 | 5,410 |
| 2007 | 165,453 | 7,493 | 302 | 4,433 | 5,844 | 1,407 | 960 | 10,181 |
| 2008 | 52,340 | 359 | 167 | 1,091 | 4,537 | 123 | 53 | 1,307 |
| 2009 | 33,661 | 2,987 | 30 | 1,647 | 2,369 | 192 | - | - |

*Source: FEWSNET*

### 3.4.4 Malawi's Trading Partners

With regard to export markets, the EU and the Southern Africa Development Community (SADC) constitute Malawi's major export destinations, absorbing about 40 and 31 percent of the country's total exports, respectively. Within SADC; South Africa, Mozambique, Zimbabwe and Zambia are major trading partners. South Africa alone accounted for about 10.4 percent of the country's exports in 2008. The Common Market for Eastern and Southern Africa (COMESA) is increasingly becoming a key market for Malawi following the establishment of the COMESA Free Trade Area (FTA) in 2000. COMESA accounts for 12 percent of Malawi's exports. The products that are exported to COMESA, mainly Kenya, Egypt, and Uganda, include tobacco, sugar, and tea. Before 2000 these countries were outside Malawi's traditional markets. The COMESA FTA has therefore helped Malawi to diversify its market within Africa. Other markets include the US and Asia, particularly India, China, and Japan. Exports to the EU include tobacco, sugar, tea, coffee, and cotton.

The same countries/group of countries constitute Malawi's source of imports with SADC being the number one followed by the EU. Within SADC, South Africa and Mozambique are major import sources for Malawi. The dominance of South Africa as one of Malawi's major sources of imports is a result of Malawi's need to use their seaports for exporting.

### 3.4.5 Malawi's International Trade Routes


There are four main border crossings in Malawi through which international freight is routed. The borders are shown in the map to the right. These routes are:

- Mchinji border post which is used for trade destined to and from Zambia and the Democratic Republic of the Congo.
- Mwanza is on the southwest border with Mozambique. It handles traffic to and from the seaport of Beira in Mozambique and South African ports as well as the southern African region in general including South Africa itself.
- Nayuchi is on the southeast border with Mozambique. It serves trade passing through the seaport of Nacala in Mozambique. This route is serviced by railways.
- Songwe is in the northern part of Malawi, on the Tanzanian border. It serves the Northern Corridor traffic destined to and from the Port of Dar Es Salaam in Tanzania.

There are other border posts scattered along Malawi's border line with its neighbours which are mainly used for cross-border trade with neighbouring countries.

As can be seen from the table3.6, Mwanza border post handles the largest proportion of Malawi's import and export trade. In 2003, it accounted for approximately 62.4 percent of

the total export/import traffic. It is followed by Nayuchi, which handled 16.1 percent of the total export/import traffic in 2003.

The volume of trade handled by each of the border posts indicates the private sector's preference of seaports for trade. Ordinarily, one would expect that proximity of the seaport to Malawi would be the main criteria for selection of the seaports. However, it is evident that the largest proportion of Malawi's trade comes from and passes through South Africa (port of Durban), which is farther when compared to the other ports in Mozambique and Tanzania. Durban is about 2,640 km from Blantyre while Nacala and Beira are 815 km and 568 km respectively. Clearly, there are other considerations that the private sector has in selecting the ports. The study by TERA International Group Inc. (2005) examined each of the points and came up with the following profiles:

**Table 3.6: Trade Traffic Through Malawi's Border Posts (2003)**

| Border Post | Exports | | Imports | | Total | |
|---|---|---|---|---|---|---|
| | Volume (000 Tonnes) | Share (%) | Volume (000 Tonnes) | Share (%) | Volume (000 Tonnes) | Share (%) |
| Mchinji | 68.58 | 12.70 | 50.55 | 9.40 | 129.03 | 11.86 |
| Mwanza | 352.94 | 65.37 | 325.6 | 60.55 | 678.56 | 62.39 |
| Nayuchi | 61.56 | 11.40 | 113.90 | 21.18 | 175.46 | 16.13 |
| Songwe | 56.83 | 10.53 | 47.7 | 8.87 | 104.53 | 9.62 |
| Total | 539.91 | 100.00 | 537.75 | 100.00 | 1,087.58 | 100.00 |

*Source: TERA International Group Inc. (2005)*

***(a) Dar-Es-Salaam Port***

The Dar Es Salaam port is a natural port for the northern part of Malawi, with a distance advantage for the northern region of 1,300 km (from Mzuzu) as compared to 1,358 km to Nacala, and 1,315 km to Beira. In terms of port facilities, Dar-Es-Salaam was found to have adequate facilities and handled more than 4.5 million tonnes per annum, of which about 100,000 tonnes per annum was cargo destined to and from Malawi. Malawi invested in bonded inland cargo facilities at the port and at Mbeya, where goods are transhipped from rail to road, making this northern corridor a multimodal transport system. It takes one and a half days to transport cargo from Dar-Es-Salaam to Mbeya by rail.

Although this multi-modal system brings in an additional handling cost, the reduced cost of rail offsets or outweighs this additional cost. The cargo from or to Dar-Es-Salaam passes through only two customs border posts (located at Songwe on the Malawian side and Kasumulu on the Tanzanian side). Therefore, the cargo is subjected to customs clearance procedures on the Tanzania side as well as on the Malawian side. Although Malawi and Tanzania are both members of the SADC FTA, under which harmonisation of customs procedures is one of the programmes being pursued, the clearance process is still cumbersome as it is done manually and is prone to abuse by customs officials. In addition, the route on the Malawian side has a number of check points which can be a source of further delays. It is reported that it takes 10 days for a round trip by road since the shipper has to wait for cargo to take the return trip.

***(b) Nacala Port***

This is a natural port for central Malawi and almost equidistant with Beira from Lilongwe by rail (989 km to Nacala and 948 km to Beira). This is the only port that is served by a railway from Malawi making it a cheaper route. However, according to TERA International Group Inc., Nacala has problems with port and rail operational efficiency and reliability, as well as infrastructure and equipment capacity. The port lacks sufficient handling equipment for both container movements within the port area and for loading on and off the ships. It relies on ships' gear for loading and unloading equipment, causing delays. Consequently, very few liners dock at this port. The rail is in good condition except for a 77 km section between the Malawi border and Cuamba in Mozambique which requires some repairs. On this section trains usually slow down to as low as 15-20 km per hour. In Malawi, there is also a shortage of available trains and rolling stocks. The road to Nacala is in bad condition and is rarely used by transporters.

Due to the problems indicated above, the port currently serves as a feeder port to both Durban and Dar-Es-Salaam. Although the port is small, it has excellent development potential because of the unrestricted access to the port, which allows ships to dock easily. There is need for the governments of Malawi and Mozambique to consult stakeholders, donors, and other countries with interest in the port to find means of improving the port in order to increase its efficiency.

***(c) Beira Port***

Located some 568 km from Blantyre, Beira is a natural port for southern Malawi. It is larger than Nacala, well-managed, and has modern container handling facilities which attract more vessels. The main disadvantage of Beira is the restricted access due to the siltation of the 27 km long access channel, which causes operational difficulties. Beira handles about 247,000 tons per annum of Malawi traffic, which is about 30 percent of Malawi's international trade by volume (excluding SADC). Despite its relative proximity, it takes about five days for a return trip to Beira due to poor road conditions. This route has two border posts, one at Mwanza on the Malawian side and another at Zobue on the Mozambican side. The Mwanza customs border post is computerised but faces logistical problems. Both Malawi and Mozambique are members of the SADC FTA and have, therefore, harmonised their customs procedures. However, operation of two separate border posts creates the duplicity of clearance processes.

***(d) Durban Port***

Durban is Africa's largest cargo port in terms of the amount of freight handled. The distance from Blantyre to Durban is 2,340 km, which is almost three times farther than Nacala or Beira. It has the advantage of being served by a road which is in a good condition. Transporters take seven days for a round trip to Durban. The cargo has to pass through six border posts involving three countries. The borders posts are: Mwanza in Malawi, Zobue and Cuchamano in Mozambique, Nyamapanda and Beit Bridge in Zimbabwe, and Messina in South Africa. The administrative and customs procedures at these border posts coupled with the numerous check points in the three transit countries can be a source of delays for transporters. Despite these, the port handles an estimated 206,000 tonnes per annum of Malawi's imports and exports.

Many importers and exporters from Malawi use Durban because of the frequency of vessel arrivals, discounted freight rates and good communication with customers on the status of their consignments. For cargo that is time sensitive, such as agricultural commodities, the condition of road transport to the port, frequency of vessel calls and consistent communications become important considerations. This explains the choice of the private sector to choose Durban as their preferred port. The other fact influencing their choice is that South Africa is Malawi's major source of imports. Therefore, exporters have an opportunity to benefit from reduced costs arising from return haul.

The route to South Africa also handles about 460,000 tons of cargo between Malawi and South Africa that is not destined for overseas shipment. All the countries involved in this route are members of the SADC FTA under which measures to facilitate the free movement of goods and services and the harmonisation of customs procedures and road transport requirements are being implemented. There are, however, still some barriers which transporters face particularly when transiting through Mozambique. These include frequent check points, introduction of scanning charges, and some unexplained payments.

### 3.4.6 On-going/Planned Corridor Development Projects

While pursuing ways to improve the existing trade corridors government has also identified other corridors which are considered to be more efficient than the existing ones. These include the Mtwara Corridor and the Shire-Zambezi waterway. The Mtwara corridor is a multi-modal transport corridor which seeks to link Malawi to the Indian Ocean, by rail, from the port of Mbamba Bay on Tanzanian side of Lake Malawi to the port of Mtwara. The plan envisages that goods destined for Malawi are unloaded at the Mtwara port and transported to Mbamba Bay by rail and finally shipped to various destinations along Lake Malawi. This project was vigorously pursued during the previous regime; however, since the new government came into power, there has not been much policy talk about the project. Nonetheless, the government has plans to revitalise handling facilities at the Chilumba port, which will be the main link to Mbamba Bay port on the Tanzanian side.

Currently, the project which has dominated the government's agenda is the Shire-Zambezi waterway which is expected to link Malawi to the Indian Ocean through the rivers of Shire and Zambezi to the port of Chindi in Mozambique. This waterway used to be the communication and trade route for the white settlers during the colonial era. Feasibility studies for the project have been conducted and some construction works for an inland port along the Shire River in Nsanje are under way. Goods destined to and from Malawi will be transported from the ports of Beira and Nacala by bulges all the way to Nsanje from where goods will be transported by rail to various destinations including Zambia, the Democratic Republic of Congo, and Zimbabwe. It is expected that the route will reduce Malawi's cost of production by over 50 percent. The success of this project largely depends on the cooperation of the Mozambican government. There has, however, been no explicit commitment from Mozambique regarding its support for the project.

### 3.4.7 The Effect of Landlockedness on Export Decisions

Malawi has favourable agronomic conditions for the production of a range of tradable agricultural commodities. Realising the high risk associated with the dependence on a narrow export base, the government has been putting in efforts to promote the production of other export crops in addition to tobacco, sugar, and tea, which currently dominate the country's export trade. The commodities that have shown potential for production and export include cotton, coffee, groundnuts, pigeon peas, beans, macadamia nuts, cashew nuts, soybeans, and paprika. Although maize is mainly linked to the attainment of food security, it is also a crop that has export potential. However, despite government's effort to promote the production of these commodities, their production volumes still remain low. In addition to productivity problems, there is also the problem of competitiveness in both the regional and international markets.

Agricultural exports from Malawi compete for the same buyers with countries within and outside of Africa. Being a small producer of these commodities, Malawi is a price taker on the international market. This means that the high transaction costs which the country faces due to it being landlocked cannot be factored into the price of its exports. These costs are transferred to the producers by the intermediaries, thereby eroding the producer's real income from the commodity sales. Because of the low returns, the producers are less motivated to produce these crops. This partly explains why crops such as maize, beans, soybeans, and groundnuts have not been taken up significantly by the estate subsector. Most of these crops are grown by smallholder farmers and are mostly grown as rotational crops, not necessarily for their market value.

The failure by the estate sub-sector to adopt new cash crops became more evident in the late 1990s and early 2000s when tobacco prices on the auction floors collapsed. Most estate farmers abandoned their land instead of planting alternative crops. Even now some estates still remain uncultivated. Consequently, this is happening at the same time that Malawi is seeing an increase in the number of private traders involved in buying and exporting these alternative crops.

Addressing the problem of high transport cost through the improvement of transport efficiency and exploration of cheap transport routes would increase the returns to the farmers and therefore motivate them to produce and export more. The other factor that affects production decisions for external markets is the market demand requirements, such as quality requirements and quantity. Quality demands have greatly affected the volumes of exports, especially of raw food crop products like groundnuts.

### 3.4.8 Trade Policy Environment

Malawi's trade policy is oriented towards addressing the disadvantages that the country faces as a result of it being landlocked. The policy is based on the MGDS which is Malawi's medium term development strategy crafted to meet the Malawi Vision 2020. The MGDS was launched in 2006 and runs until 2011.

The main goal of the MGDS is to foster wealth through sustainable economic growth and infrastructure development as a means of achieving poverty reduction. This is expected to transform the country from being a predominantly importing and consuming

economy to a predominantly manufacturing and exporting economy (Ministry of Economic Planning and Development, 2006). The specific sectoral policy declarations are clustered into six thematic areas, namely:

i. sustainable economic growth
ii. social protection
iii. social development
iv. prevention and management of nutrition disorders, HIV and AIDS
v. infrastructure development
vi. improved governance

Trade policy is by nature an issue that cuts across many sectors and relates to all the six thematic areas both directly and indirectly. Specifically, trade policy issues are handled under the sustainable development pillar whose objective is to trigger economic development by transforming the country from a consumption-based economy to one based on production. This essentially entails the creation of an environment that is conducive to efficient and effective operation of the private sector. In this regard, the trade policy builds on the market oriented policies implemented under the World Bank/ IMF sponsored SAPs adopted in the late 1980s. Some of the trade policy reforms undertaken under SAPs include:

- reduction of tariffs to 25 percent, as a maximum tariff, that can be levied on imports;
- streamlining the tariff bands to only four;
- removal of quantitative restrictions such as quotas, and import/export bans;
- elimination of multiple customs documentation;
- deregulation of price controls;
- removal of restrictions on operation of businesses;
- removal of controls on foreign exchange;
- phasing out of discrimination between imported and domestically produced products; and
- abolition of import and export licensing requirement except for those maintained for the protection of the environment, health, and security of the people and animals.

Implementation of these reforms has made Malawi one of the most liberal economies in Southern Africa (WTO, 2004). However, the opening up of the economy exposed the vulnerability of the domestic industry to import competition. As a result, the country's industrial performance decreased (Munthali, 2004). The performance of the agricultural sector has also failed to match expectation. This poor trade performance is attributed to the fact that the SAPs did not address non-price incentives, which are just as crucial as price incentives. Therefore, through the MGDS, the government seeks to address this imbalance while consolidating the trade liberalisation drive.

Specifically, the government seeks to promote sectors with high potential for growth. These include tourism, mining, agro-processing, manufacturing and integrated cotton industry. The traditional sectors of tea, sugar and tobacco are considered to be important sub-sectors which should be used to launch the diversification of the economy. In this regard, the goal is to address supply-side constraints that the private sector is facing. Such constraints include poor utility supply, high transport cost, erratic power supply and high cost of doing business. The policy also seeks to address obstacles that

Malawi's exports face in international markets. The challenge for the government is whether or not the promotion of these high growth areas will trigger a positive supply response from the private sector.

### 3.4.9 Agricultural Trade and Trade Facilitation

Agricultural commodities are highly perishable and, therefore, require a good handling system, which includes an efficient transportation system to the markets. The long distance to seaports as outlets to international market puts Malawi at a big disadvantage. While in transit, the cargo is subjected to checks and inspections, which contribute to the long delivery period. The net effect of Malawi's geographical disadvantage is that it can only export products which are not time sensitive. On a number of occasions nuts exported from Malawi have been denied entry into the EU due to high aflotoxin levels. However, exporters have argued that the aflotoxins were within the acceptable levels when the nuts were being dispatched. This leads one to believe that the aflotoxins developed while the goods were in transit.

The sugar industry provides a good example of how Malawi's exports are affected as a result of the country being landlocked. According to Illovo Sugar Company, the costs of sending sugar to Beira and Nacala averaged US$60/tonne in 2006-2007 and the cost has since increased to US$70/tonne. The company prefers to use the Durban port because the routes to Nacala (by rail) and to Beira (by the road) are not reliable. The rail lines that serve the route to Nacala are poorly maintained, lack adequate rolling stock, and experience occasional wash-aways during the rainy season. When the company uses the Beira and Nacala ports for shipping, delivery delays are expected. Exporting through these parts is a risky venture because the chances of missing delivery days and deadlines are high.

While in transit, transporters are occasionally faced with transport levies or fee. Although the fee is no longer in place, there is a fear that such charges may resurface since they were imposed by provincial governments. There have been other cases when transit countries have demanded payment of transit fee. This was the case for sugar transiting through Zambia to Democratic Republic of the Congo. After discussions under COMESA, the charges have since been phased out. Recently, the Government of Mozambique gave notice of the introduction of scanning charges on cargo transiting through Mozambique. These charges add to the already high transport cost.

Cognisant of the negative effects that being landlocked has on trade, the government has initiated a number of reforms aimed at reducing transaction costs for importers and exporters. Efforts to improve the country's transportation networks, particularly those that connect the country to its markets, are afoot. Plans are also underway to link the country to the sea through the Shire and Zambezi rivers. This programme is estimated to reduce the transportation cost by over 50 percent. There are also plans to rehabilitate the railway system, including the 77 km section to Nacala.

Efforts are also being made to reduce the time it takes to go through customs procedures. Currently, importers and exporters are only required to use a single customs document. Except for some requirements regarding health, security, and environmental

considerations for some products, most import and export licensing requirements have been eliminated. Nevertheless, recently the list of goods requiring licensing was increased by the Ministry of Industry and Trade to account for problems relating to food security. However, some of the products added to the list had very little to do with food security, including products such as vegetables and some pulses.

The Malawi Revenue Authority (MRA) has computerised some of its border posts (Mwanza and Kamuzu International Airports) in an attempt to speed up the clearance process of goods. There are also plans to computerise all key border posts. In addition, they have introduced a risk based approach to clearing goods, meaning that not all cargo has to be inspected before clearance. This has helped to reduce the time transporters stay at the border post.

The country has also intensified cooperation with regional partners within the framework of SADC and COMESA, which are implementing trade facilitation schemes as part of their regional integration programmes. The schemes being implemented include:

***(a) Harmonisation of Customs Documentation and Procedures***
Both in SADC and COMESA, members have adopted common customs documents and procedures. These are meant to make it easier for importers and exporters to comply with customs requirements without wasting time.

***(b) Introduction of a Code on the Handling of Transit Goods***
Both the COMESA Treaty and the SADC Protocol on Trade have provisions that require member countries to facilitate the movement of goods transiting through their territories, destined to and coming from other member countries. The countries are not expected to subject the cargo to unnecessary inspections or measures that could constitute barriers to the free movement of the cargo.

***(c) Yellow Card Scheme***
This scheme is being implemented under COMESA and seeks to facilitate the movement of vehicles among COMESA countries. It is a third party vehicle insurance scheme which enables transporters to take up vehicle insurance cover in any COMESA country and use it throughout COMESA countries. Before this scheme, transporters had to get insurance cover in every transit country, increasing transaction cost. However, Malawi does not benefit much from this scheme since most of its cargo passes through countries which are not members of COMESA, namely Mozambique, South Africa and Tanzania. There has been an attempt to include SADC member states into this scheme as part of a collaborative programme between SADC and COMESA; however, SADC member states, particularly Mozambique, are not keen to participate in the scheme. As a member of SADC, Malawi must negotiate to create a similar programme under SADC as an alternative to having the SADC countries participate in the COMESA programme.

***(d) Customs Bond Guarantee Scheme***
This is another programme under COMESA whose purpose is to facilitate the transportation of goods within COMESA member countries. It allows exporters and importers to take up a customs bond in one COMESA country to guarantee the transit

of the goods in any COMESA country. This bond acts as an assurance that the goods will not be offloaded in the transit country. Once the system is launched, it will remove the current practice where a transporter is issued a bond at every border of entry and surrenders it when they exit. Sometimes the process of redeeming the bond takes a long time; however, similar to the Yellow Card Scheme, Malawi will not benefit unless Tanzania, Mozambique and South Africa are involved in the programme.

***(e) Harmonisation of Axle Load***

This programme requires COMESA member countries to harmonise their maximum allowable load for trucks. Prior to this programme, countries used different maximum axle loads which caused a lot of problems for transporters as they could be in violation of the requirement in one country but within the requirement in another country.

***(f) Harmonisation of SPS Measures and TBT***

Both SADC and COMESA have programmes which require member states to harmonise their SPS and TBT (product standards). This seeks to create certainty of entry requirements to markets of member states.

### 3.4.10 Analysis of Main Stakeholders

The challenges that Malawi faces from being landlocked is aggravated by the institutional constraints which relate to the country's trade-related capabilities (WTO, 2004). These include:

- lack of sufficient or appropriately trained human resources;
- management of relevant institutions;
- lack of financial and material resources; and
- inadequate communication with both internal and external stakeholders.

Since trade policy cuts across many sectors, there are several institutions which are engaged in activities that have a bearing on trade either directly or indirectly. The major ones are:

***(a) The Ministry of Industry and Trade***

The Ministry of Industry and Trade has primary responsibility for trade policy analysis, formulation, and implementation. However, the Ministry does not have sufficient resources to carry out its functions and has customarily been viewed as a "second tier" entity within the context of government policy making (WTO, 2004). The Ministry of Industry and Trade has to do a great deal of internal negotiations with other key players within the decision-making apparatus in order to institute trade policy reforms. The delay in effecting tariff reductions under the SADC Trade Protocol[5] is one case where the Ministry undertook extensive internal negotiations for the country to fully comply with its tariff reduction commitments.

Furthermore, the Ministry has delegated some of its responsibilities, particularly ones relating to policy implementation to parastatal organisations. These organisations are under resourced both financially and in terms of human capital. There is also no synergy among the institutions that are delegated to implement trade related policies, affecting the overall effectiveness of the Ministry.

***(b) Malawi Export Promotion Council***

The primary function of the Malawi Export Promotion Council (MEPC) established in 1971, is to promote the export of agriculture and manufactured goods from Malawi. MEPC organises trade shows and "Malawi Days" to promote domestic products. The mission statement for MEPC is in line with the government's export diversification policy, aimed at reducing the country's dependence on a few traditional export products. MEPC uses an integrated approach covering five key areas which include product development, market development, export trade facilitation, exporter extension service, and trade information service.

MEPC suffers from serious technical and financial limitations. The Council does nothing but conduct periodic market surveys and organise exhibitions. It has no statistics on the country's export performance, and very limited communication with the exporters to the extent that they do not know what products are being exported and to which markets. The capacity weaknesses of MEPC may be a binding constraint to the country's export diversification effort.

***(c) Malawi Investment Promotion Agency***

The Malawi Investment Promotion Agency (MIPA) is a statutory body whose main objective is to facilitate all aspects of the investment process, both domestically and internationally. MIPA is responsible for providing relevant services to investors to promote inward investment. The most serious problem facing MIPA is that it has suffered from inadequate funding, and this has to some extent affected the Agency's ability to carry out some of its core functions.

As part of its functions, MIPA facilitates the approval of permits for business establishment. For this purpose, MIPA works as a one-stop facilitating agency, its ultimate goal being to establish a one-stop investment centre. There is currently no consistent monitoring of new investors since the investment figures maintained by MPEC are mere investment pledges.

A decision has been taken by the government to merge MIPA and MEPC. The delay in implementing this decision has negatively affected the operation of the two agencies, making it crucial for the government to undertake the implementation urgently.

***(d) Malawi Bureau of Standards***

The Malawi Bureau of Standards (MBS) was established in 1972 to set and implement standards and conduct conformity tests on selected imports and exports. Over the years, an increasing proportion of its funding has come from revenues generated by its quality assurance and testing activities. There are three technical divisions operating within MBS: (i) chemical and textile; (ii) engineering and materials; and (iii) food and agriculture. For food products, MBS usually uses CODEX standards. However, in some circumstances it has used Indian or South African standards as a reference for local standards. The Bureau has set standards for some of the country's major exports including tea, tobacco and sugar, yet it does not conduct any testing of these commodities.

The Bureau faces serious infrastructure and equipment constraints. Since its laboratories are not up to date, it is not accredited to certify exports. In order to improve the capacity of MBS, the government has intensified the soliciting of funding from cooperating partners and the EU has expressed interest to provide funding under the European Development Fund.

***(e) Ministry of Agriculture and Food Security***

Since Malawi is an agriculture based economy, the Ministry of Agriculture and Food Security plays a key role in promoting the country's economic development. The Ministry is entrusted with the responsibility of creating a favourable policy environment for the development of the agricultural sector as well as providing extension and agricultural research services to farmers. In the area of trade facilitation, the Ministry is responsible for administering SPS certification which involves issuing SPS certificates and checking compliance with SPS requirements.

While the Ministry has been given priority consideration by the government in terms of funding, the country has experienced a breakdown in extension services both for crops and animal production. Farmers are not receiving technical advice on new farming methods. Therefore, they are not using new agricultural technologies and are experiencing land degradation problems, which result in a decreased productivity. This problem has been compounded by the fact that agriculture research has also been neglected. A greater part of funding to the agricultural sector has been directed towards subsidising agricultural inputs for vulnerable households, which raises the problem of sustainability.

With regard to issuance of SPS certificates, the Department of Research has been designated to be a certifying authority. The challenge, however, is that the department is centralised, making it difficult for exporters located away from the certifying centres to access the services.

***(f) The Private Sector***

The private sector is the engine of Malawi's economic growth. It plays a key role in producing goods and services for domestic use and for exporting. Following the liberalisation of the country's economy, the role of the private sector has become more pronounced. The government has scaled down its involvement in buying and selling agricultural inputs and products, leaving these roles to the private sector. However, private sector involvement in the agricultural sector is driven by profit maximisation motive. This has created problems, particularly in rural areas, where transaction costs are high and can result in the erosion of profits. Therefore, the private sector tends to shun operating in rural areas.

Malawi's private sector is characterised by a "missing middle", with too few businesses in-between the larger corporations and the micro enterprises (Record and Davies, 2007). It faces a number of challenges which include the lack of protection from unfair competition, poor transport infrastructure, unreliable supply of energy and utilities, and low use of technology. There is also evidence that the private sector in Malawi faces liquidity problems due to limited access to credit. The banks emphasis on lending against collateral has disadvantaged companies, particularly those involved in trading,

which do not have sufficient collateral. This problem also extends to the issuance of letters of credit for import and export businesses. These problems are more pronounced for small-scale traders that act as a link between farmers and exporters/importers.

For the private sector to play its role, the government needs to address these challenges and put in place measures that will result in the emergence of robust medium sized enterprises.

***(g) Smallholder Farmers***

Smallholder farmers play a very crucial role in Malawi's agricultural sector. Other than being dominant producers of food crops, smallholder farmers are also key producers of Malawi's export commodities such as tobacco, cotton, and coffee.

However, despite their key role in agriculture, smallholder farmers operate under unfavourable conditions. They face land degradation and insufficient use of new agricultural technology which means that they have problems increasing production. They also face the problem of access to credit and markets. These problems have become more pronounced with the scaling down of the role of ADMARC in agricultural marketing. Smallholder farmers, particularly those in rural areas, have problems accessing inputs and selling their produce since ADMARC does not have sufficient liquidity to operate markets in these areas. These problems have undercut the contribution of smallholder farmers to the country's agricultural sector.

## 3.5 Linkages of Agricultural Trade and Rural Livelihoods

Agriculture, being the mainstay of the economy in Malawi, accounts for the main source of income of the majority of rural people, who make up more than 85 percent of the current estimated population of 13 million. The agricultural sector provides 87 percent of total employment, supplies more than 65 percent of the manufacturing sector's raw materials, and provides 64 percent of the total income of rural people (Ministry of Agriculture and Food Security, 2005a). The development of agricultural policies and strategies for major export crops have been complemented by trade policies in order to promote commercial farming in the country.

### 3.5.1 Livelihood Impact of Tradable Crops

***Introduction***

Smallholder agriculture remains a main source of employment among rural households in Malawi. Abiding by the traditional customary system of land ownership, with the recent increase in population, land holdings have become more fragmented and the average size has sharply decreased. Maize is still the main crop grown using traditional farming methods, by smallholder farmers largely to meet subsistence needs. In a few cases, smallholder farmers are also engaged in cash crop farming. Although most smallholder farmers remain unorganised, some have formed associations to promote their interests in the value chain (Chirwa *et al*). Such organisations enable farmers to have access to extension services, information, inputs, and markets for their produce.

The smallholder agricultural sector in Malawi mainly caters to subsistence needs of such farmers, with most of the land devoted to the production of staple food crops like maize, cassava and groundnuts. Since most of these crops are grown for food purposes, insignificant amounts are marketed. Diversification into cash cropping offers smallholder farmers opportunities for sustainable livelihoods. Studies have shown that the participation of smallholder farmers in tobacco farming reduces the probability of being poor (Mukherjee and Benson, 2003).

***Livelihood Conditions of Sugar Producers***

Malawi's sugar sector is vital for the country's economy and holds enormous potential. It is the country's second most important export commodity after tobacco, valued at US$61mn in 2007. Malawi is one of the most efficient sugar producers in the world, producing sugar three times cheaper than the European producers. Sugar cane is grown under irrigation, and agro-climatic conditions are favourable for both cane yields and sugar formation. As an African, Caribbean and Pacific (ACP) country, Malawi has been able to export 20,000 metric tonnes of sugar to the EU through a preferential scheme (National Resources Institute).

Sugar in Malawi is produced by Illovo Sugar (Malawi) Limited, the only sugar producer. The company has two estates with milling facilities at Nchalo Estate on the Shire River and Dwanga Estate near Lake Malawi. Together with smallholder production they produce around 270,000 tonnes of sugar per year (National Resources Institute).

The Fairtrade certification of the first and only fair trade sugar producer group in the country is Kasinthula Cane Growers (KCG) in Nchalo. Kasinthula irrigation scheme has 784 hectares of land of which 754 hectares are under sugar and 30 hectares are under other crops. During the discussion with Illovo management it was learnt that the scheme has 282 smallholder farmers of which 91 are women. Initially the scheme used to grow rice but eventually changed to cane sugar production. A study by the National Resources Institute reported that there have been economic benefits due to the change from rice to sugar and from the fair-trade certification.

There is a Fairtrade premium of US$60 per metric tonne of sugar, which is shared as follows: 40 percent for farmers' livelihoods; 30 percent for cane plough out and replanting; and 30 percent for community development projects. The 40 percent premium for farmers' livelihood is divided equally among the 282 farmers. The 30 percent premium allocated to community development is aimed at benefiting the whole community not only the farmers on the scheme as the other two premiums. This has been used for drilling boreholes, providing piping and taps for clean water supply, provision of bilharzia drugs, village electrification, clinic extensions and bicycle ambulances. Fairtrade certification of Nchalo has not only helped outgrower farmers but also labourers on the estate, who have indicated that salaries have increased and job conditions have improved. Kasinthula Cane Growers is a Limited Company with 95 percent of the shares owned by farmers through the Shire Valley Cane Growers Trust.

Sugarcane is a capital and labour intensive activity, but participation of smallholder farmers under an organised scheme also offers the potential for sustainable livelihoods

for smallholder farmers. A study done by the National Resources Institute in 2010 reported that annual average gross income for sugarcane farmers between October 2008 and September 2009 was US$2155. The study reported that the households were earning US$5.9 a day, significantly above the international poverty line.

There are 200 smallholder sugar farmers at Dwangwa. The irrigation scheme includes five villages. The farmers are part of the Dwangwa Cane Growers Limited (DCGL) which has shares belonging to the management employees and farmers (farmers hold the majority of shares). DCGL offers agronomy services to the farmers including managing the use of farm equipment, technical services, and other services such as cultivation and hiring of labourers to work on smallholder farms in special cases, the transportation of cane to the factory, and the marketing of cane to Illovo Sugar Limited (Chirwa et al.). DCGL deducts 30 percent of the farmers' sales proceeds as management fees.

The study done by Chirwa *et al* reported that smallholder farmers under DCGL complained about the unreasonable deductions for some of the services, high interests rates, lack of transparency in sugar pricing, and the staggering of payments of their net proceeds. Chirwa *et al* reported that farmers also complained of lack of social investment in their residential areas. In their study, Chirwa found that the smallholder farmers were charged 32 percent interest on their fertiliser input loan, a 32 percent mark-up on all services offered to the farmers in addition to the 30 percent deducted from sales proceeds as a part of management fees. Chirwa *et al* (2006) reported that Dwangwa Cane Growers Limited imposed an implicit taxation on the cane growers by charging them above cost for the use of inputs.

This in turn reduced the incomes of the farmers. They reported that "...the paradox is that farmers own DCGL which in turn owns the assets (farm equipment) and use gravity fed irrigation, but smallholder farmers are in turn charged highly for use of such farm equipment and services offered by DCGL at more than the cost of such services in addition to management fees..." (Chirwa *et al,* page 23). They observed that the elite shareholders who manage the company take advantage of the smallholder farmers (who hold the majority shares) due to high illiteracy levels and powerlessness. They observed that such a practice was perpetuating poverty in smallholder growers.

***Livelihood Conditions of Tea Producers***

Tea is the third major export of Malawi, following tobacco in first place and sugar as a close second. Since the 1880s, tea has been grown on commercial basis in Malawi, which is ranked the second largest producer in Africa after Kenya (Government of Malawi, 2003). In 2002, about 39 million kilograms of processed tea was produced with exports accounting for 83 percent by volume of the total production. Tea generated approximately US$33.3mn of export earnings in 2003. The tea sector employs about 42,000 people in commercial estates and about 8,000 smallholder farmers produce tea as their main economic activity. It is estimated that approximately 300,000 people in Malawi rely directly on the tea industry as a major source of income (Government of Malawi, 2003).

A study by Chirwa and Kydd reported that for most smallholder tea growers, tea farming is their primary source of income and livelihood. Smallholder tea growers were organised to sell their green leaf to a state-established tea factory, which was eventually privatised to form the Smallholder Tea Company (STECO). However, due to some problems that the factory experienced a few years ago, a handful of commercial estates started to purchase tea from smallholder farmers.

Studies have shown that smallholder farmers that have private contracts with commercial estates tend to be more productive and more profitable than farmers that have contractual arrangements with state factories (Chirwa and Kydd). They found that farmers who contracted with commercial estates were 1.7 times more productive than those who contracted with STECO. The differences were due to differential services offered to smallholder farmers under the contracts. Commercial farmers provide extension and farm management services to smallholder farmers and there is also a demonstration effect since most of the farmers are on the margins of the commercial estates which contract them. Farmers with contracts with commercial estates have access to low cost and high quality inputs and receive their proceeds timely compared to those with contracts with STECO.

In a study of smallholder tea farmers, Chirwa *et al* reported that almost half of the interviewed farmers that sell green tea to commercial estates believed that tea farming has become more profitable due to better prices. They noted that the smallholder tea sector is very significant since it provides a source of income and stable livelihoods to growers, and provides other community benefits, such as an increase in business activity and labour markets by hiring villagers to work on the smallholder tea farms.

***Livelihood Conditions of Smallholders Cultivating Other Crops***

Similarly, crops such as paprika, chilli, and cotton, which are traditionally grown on smallholder farms, offer opportunities to them to improve their welfare. Cash crop farming plays a vital role in the livelihood of smallholder farmers in Malawi, given that about 80 percent of the rural population derives its livelihood from the agricultural sector. However, the contribution of cash crops farming to poverty reduction will depend on the availability of markets and the returns that farmers obtain from cash crop production.

Chirwa *et al* (2006) studied smallholder farmers involved in cultivation of four selected crops in four districts. The four selected crops included chilli, paprika, sugar, and cotton. They observed that the farmers had access to markets through farmer associations and special institutions or through their relations with the crop buyers. In their study of 100 farmers, for each of the four crops, they asked the farmers for their views on profitability of the four crops over time.

The results are presented in table 3.7. The highest proportion of households that revealed an increase in profitability is 55 percent among sugarcane growers and the lowest proportion is 27 percent among paprika farmers. Otherwise, a higher proportion of farmers in chilli, paprika and cotton revealed that profitability in these crops had slumped over the years. The proportion was particularly high among the smallholder cotton farmers. Furthermore, Chirwa *et al* found that most farmers of these crops reported that

| Table 3.7: Changes in Profitability of Smallholder Cash Crop Farming (in percent) | | | | |
|---|---|---|---|---|
| **Nature of Change** | **Mulanje (Chillies)** | **Nkhotakota (Sugar)** | **Dowa (Paprika)** | **Balaka (Cotton)** |
| More Profitable | 37.0 | 55.0 | 27.0 | 39.0 |
| No Change | 10.0 | 13.0 | 3.0 | - |
| Less Profitable | 46.0 | 31.0 | 34.0 | 58.0 |
| Do Not Know | 7.0 | 1.0 | 36.0 | 3.0 |
| *Source: Chirwa et al (2006)* | | | | |

their socio-economic status was worse off than before. The proportion of farmers that reported to be worse off identified the increase in input costs and low output market prices as the main reasons.

## 3.6 Conclusions and Recommendations

### 3.6.1 Conclusions

***Agricultural Productivity***

Although in some years yield was affected by unfavourable rainfall patterns, there has been an overall increase in the productivity of major agricultural tradable crops in the past decade. The increased productivity has been due to the government's effort through the introduction of different interventions that aimed at increasing land productivity by smallholder farmers such as the Farm Input Subsidy Programme, the promotion of organic manure, intensive extension methods, and promotion of high yielding varieties. The availability of policies and strategies that targeted smallholder farmers and the agricultural sector as a whole has influenced the increase in crop productivity.

The constraints to increased productivity include increased costs of agricultural inputs, lack of access to credit and to some extent, negligence by smallholder farmers. For instance, some farmers sold the subsidised farm inputs that they obtained which led to low input usage and in turn poor quality of the produce resulting in low prices at the market. The productivity of tea by smallholder farmers is mainly constrained by the lack of modern tea crop husbandry skills, the high cost of clones, and termite attacks due to field gaps (vacancies) which also allow for weed growth.

***Agricultural Trade***

High transaction costs have been singled out as one of the major factors that contribute to the uncompetitive nature of Malawi's exports in the international market. The high transport costs result in Malawi's high production costs. The government has, therefore, made trade facilitation a major element of its economic policy. Under the WTO negotiations and RTAs, the goal is to have in place mechanisms for the provision of assistance for addressing trade facilitation problems that the country is facing. Malawi's exports are dominated by agricultural commodities. However, over the past decade, the country has been experiencing trade imbalances in imports and exports.

With regard to export markets, the EU and the SADC constitute Malawi's major export destinations. The COMESA FTA has, therefore, helped Malawi to diversify its market within Africa. The country has also intensified cooperation with regional partners within the framework of SADC and COMESA, which are implementing trade facilitation schemes as part of their regional integration programmes. The schemes being implemented include: the harmonisation of customs documentation and procedures; the introduction of a code on handling goods in transit; the yellow card scheme; the Customs Bond Guarantee Scheme; the harmonisation of axle load; the harmonisation of sanitary and phyto-sanitary measures; and technical barriers to trade.

The challenges that Malawi is facing as a result of being landlocked are aggravated by institutional constraints which relate to the country's trade-related capabilities. These challenges include the lack of sufficient or appropriately trained human resources, the management of relevant institutions, the lack of financial and material resources, and the inadequate communication with both internal and external stakeholders.

***Linkages of Agricultural Trade and Rural Livelihoods***

Participation of smallholder farmers in cash crop farming reduces the probability of being poor and improves people's livelihood through income generation. Apart from providing incomes and stable livelihoods to growers, the community benefits from the promotion of the cash economy, e.g. drives demand for other business activities, offers opportunities for casual labour, etc. Other crops, such as chillies and paprika, have the potential to improve farmers' welfare, and should therefore be promoted. However, the contribution of cash crop farming to poverty reduction depends on the availability of markets and the returns that farmers obtain from cash crop production.

Smallholder cash crop farming has the potential to improve rural livelihoods through the linkages between productivity, trade and livelihood. Apart from sugar and tea, other cash crops, some of which are just emerging as foreign exchange earners, have the potential to improve the livelihood of smallholder farmers. Chilli production is more profitable and requires fewer inputs, apart from labour, than cotton, paprika, and sugar. Paprika proves to be the least profitable but has the potential to be profitable with good farm management practices. Data found on the production and productivity of sugar and tea crops indicated a general rise in the last five years. The increase in productivity implies high production and exports (trade). The revenue from trade contributes to smallholders' livelihoods by providing income.

Although some farmers believe that the profitability of crops, such as chillies, paprika, and cotton, has decreased over the past five years and feel that their socio-economic status has worsened, the contribution of smallholder cash crop farming cannot be understated. While the increase in income of farmer households was significant, the benefits to the community that resulted through the derived demand for other goods and services proved to be the most important. Most farmers engage casual labourers from within the village or district. Furthermore, farmers have diversified their incomes from sugar and tea into other areas including small businesses and livestock and crop cultivation. This multiplier effect of cash crop farming has a positive impact on rural livelihoods.

### 3.6.2 Recommendations

Based on the findings in the study the following recommendations are offered:

(i) Studies should be conducted to determine whether current reports on exploitation of tobacco farmers are true and, if so, the extent of exploitation. Moreover, the government should develop a policy to protect tobacco farmers from exploitation and educate the farmers to report any form of exploitative behaviour by tobacco dealers.

(ii) The government should identify a funding agency to help finance smallholder tea farmers with funds for uprooting old tea and establishing plantations of hybrid tea. The government should also promote irrigation in tea farming to improve land productivity for both commercial and smallholder farmers.

(iii) Extension-Research-Farmer linkages should be strengthened to identify the causes of farmers' inability to adopt good crop husbandry practices and high yielding varieties. Where possible, research should identify the factors that determine progressive farmers which could be introduced to other farmers so as to increase rates of technology adoption to reduce supply-side constraints.

(iv) The government should work with trade partners in the region to strengthen regional trade. Studies have shown that, with the exception of South Africa, Malawi does not have strong trade ties within the SADC or the sub-Saharan Africa.

(v) Malawi should invest in the research and development of producing more of commodities in which it has a competitive advantage or a niche (e.g. Kilombero rice, which is a speciality of Malawi).

(vi) During the field survey most exporters requested that the government work on improving the railway between Malawi and the Mozambique port of Beira, since it is cheaper. By undertaking major repairs and maintenance and by investing in a faster train, the country's bid to increase exports could be achieved. The GoM, along with other regional governments, could work with the Mozambican government to deepen the port at Beira to allow for big ships to dock.

(vii) On the Shire-Zambezi waterway the government should put in place mechanisms to ensure that siltation of the waterway is controlled. In addition, the catchment area should be planted with trees in order to curb soil erosion.

(viii) The government should work hand in hand with countries in COMESA and SADC regions to come up with ways of dealing with port and rail related problems that delay loading and unloading ships at the ports. The governments also need to come up with efficient and effective means of clearing goods at the borders, since this process is extremely slow and prone to abuse by custom officials.

(ix) A survey of large scale and smallholder farmers that are involved in the cultivation of tradable crops should be undertaken as a means to study their levels of production, extent of involvement in trade, livelihoods, and general constraints. This would provide more detailed information that could be used to validate the massive amounts of information obtained using desk research.

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## ANNEX

Persons Interviewed During the Field Work (June 14-18, 2010)

1. Illingworth, Eastern Produce Tea Company
2. Clement Thindwa, Tea Association of Malawi
3. C. Tongani, Smallholder Tea Company
4. Emmanuel Chilanga, Smallholder Tea Authority
5. Felix Mkumba, Tobacco Association of Malawi
6. Cecilia Kachifumbu, Tobacco Control Commission
7. Goeff Mkamdawire, Illovo Sugar (Malawi) Limited

## Endnotes

1 The Malawi government used to offer farm input subsidies to farmers before the adoption of the World Bank/IMF sponsored Structural Adjustment Programme in 1980s. The removal of input subsidies was followed by poor performance of the smallholder sub-sector. In 2005 the Bingu wa Mutharika's administration introduced a new farm input subsidy programme which, unlike the previous scheme, only targets poor smallholder farmers.

2 Such commodities include scented rice, chilli, paprika, macadamia, coffee, tea, sugar, tobacco, cassava, soybeans, groundnuts, seed maize, vegetables (tomato, onion, garlic, shallots, green beans) and fruits (mango, banana, citrus, pineapple).

3 Clive Stanbrook OBE Q.C., Washington & Brussels. Preliminary Note on Tobacco Sales in Malawi

4 Unpublished reports from field survey on tobacco farmers that are paying for weather insurance through some tobacco buying companies

5 Malawi has been lagging behind in the implementation of tariff phase down under the SADC Trade Protocol. The reason has mainly been that the implementation of the tariff reductions would result in loss of government revenue, creating an imbalance in the government's budget. However, the government is taking necessary steps to comply with these obligations.

# 4 Regional Trade in Agriculture: Implications for Food Security and Rural Livelihoods in Tanzania

– Monica A. Hangi
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## 4.1 Introduction

### 4.1.1 Objectives of the Study and Methodology

This study brings out the level of impact that trade in agricultural products has on food security and rural development situations/conditions in Tanzania. The study addresses issues such as the level of Tanzania's trade in agricultural products with the rest of the EAC member countries – both formal and informal – and the status of food security as well as of rural livelihood and the impact trade has on them. The study also outlines the national, regional and international policy dimensions related to trade in agriculture and the role of stakeholders in assuring food security and rural development conditions in Tanzania.

The study mainly relies on secondary data, complemented with primary data. Secondary data used has been obtained from Tanzania's Ministries of Industry, Trade and Marketing; East African Community; and Agriculture and Food Security. Other sources include Tanzania's Bureau of Statistics; official publications of the EAC Secretariat; and international sources such as the United States Agency for International Development (USAID) and the Food Early Warning Systems Net (FEWS Net).

The primary data employed in this report has been collected through one-to-one interviews with stakeholders from the Ministries of Agriculture and Food Security and of Industry, Trade and Marketing. Interviews with farmer groups and associations were also conducted. A huge set of primary data collected by Tanzania's Revenue Authority has also been used.

### 4.1.2 Brief Profile of Tanzanian Agriculture Sector

Agriculture is the foundation of Tanzanian economy. It originally accounted for approximately half of the national income; three quarters of merchandise exports; predominant source of food, and provided employment opportunities to about 74 percent of Tanzanians. Its current impact on the economy of the country is only slightly less as it still contributes about 45 percent to Tanzania's GDP, brings approximately 66 percent of foreign exchange, and provides raw materials for local industries. For the sector to have a greater, positive impact on the economy of the country, Tanzania's Ministry of Agriculture and Food Security has estimated that it should grow by at least 10 percent annually (URT, 2008).

Agriculture in Tanzania is dominated by smallholder farmers (peasants) cultivating farms of average sizes of between 0.9 and 3.0 hectares. A very high percentage of crop area cultivation is done by hand, with smaller percentages cultivated by ox plough and tractors. The main export basket consists of seven traditional export crops[1] and several non-traditional crops[2]. Recent volumes of production of food and cash crops in Tanzania can be seen in the tables 4.1 and 4.2:

**Table 4.1 Tanzania Food Crops Production in 2007 and 2008 (tonnes 000)**

| Crops | 2007 | 2008 | % Change 2007/08 |
|---|---|---|---|
| Maize | 3,302 | 3,555 | 7.66 |
| Rice | 872 | 875 | 0.34 |
| Wheat | 83 | 92 | 10.8 |
| Millet | 1,165 | 1,064 | (8.66) |
| Cassava | 1,733 | 1,797 | 3.69 |
| Beans | 1,156 | 1,125 | (2.75) |
| Banana | 1,027 | 982 | (4.38) |
| Sweet Potato | 1,322 | 1,379 | 4.31 |

*Source: Tanzania Economic Survey, 2008*

**Table 4.2: Tanzania Cash Crops Production in 2007 and 2008 (tonnes 000)**

| Crops | 2007 | 2008 | % Change 2007/08 |
|---|---|---|---|
| Cotton | 199,954 | 200,662 | 53.7 |
| Tobacco | 50,784 | 55,356 | 9.0 |
| Sugar | 279,494 | 276,605 | 4.2 |
| Sugar cane | 2,766,023 | 3,500,325 | 26.5 |
| Tea | 34,763 | 34,770 | 10 |
| Pyrethrum | 1,000 | 1,500 | 8.2 |
| Coffee | 33,708 | 58,052 | 36.0 |
| Sisal | 33,039 | 33,000 | 7 |
| Cashew nut | 92,573 | 99,107 | 7.05 |

*Source: Tanzania Economic Survey, 2008*

In 2008, the real GDP of Tanzania grew by 7.4 percent compared to 7.1 percent in 2007. The growth was mainly attributed to the increase in growth rates of agriculture, fishing and services. In 2008, agricultural activities grew by 4.6 percent compared to 4.0 percent in 2007. The growth was mainly attributed to the increase in crop production as a result of favourable weather in the 2007-2008 agriculture season; improved irrigation and rural roads infrastructure; and increased utilisation of fertilisers as well as power tillers especially in the major agriculture producing regions. The growth rate of crop sub-activity increased to 5.1 percent in 2008 from 4.5 percent in 2007. The increase was a result of improved crops production in the country (Economic Survey, 2008).

***Poverty in Tanzania***

With the above statistics portraying Tanzania's dependence on its agricultural sector, this sub-section briefly highlights the extent of poverty in Tanzania. Poverty, in most developing countries, has been a very chronic problem and plays a big role in the lack of the realisation of the development goals of a country. To address this chronic problem, Tanzania came up with a five-year National Strategy for Growth and Reduction of Poverty (NSGRP) – famously known as MKUKUTA[3] – from 2005 with focus on three clusters: Growth and Reduction of Income Poverty; Improved Quality of Life and Social Well-being; and Governance and Accountability. This strategy had projected a decline in basic needs poverty to 24 percent in rural areas and to 12.9 percent in urban areas by 2010. In 2007, the proportion of population below the basic needs poverty line was 33.6 percent and the incidence of food poverty was at 16.6 percent (Poverty and Human Development Report, 2009).

Poverty in Tanzania still remains high in rural areas where 37.6 percent of rural households live below the basic needs poverty line compared with 24 percent of urban households and 16.4 percent of households in Dar Es Salaam (table 4.3):

**Table 4.3: Incidence of Poverty in Tanzania (percentage)**

| Poverty Line | Year | Dar es Salaam | Other Urban Areas | Rural Areas | Mainland Tanzania |
|---|---|---|---|---|---|
| Food | 1991-1992 | 13.6 | 15.0 | 23.1 | 21.6 |
| | 2000-2001 | 7.5 | 13.2 | 20.4 | 18.7 |
| | 2007 | 7.4 | 12.9 | 18.4 | 16.6 |
| Basic needs | 1991-1992 | 28.1 | 28.7 | 40.8 | 38.6 |
| | 2000-2001 | 17.6 | 25.8 | 38.7 | 35.7 |
| | 2007 | 16.4 | 24.1 | 37.6 | 33.6 |

*Source: Tanzania's Poverty and Human Development Report, 2009.*

### 4.1.3 EAC Regional Trade Trends

Since mid 1990s, intra-EAC trade has increased substantially. This has mainly been due to the increased level of openness among the member countries (IPAR, 2005). The total intra-trade in 2007 between the original member states (Kenya, Uganda and Tanzania) increased by 22 percent to US$1,973.2mn (EAC Trade Report 2008). This achievement was on account of the increase in exports and imports between the member states, especially trade between Kenya and Uganda. EAC exports remained stable in 2008 despite the global economic crisis with the non-traditional exports, particularly gold, continuing to make larger contributions to exports. Imports of goods, particularly of capital and intermediate goods also increased. However, imports of foodstuffs decreased slightly compared to the previous year.

***Imports***

The total intra-EAC imports increased by 13 percent to US$824.6mn in 2007 compared to a decrease of 7.2 percent in the previous year. Uganda's share in intra-EAC trade increased to 63.8 percent in 2007 compared to 59.1 percent in 2006, while Kenya's imports increased significantly and recorded an increase of 145.1 percent in 2007 over 2006. At the same time, Tanzania's share in intra EAC imports declined to 13.4 percent in 2007 as compared to 30.3 percent in 2006. The rise in intra-EAC imports was accounted by the increase in imports of capital and consumer goods by Uganda, as the country was preparing to host the Commonwealth Heads of States and Governments Meeting (CHOGM), and increased its imports from Kenya due to drought experienced in the country in the previous year (EAC Trade Report, 2008).

**Table 4.4: EAC Import Values, 2003-2007 (US$mn)**

| Imports | | | | | | PERCENTAGE CHANGE | | |
|---|---|---|---|---|---|---|---|---|
| **Country** | **2003** | **2004** | **2005** | **2006** | **2007** | **2005** | **2006** | **2007** |
| Uganda | 368.1 | 415.0 | 550.8 | 429.7 | 526.5 | 32.7 | -22.0 | 22.5 |
| Tanzania | 126.1 | 153.6 | 175.9 | 220.6 | 110.1 | 29.7 | 25.4 | -50.1 |
| Kenya | 32.5 | 40.7 | 59.5 | 76.7 | 188.0 | 46.1 | 29.0 | 145.1 |
| Total | 526.7 | 591.3 | 786.2 | 727.0 | 824.6 | | | |

*Source: EAC Trade Report, 2008*

***Exports***

The total intra-EAC exports rose to US$1,148.6mn in 2007 compared to US$890.1 in the year 2006. Generally, all EAC member states registered a remarkable increase in intra-EAC exports. Uganda's share of intra-EAC export increased from 11.4 percent in 2006 to 13.0 percent in 2007, while Kenya's share of intra-EAC export remained at the 2006 level of 72 percent. Meanwhile, Tanzania's exports to EAC countries increased to US$315.5mn in 2008 from US$173.1mn in 2007 – an increase of 82.6 percent. This was mainly on account of increase in exports to Kenya from US$101.1mn in 2007 to US$235mn – an increase of 132.4 percent. However, exports of goods to Burundi decreased to US$19.5mn in 2008 from US$41.5mn in 2007, as depicted in table 4.5 (Economic Survey, 2008).

| Table 4.5: Tanzania Exports to EAC Member Countries, 2001-2008 (US$mn) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Country** | **2001** | **2002** | **2003** | **2004** | **2005** | **2006** | **2007p** | **2008p** |
| Burundi | - | - | - | - | - | - | 41.5 | 19.5 |
| Kenya | 38.1 | 35.3 | 78.3 | 83.7 | 76.3 | 97.2 | 101.1 | 235 |
| Rwanda | - | - | - | - | - | - | 11.2 | 20.6 |
| Uganda | 5.5 | 5.5 | 10.3 | 11.7 | 20.1 | 20.5 | 19.3 | 40.5 |
| Total EAC | 43.6 | 40.8 | 88.6 | 95.4 | 96.4 | 117.7 | 173.1 | 315.5 |
| Other African Countries | 6.2 | 22.9 | 22.2 | 20 | 34.7 | 29.9 | 72.8 | 96.1 |
| *Source: Tanzania Economic Survey, 2008* | | | | | | | | |

***Balance of Trade between Tanzania and Regional Economic Groupings***

As per the table 4.6, balance of trade between Tanzania and other EAC countries registered a surplus of US$110.7mn in 2008 compared to the surplus of US$ 66.5mn in 2007.

| Table 4.6: Balance of Trade Between Tanzania and Other Regional Groupings (US$mn) | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Regions / Year** | **2002** | **2003** | **2004** | **2005** | **2006** | **2007p** | **2008p** |
| EU | 118.6 | -210.5 | 176.7 | 3.9 | -77.8 | -515.2 | -56.7 |
| SADC | 143.6 | -233.7 | -213.4 | -103.2 | -284.8 | -355.4 | -510.2 |
| EAC | -57.1 | -35.6 | -42.3 | -64 | -56.7 | 66.5 | 110.7 |
| *Source: Tanzania Economic Survey, 2008* | | | | | | | |

### 4.1.4 Trends in Food Security and Rural Livelihoods

***Food Security***

Food security is defined in terms of either food self-sufficiency or food self-reliance. The Food and Agriculture Organisation (FAO) explains that, *food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life*. Food self-sufficiency requires production of various food items in the quantities consumed domestically while food self-reliance requires domestic availability. Based on this distinction, self-sufficiency rules out imports as a source of supply while self-reliance allows it.

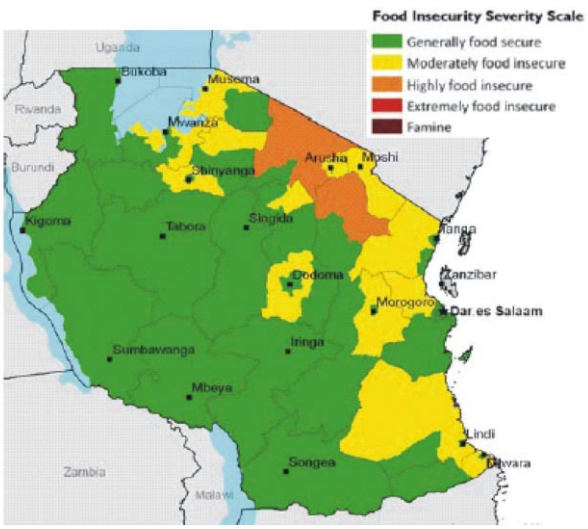
According to the FAO Report of 2008, the world has higher capacity to produce food than to consume. It implies that fewer restrictions on the exports of food items from countries with the excess capacity in the region coupled with availability of transportation that allows its rapid movement could tackle the food insecurity in the region.

Therefore, food self-sufficiency in each country and in the region may make little economic sense. What is required in each country with frequent food shortages is sufficient capacity to generate foreign exchange by specialising in the production of goods/food of their comparative advantage to pay for the import of excess quantities consumed over those domestically produced. Hence, it can be argued that food security in the region can be improved through regional trade liberalisation. The International Food Policy Research Institute (IFPRI) report, 2008, indicates that while all the EAC countries are predominantly agrarian economies, all of them are net importers of food commodities. Cross-border trade impacts the food security situation in the region in one or more of the following ways:

- it broadens available market for commodities produced in the region and farmers benefit from a wider market for food commodities and increased demand for their animals;
- people consume food items produced and/or trans-shipped from across the border that cannot be supplied as cheaply through domestic production. Items produced domestically may be unavailable in certain seasons and/or can be more expensive than their imported substitutes;
- cross-border trade expands employment opportunities in zones of chronically high unemployment, and
- where alternative employment is limited, people may engage in cross-border trading, in order to earn income to purchase food (FEWS Net, 2007).

Availability, access and affordability of food are the key elements for regional food security. These elements of food security are complex and encompass a wide range of interrelated economic, environmental, social and political factors that are internal and external to the region. However, trade can help in improving regional food security by targeting these elements.

**Figure 4.1: Estimated Food Security Conditions in Tanzania, 2009**




*Source: FEWS Net, August 2009*

As of September 2009, there are more than 1.5 million food-insecure people in 63 districts, across 15 regions in Tanzania. This estimate marks a five-fold increase over the figure of 279,607 food-insecure people as established by the March 2009 assessment (FEWS Net, 2009).

As shown in the figure 4.1, north and north-eastern parts of Tanzania (Arusha, Simanjiro and Manyara regions), and the lowlands of Kilimanjaro and Tanga regions suffer from food insecurity. These regions mainly consist of pastoral and agro-pastoral households and marginal agricultural households. Lindi region, in the south-eastern part of Tanzania, is characterised by moderate food insecurity conditions as are the Mwanza and Shinyanga regions in north Tanzania.

One way of measuring food insecurity is to assess the level of hunger in each country which is indicated by the Global Hunger Index (GHI) computed by IFPRI yearly. The GHI is a comprehensive measure of hunger and malnutrition. It ranks countries based on three indicators and then combines them into one. The indicators are:

- proportion of people who are calories deficient;
- child malnutrition prevalence; and
- child mortality rate.

Countries are ranked on a 100-point scale, with 0 being the best score (no hunger) and 100 being the worst though neither of these extremes is achieved in practice (IFPRI, 2008). The GHI values which are less than 4.9, reflect low hunger; values between 5 and 9.9 reflect moderate hunger; values between 10 and 19.9 indicate a serious problem; values between 20 and 29.9 are alarming; and values exceeding 30 are extremely alarming (IFPRI, 2008). The GHI 2008 for the EAC states is shown in the table 4.7 which indicates that that all the EAC countries are food insecure.

**Table 4.7: EAC Global Hunger Index (GHI) 2008**

| Country | Rank | GHI Score | Situation |
|---|---|---|---|
| Tanzania | 68 | 24 | Alarming |
| Kenya | 55 | 19.87 | Serious |
| Uganda | 44 | 17.13 | Serious |
| Burundi | 86 | 38.26 | Extremely alarming |
| Rwanda | 63 | 22.3 | Alarming |

*Source: International Food Policy Research Institute (IFPRI), 2008*

***Rural Livelihoods***

In rural areas of most developing countries, livelihoods are based overwhelmingly on the primary production of food and cash crops. Livestock is also usually important even outside pastoral or agro-pastoral areas. Therefore, agro-ecology plays an important role as do other factors such as isolation from roads and markets, proximity to large cities, irrigation opportunities, and mining operations that can offer substantial casual employment. Finally, both local culture and government policy also contribute to differences in livelihoods conditions.

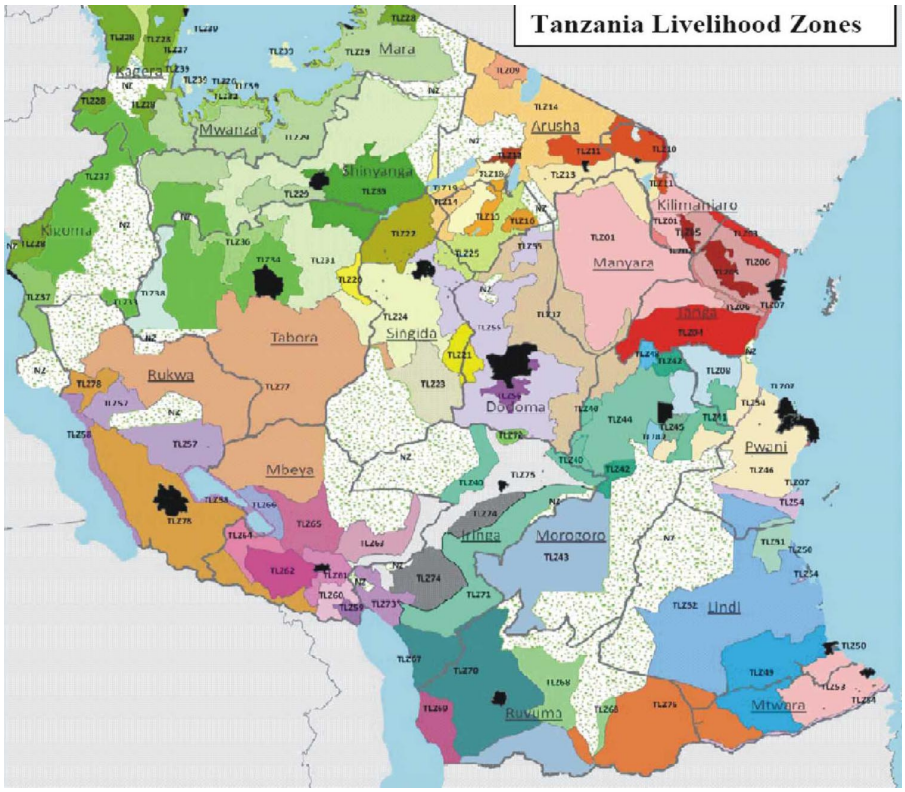
Livelihood zones are rarely aligned exactly with administrative boundaries, since the latter are the result of political events and decisions over time based on additional considerations rather than only the local economy. Sometimes a *part* of a livelihood zone boundary does coincide with an administrative boundary because both are defined by a major physical feature. Perhaps both skirt a major mountain or both run along the top of an escarpment. Most commonly, livelihood zones cross district or even regional boundaries.

In Tanzania, the 2008 livelihoods zoning exercise was designed as a starting point for the potential development of such livelihoods inquiries in the country. Since at least the mid-1980s, there has been a growing understanding that rural food security is not simply a matter of food production, and that effective famine early warning is not simply the measurement of reduced food production. There is also the 'demand side' – the capacity of farmers and herders to buy food. Indeed, in rural Africa today, the overwhelming evidence from the field is that the poorer the people, the more they *normally* rely on purchasing staples from the market, because they cannot get enough food-crops from the land they have, or enough milk from the livestock they keep. Therefore, food security analysis has become as much about people's sources of cash as about their production of food.

In Tanzania, 78 livelihood zones have been distinguished, with a broad-brush approach, i.e. avoiding numerous, highly localised differences. As further field investigations are undertaken to create livelihood profiles or baselines, it is customary to begin (for field sampling purposes) by verifying with local offices in each zone the livelihood zone qualities and the boundaries, down to the village level as is necessary. It is significant to note that in modern Tanzania, the monetisation of the rural economy is well advanced. The vast majority of rural Tanzanians are primary producers, but it is impossible to find livelihood, even in the most productive agrarian areas, where people live essentially as subsistence farmers and herders, simply eating the crops and drinking the milk they produce. All rural Tanzanians produce partly for their own consumption and also use the market as a fundamental part of their livelihoods by selling part of their produce to generate cash to meet their other livelihood needs.

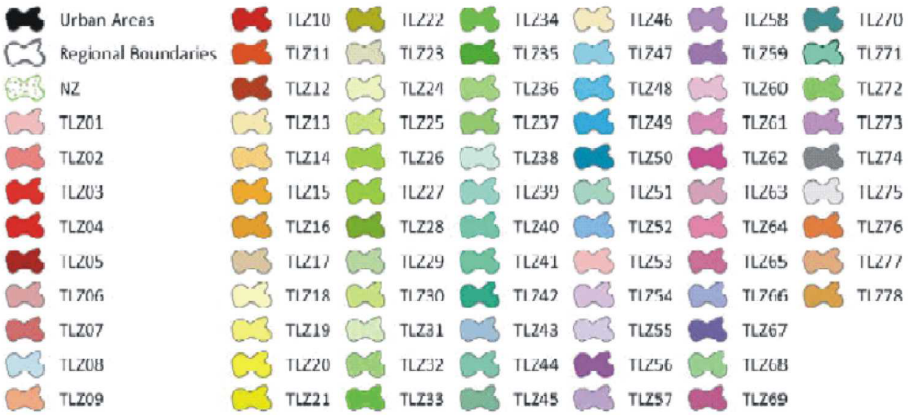
Households use the market in many different ways, depending on the economy of the area and the accessibility of physical markets. But market use also depends on a household's level of wealth in productive assets, especially land holdings and herds. It also depends on its 'capital' in family labour and the money to hire other labour (from the local labour 'market') and obtain fertilisers, pest control products, and veterinary drugs. From a food security point of view, poor people very rarely produce enough food even for themselves.

**Figure 4.2: Livelihood Zones in Tanzania, 2008**




*Source: USAID, 2008*

The Zones:



Brief Description of Livelihood Zones

*The Coastal Zones*

Generally livelihood zones in coastal, lakeshore (Lakes Victoria, Nyasa, and Tanganyika), and highland areas receive comparatively high quantities of rainfall and have comparatively high yields of crops. In these areas, even if the population density is relatively high, the majority of households is able to meet their annual food and income needs and is capable of withstanding production setbacks. These areas, however, suffer constant problems with crop pests and livestock disease as well as increasing input prices, notably for chemical fertilisers. Yet household food security is not threatened. Households that grow and produce non-grain cash crops (such as coffee, banana, fruits, vegetables, and nuts) tend to be more food secure than those that just grow grains and pulses.

*The Central Zones*

Shinyanga, Tabora, Dodoma, and central/southern Singida zones present a different picture. In these zones, annual cash crops are extensively grown (especially cotton, tobacco, and sesame) but rain failure and poor market infrastructure often limit not only the amounts people can produce but also the prices they earn for their crops. The exceptions are the niche areas, whether small like the Karatu wheat-dominated area or extensive as the Tanga where large sisal plantation operations offer substantial employment. A unique, but unfortunately failing, 'niche area' is that of the Hadzabe hunter-gatherers living in the lowland forest and on the peripheries of Lake Eyasi. This is an area with a small population, but it is distinguished as a zone because that population is dispersed and has exceptional food security problems.

### 4.1.5 Policy Framework

All the original member states of EAC (Kenya, Uganda and Tanzania) have either a policy that deals with agriculture development or food security and nutrition strategies. Kenya has a National Agriculture Policy and a strategy for revitalising agriculture; Tanzania has a National Agriculture Policy and a Food and Nutrition Policy that is implemented through the Agriculture Sector Development Strategy; and Uganda has a food and nutrition policy which is implemented through the Plan for Modernising of Agriculture.

Achievement of agricultural production and food security targets within the EAC countries is largely constrained by natural factors; under-developed or faulty policy; institutional and legal frameworks; and lack of modern technologies. The policy related factors include:

- weak governance;
- under-developed legal and regulatory framework;
- insecurity;
- inadequate access to productive resources;
- inadequate participation of local communities;
- poor physical infrastructure and utilities;
- weak institutional framework;
- low public expenditure and investments; and
- unfavourable terms of trade.

The summary of EAC partner's states policies, strategies and thematic areas that affect food security are shown in table 4.15 on page 159. These policies and strategies have a number of weaknesses that constrain agricultural production, productivity and food security in the region. Some other weaknesses include:

- some EAC countries do not encourage cross border trade in food commodities;
- the implementation strategy or action plan is lacking in some countries; and
- many of the policies are inward-looking.

Finally, a major factor responsible for the decline in agricultural production in the region is the poor quality of agricultural inputs, for example, poor propagation material, fake seeds and fertilisers, sub-standard vaccines, etc. Unscrupulous trading practices often affect agricultural productivity by selling adulterated products to farmers. This happens due to inadequate inspection capacity, old laws not in line with new developments in technology, weakness in enforcement, and endless litigation. Most laws on agricultural inputs are not punitive enough to deter potential offenders. In addition, world market has high quality demands and has developed codes of practice/standards as a result of growing consumer concern about food safety and production methods and their impact on the environment and consumer.

## 4.2 Analysis

### 4.2.1 Regional Trade in Agriculture

***Tanzania's Trade with Other EAC States***

As has been indicated in the above sub-section, trade in the EAC region continues to be dominated by Kenya. Trade balance between Kenya and Tanzania has been negative since 2000 (see table 4.8). However, this improved marginally in favour of Tanzania from a negative balance of US$63.9mn in 2006 to a positive balance of US$0.9mn in 2007. Tanzania reduced imports from Kenya to US$100.2mn in 2007 from US$153.2mn in 2006, whereas exports to Kenya increased to US$101.1mn in 2007 from US$89.3mn in 2006. The improvement is partly explained by an increase in export of staple foods and improvement of quality of Tanzanian products for the Kenyan market. At the same time, Tanzania continued to be a net exporter to Uganda, Rwanda and Burundi [Bank of Tanzania (BoT) Annual Report 2007-2008]. As seen in table 4.8, regional exports and imports of Tanzania indicated an increasing trend from 2002 to 2007, except in 2007 when Tanzanian imports from the EAC declined to US$106.6mn from US$157.2 mn in 2006. The overall trade balance with EAC remained negative from 2000 till 2006 before turning positive in 2007.

Notwithstanding an increase in Tanzania's absolute exports to Kenya, its share of exports to Kenya slowed down to 58.4 percent in 2007 from 77.6 percent in 2006, while her export share to Burundi and Rwanda went up significantly from 3.1 and 2.4 percent to 24.0 and 6.5 percent respectively in 2007 (see table 4.9). The increase in exports to Burundi was a result of increased exports of cereals and fertilisers (BoT 2007-2008). Most EAC imports into Tanzania are from Kenya. However, the share declined in 2007 to 94.0 from 97.5 percent in 2006. On the other hand, the share of Uganda in Tanzanian imports from the EAC increased significantly from 2.4 to 6.0 percent over the same period.

| Table 4.8: Tanzania's Trade with EAC States 2000-2007 (US$mn) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Item** | **2000** | **2001** | **2002** | **2003** | **2004** | **2005** | **2006** | **2007** |
| **Tanzania's Trade with Kenya** | | | | | | | | |
| Export to Kenya | 32.1 | 38.1 | 35.3 | 78.2 | 83.7 | 76.3 | 89.3 | 101.1 |
| Import from Kenya | 93.1 | 203.4 | 95.2 | 115.8 | 130.2 | 155.3 | 153.2 | 100.2 |
| **Trade Balance** | **-61.0** | **-165.3** | **-59.9** | **-37.6** | **-46.5** | **-79.0** | **-63.9** | **0.9** |
| **Tanzania's Trade with Uganda** | | | | | | | | |
| Export to Uganda | 8.5 | 5.5 | 5.5 | 10.3 | 11.7 | 20.1 | 19.6 | 19.3 |
| Import from Uganda | 5.6 | 11.4 | 2.7 | 8.2 | 7.7 | 5.1 | 3.8 | 6.4 |
| **Trade Balance** | **2.9** | **-5.9** | **2.8** | **2.1** | **4.0** | **15.0** | **15.8** | **12.9** |
| **Tanzania's Trade with Burundi** | | | | | | | | |
| Export to Burundi | 4.2 | 6.1 | 7.0 | 4.7 | 7.5 | 7.3 | 3.5 | 41.5 |
| Import from Burundi | 0.0 | 0.2 | 0.0 | 0.3 | 0.0 | 0.3 | 0.0 | 0.0 |
| **Trade Balance** | **4.2** | **5.9** | **7.0** | **4.4** | **7.5** | **7.0** | **3.5** | **41.5** |
| **Tanzania's Trade with Rwanda** | | | | | | | | |
| Export to Rwanda | 1.8 | 2.8 | 3.9 | 2.6 | 2.9 | 3.0 | 2.7 | 11.2 |
| Import from Rwanda | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.2 | 0.0 |
| **Trade Balance** | **1.7** | **2.7** | **3.9** | **2.8** | **2.8** | **3.0** | **2.5** | **11.2** |
| **Total to EAC States:** | | | | | | | | |
| **Export to EAC States** | 46.6 | 52.0 | 51.7 | 95.8 | 105.8 | 106.7 | 115.1 | 173.1 |
| **Import from EAC States** | 98.8 | 215.1 | 97.9 | 125.1 | 138.0 | 160.7 | 157.2 | 106.6 |
| **Trade Balance** | **-52.2** | **-163.1** | **-46.2** | **-29.3** | **-32.2** | **-54.0** | **-42.1** | **66.5** |
| *Source: BoT Report 2007-2008.* | | | | | | | | |

***Trade in Agricultural Products: Tanzania***

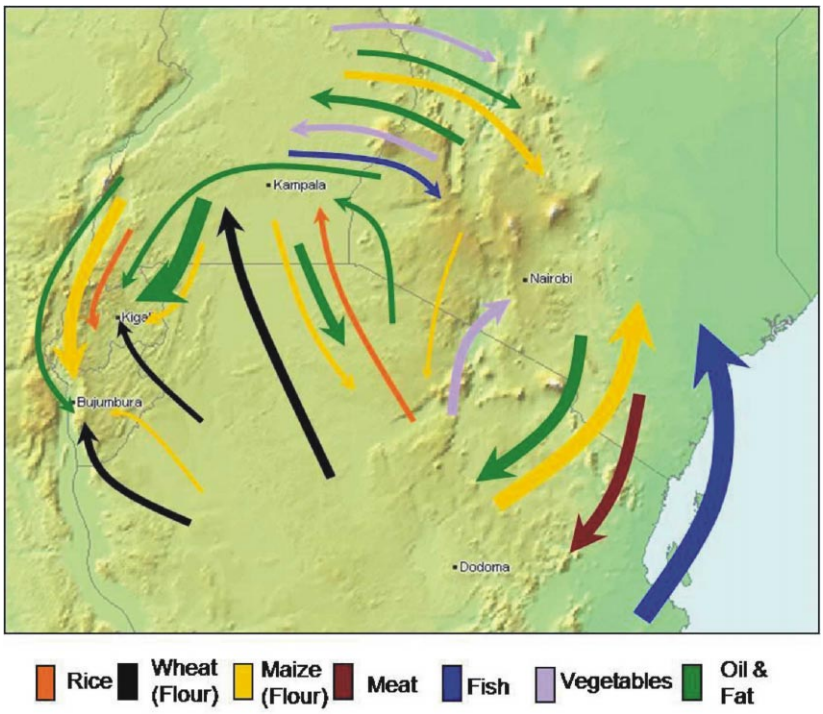
Exports account for a very small percentage, approximately 13, of the entire value of crop production in Tanzania. This has been the case since early 1990s that witnessed the reduction of government subsidies to the agricultural producers. There are also other reasons that contribute to this low production of the agricultural products for export purposes (as well as for household consumption). These are: unreliable and irregular weather conditions; low prices compared to the costs of production; low use of inputs such as fertilisers; pests and diseases; poor knowledge of agronomic practices; poor rural infrastructure; and low levels of capital, especially for small scale farmers (Sarris, A. *et al*, 2006).

Within the EAC region, agricultural trade patterns reflect the economic development levels of the respective countries. According to Tanzania's Ministry of Trade, Tanzania's imports of agricultural products from Kenya are approximately six times Tanzania's agricultural exports to Kenya [Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ), 2010]. Figure 4.3 portrays the main agricultural trade flows within the region.

| Table 4.9: Tanzania's Trade with Individual EAC Countries as Percent of Total Trade with the EAC, 2000-2007 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Item** | | | | | | | | |
| **Share of Export to:** | **2000** | **2001** | **2002** | **2003** | **2004** | **2005** | **2006** | **2007** |
| Kenya | 68.8 | 73.3 | 68.3 | 81.7 | 79.1 | 71.5 | 77.6 | 58.4 |
| Uganda | 18.2 | 10.6 | 10.6 | 10.8 | 11.1 | 18.8 | 17.0 | 11.1 |
| Burundi | 9.1 | 11.8 | 13.6 | 4.9 | 7.1 | 6.9 | 3.1 | 24.0 |
| Rwanda | 3.9 | 4.4 | 7.5 | 2.7 | 2.8 | 2.8 | 2.4 | 6.5 |
| **Total** | **100.0** | **100.0** | **100.0** | **100.0** | **100.0** | **100.0** | **100.0** | **100.0** |
| **Share of Import from:** | | | | | | | | |
| Kenya | 94.2 | 94.6 | 97.2 | 92.5 | 94.3 | 96.6 | 97.5 | 94.0 |
| Uganda | 5.7 | 5.3 | 2.8 | 6.6 | 5.6 | 3.3 | 2.4 | 6.0 |
| Burundi | 0.0 | 0.1 | 0.0 | 0.3 | 0.0 | 0.2 | 0.0 | 0.0 |
| Rwanda | 0.1 | 0.0 | 0.0 | 0.6 | 0.1 | 0.0 | 0.1 | 0.0 |
| **Total** | **100.0** | **100.0** | **100.0** | **100.0** | **100.0** | **100.0** | **100.0** | **100.0** |

*Source: BoT Report 2007-2008*

**Figure 4.3: Main Agricultural Trade Flows in the EAC Region**




*Source: GTZ, 2010.*

***Tanzania and Kenya***

Historically, Kenya and Tanzania have enjoyed strong agricultural trade ties. Among other factors, this trade has evolved due to poor transport infrastructure within Tanzania, making Kenya an outlet for surplus food production from the Arusha and Lake Victoria regions. Currently Tanzania has improved its infrastructure, which has widened the food sources available for the Kenyan market. It is now common for maize from south Tanzania, parts of Malawi, and Zambia to reach the Kenyan markets of Nairobi (USAID, 2007).

Maize, rice and beans are the main staple foods traded between these two countries. Maize remains the principal commodity imported into Kenya from Tanzania, followed by beans, fish, rice, root crops and sugar. On the other hand, wheat flour and sugar are the major agricultural commodities imported by Tanzania from Kenya, both in terms of quantity and value. Moreover, various fruits and vegetables grown in the north Tanzania are regularly traded in the urban markets of Nairobi and Mombasa, where the products are further processed (GTZ, 2010).

***Tanzania and Uganda***

Both sides of the Uganda-Tanzania border experience similar and favourable agro-climatic conditions, conducive for ample food production with surpluses exported to Kenya and Rwanda. Hence, there is limited trade in the border area between Tanzania and Uganda and agricultural trade between Uganda and Tanzania is low compared to agricultural trade between Tanzania on the one hand and Kenya, Zambia, Rwanda, Burundi, Democratic Republic of the Congo, and Malawi on the other (USAID, 2007).

Rice, beans, and bananas are the main staple foods traded between Tanzania and Uganda. Beans and bananas are exported to Uganda from Tanzania, but the direction of trade can reverse depending on the seasonal variations in production on either side of the border. Rice is mainly imported by Tanzania, and remains the largest commodity traded between the two countries, mostly through informal channels (GTZ, 2010).

Informal Cross-Border Trade in EAC

Analysts opined that informal cross-border trade within EAC occurs largely through unofficial routes established around formal ones at border townships and seas. For instance, on the Tanzania-Kenya border, informal trade occurs at Namanga and Sirari while on the Tanzania-Uganda border it mainly occurs at the Mutukula, Bukoba and Kyaka border points (Trade Law Centre for Southern Africa website).

There are a number of reasons for the ongoing informal trade including rigid and time-consuming bureaucratic procedures required to conduct formal trade. This informal cross border trade within the region involves staple foods like maize and rice, cattle, and low quality consumer products such as clothes, shoes and electronics.

Informal trade within EAC, as can be seen from a study by the Organisation for Economic Cooperation and Development (OECD), entitled "Informal Cross-Border Trade and Trade Facilitation Reform in sub-Saharan Africa" has both positive impacts and negative implications.

| Table 4.10: Positive and Negative Implications of Informal Cross-Border Trade in EAC | |
|---|---|
| **INFORMAL CROSS-BORDER TRADE** | |
| **Positive Impacts on the Economies of EAC** | **Negative Impacts on the Economies of EAC** |
| Increasing entrepreneurial activities and regional trade | Creating unfair competition to formal trade which reduces the incentives to invest in the formal economy and hence lowering business opportunities regionally and globally |
| Contributing to greater food security | Compromising measures on health, safety and environment (especially for the agricultural products which would not pass through the formal sanitary and phyto-sanitary controls) |
| Enhancing income and employment opportunities for poor households | Eroding government revenues which is significant as countries in the region rely on trade taxes for more than 25 percent of total government revenues |
| *Source: Trade Law Centre for Southern Africa.* | |

Informal Trade in Agricultural Food Commodities

Most agricultural trade in the EAC region is informal. According to estimates by ministries and industry associations, about 80 percent of trade in agricultural produce and food in the region is informal and not statistically recorded. For example, 400,000 head of livestock are apparently traded informally each year between Kenya and Tanzania.

According to a study done by USAID (1998), Informal Cross-Border Trade (ICBT) activities between Tanzania and the neighbouring countries were found to be significant and involved exchange of large volumes of commodities. Four categories of goods being informally traded were identified:

- *Agricultural food commodities:* mainly maize, rice, beans, sugar, wheat flour and root crops;
- *Industrial manufactures:* toiletries, beer and spirits, cooking fats/oils, soft drinks, textiles (both new and used), construction materials, salt, electronics, petroleum products and car and bicycle parts;
- *Forest resources:* charcoal and timber; and
- *Water-based resources:* which included all kinds of fish species and prawns.

| Table 4.11: Informal Trade between Tanzania and its EAC Partners – Kenya and Uganda | | |
|---|---|---|
| **Link** | **Scenario** | **Statistics** |
| Informal trade between Tanzania and Kenya | Tanzania imports industrial products and exports agricultural products | The total trade in agricultural food commodities between the two countries was estimated at US$6.3mn, with a larger proportion (US$4.3mn) composed of exports. Of the total trade in industrial manufactures estimated at US$12.5mn, imports comprised US$9.6mn. The overall informal trade between Tanzania and Kenya thus amounted to US$18.8mn, with a trade balance in favour of Kenya by US$4.4mn |
| Informal trade between Tanzania and Uganda | Tanzania both imports and exports coffee, rice, sugar, maize, maize flour and bananas | The overall trade between Tanzania and Uganda was estimated at US$4.5mn, with a trade balance favouring Tanzania by US$1.5mn |
| *Source: Compilation by author from existing literature* | | |

### 4.2.2 Food Security and Rural Livelihoods

Below is a table showing the rate of food production within EAC at the rate of kilograms per person (farmer) in the outlined years:

| Table 4.12: EAC Food Production (Kg/Person/Year), 2003-2005 | | | | | | |
|---|---|---|---|---|---|---|
| | **Wheat** | **Maize** | **Millet** | **Cassava** | **Beans** | **Rice** |
| **Burundi** | 1 | 17 | 1 | 99 | 31 | 6 |
| **Kenya** | 11 | 79 | 2 | 14 | 10 | 1 |
| **Rwanda** | 2 | 10 | | 98 | 23 | 3 |
| **Uganda** | 1 | 42 | 23 | 196 | 17 | 3 |
| **Tanzania** | 3 | 79 | 5 | 164 | 8 | 18 |
| *Source: FAO website (www.fao.org)* | | | | | | |

Regionally, production of foods, as indicated in Table 4.13 shows that in 2007, Rwanda produced higher quantities of plantain and potatoes, Burundi of bananas and sweet potatoes, Uganda of plantain, cassava and sweet potatoes, Kenya of cow milk and maize, and Tanzania of cassava, maize and banana. Taking maize and beans as major staple foods in the region, higher outputs were realised in Tanzania and Kenya.

**Table 4.13: The Top Five Produced Food Commodities in EAC Member States in 2007 (Quantity in MT)**

| TANZANIA | | KENYA | | UGANDA | | BURUNDI | | RWANDA | |
|---|---|---|---|---|---|---|---|---|---|
| **Product** | **MT** | **Product** | **MT** | **Product** | **MT** | **Product** | **MT** | **Product** | **MT** |
| Cattle meat | 248,695 | Cow milk | 4,230,000 | Plantain | 9,231,000 | Banana | 1,600,000 | Plantain | 2,600,000 |
| Banana | 3,500,000 | Cattle meat | 396,520 | Cassava | 4,456,000 | S/Potatoes | 873,663 | Potatoes | 1,200,000 |
| Cassava | 6,600,000 | Maize | 2,928,793 | S/Potatoes | 670,000 | Beans (Dry) | 205,196 | Beans (Dry) | 280,000 |
| Maize | 3,659,000 | Beans | 427,996 | Cattle meat | 106,044 | Vegetable | 250,000 | S/Potatoes | 800,000 |
| Rice(Paddy) | 1,341,835 | Banana | 1,186,740 | Cow milk | 735,000 | Cassava | 558,557 | Cassava | 800,000 |

*Source: EAC Trade Report 2008, FAO website (www.fao.org)*

### 4.2.3 Underlying Factors for Food Insecurity in Tanzania

Food insecurity in Tanzania is due to a number of factors that can be categorised into economic, environmental, political and social factors.

**Economic Factors**

- *Lack of food security knowledge*: Most policy makers and stakeholders lack relevant knowledge resulting in the inability to detect early warning signals for food insecurity in their areas.
- *Insufficient market information*: This lack of information does not allow adequate production responses.
- *Low food production*: Small scale farmers in central regions and other marginal rainfall areas are limited by small plots of land, low input use, labour distribution constraints and short rainfall season. This has led to low food production every year that is not sufficient for their household requirements. They are forced to sell labour to bridge their food gaps which in turn compromises their production capacity. When the drought is severe, complete crop failure complicates their situation.
- *Plant Diseases*: Cassava which serves as buffer crop during prolonged dry season is frequently affected by Cassava Mosaic Disease (especially in Mwanza, Kigoma, Kagera, Mara, Shinyanga and Tabora regions). This limits availability of alternative crops during drought periods.
- *Household poverty*: This forces small scale farmers to sell a greater portion of their produced food crops to meet family needs (such as education, medical, water and basic needs other than food) causing depletion of their household food stocks for their own consumption and limiting the availability of food at household level. This is mainly common in the central regions of Dodoma, Singida and Shinyanga (FEWS Net, 2008).
- *Food trade barriers*: There are many NTB including SPS standards.
- *Volatility in food prices*: The prices are unpredictable for all markets such as primary, secondary and terminal.
- *Low investment in agriculture sector*: Unfortunately, agriculture sector has not received the required investment from either the public or private sectors.
- *Limited Infrastructure*: Due to lack of or underdeveloped infrastructure systems markets do not function efficiently. This has resulted in producers not realising the full benefits from the crops they produce, thus leading farmers to remain poor. Moreover, high transportation cost, caused by rising fuel prices and poor road conditions coupled with poor storage structures, limits movement of food and distribution from surplus areas to deficit areas. Poor infrastructural connection between producer surplus areas and main consumption markets also worsens the situation.

**Environmental and Ecological Factors**

- *Environmental degradation*: Degradation in both pastoral and marginal agriculture areas means that even when rains are favourable, vegetation regeneration is limited. High runoff and poor water infiltration suggests that only a small proportion of rainfall is appropriately used.
- *Natural calamities such as droughts and floods*: During droughts, agricultural labour opportunities are scarce thus limiting income and purchasing power of casual

labourers dependent on agriculture and livestock labour activities. Marginal farmers and fishing households situated along the lakeshore and river basins are exposed to recurrent floods that lead to loss of life, assets, crops and displacement of people. Households in flood prone areas limit investments in productive activities due to their vulnerability to flood destruction and thus limiting their income sources.

- *Poor crop selection by farmers in the rainfall marginal areas*: Farmers have continued to grow maize in the agro-ecology suitable for sorghum, millets, pigeon peas etc. As a result they have experienced repeated crop losses even when rains would have supported growth of drought tolerant crops, leading to chronic food insecurity in rainfall marginal areas of Tanzania.
- *Declining fish catch*: This is caused by illegal fishing techniques, increasing number of fishermen, overfishing, destruction of coral reefs, poor fishing gears, trawlers fishing close to the coast, use of seine nets, fishing by juveniles and reduced water level in lakes, dams and rivers during droughts. Declining fish catch is also contributed by over-exploitation of shallow water stocks due to lack of proper fishing gears suitable for deep water fishing coupled with frequent windy weather and cyclones. This leads to a fall in the purchasing power for foods for poor fishermen.
- *Poor storage and food handling*: Post harvest losses of food crops from mishandling, processing, spoilage and pest infestation reduce the amount of food produced.
- *Dependency on rain-fed agriculture*: Modern irrigation methods are not practiced in most places in the country.
- *Impact on pastoralists*: Herds of pastoralists have been declining following shortage of pasture and water during prolonged droughts. During droughts condition of animals deteriorates and milk production is reduced in terms of volume and duration. Prolonged severe droughts trigger abnormal movement of pastoralists in search of pastures and water, causing conflict with crop farmers, spread of animal disease, livestock deaths and limited milk intake at household level, as herds move away from families. Also during droughts, terms of trade are unfavourable to pastoralist as livestock prices are low and cereal prices are high (FEWS Net, 2009). This limits pastoralists income and food purchasing power.

**Political and Institutional Factors**

- *Inappropriate policies*: Inappropriate and changing agriculture and trade policies affect food security.
- *Weak institutions*: Adequate policies and measures cannot be adopted and implemented without strong and vibrant institutions.
- *Land policies*: Changing land use policies coupled with expansion of farmlands as well as of national parks for the strategic promotion of wildlife tourism has limited agriculture and grazing land for pastoralists.
- *Inappropriate interventions*: Historically the main intervention during food insecurity crises has been provision of relief food and seeds hence limited attention has been given to the long term solution of the problem.
- *Lack of safety nets*: There is no legal framework and safety nets to effectively protect the farmers from natural and man-made disasters.
- *Insufficient agricultural development efforts*: Agriculture sector until recently did not receive the attention it deserved. The policies and measures instead focussed on industrialisation by implicitly taxing the agriculture sector.

- *Lack of compliance with regional trade agreements*: RTAs that allow free movement of goods including food in the region are not being fully implemented.

**Social Factors**

- *High prevalence of HIV/AIDS*: High prevalence of HIV/AIDS in farmers, fishermen, traders, pastoralists and workers in the country is impacting negatively on food security. The impacts include loss of productive family members, diverting money to medical care and funerals, increased dependency of orphans, reduced agricultural production and reduced remittances from urban centers to rural areas.
- *Increasing unemployment*: Economic policies and structural adjustment programmes have sometimes resulted in mass retrenchments and a consequent fall in purchasing power of people.
- *Unequal distribution of resources*: Resources such as arable land, water, finances, farm technology, and capital are not equally available to farmers.
- *Population growth*: Population growth in some parts of the country exceeds the food production and availability.
- *Gender inequality*: This is particularly significant in land ownership.
- *Lack of security for traders*: Insecurity is one of the major risks facing traders. Insecurity manifests in several forms, including ethnic conflicts, highway robbery, business rivalry, wars and tribal disputes. These affect productivity and trade in agricultural commodities.

### 4.2.4 Relationship between Food Security and Rural Livelihood Conditions in Tanzania

Food insecurity and poverty, although associated, are not synonymous. Poor households are vulnerable to small adversities when compared with the wealthier households (e.g., poor rains as compared to full drought), but some are more resilient than others due to various factors, notably the diversity of their income sources which in turn reflects the quality of the local economy. An analysis based on these considerations shows that 70 percent of livelihood zones in Tanzania are reasonably or very food secure, while the remaining 30 percent are considered borderline or food insecure.

**Table 4.14: General Food Security Rating by Percentage of Livelihood Zones in Tanzania**

| | Percentage |
|---|---|
| Very Food Secure | 28.21 |
| Reasonably Food Secure | 41.03 |
| Borderline | 28.21 |
| Moderately Food Insecure | 1.28 |
| Chronically Food Insecure | 1.28 |

*Source: FEWS Net, 2008*

### 4.2.5 Relationship between Trade in Agriculture and Poverty Reduction

Trade can be an important means to fight poverty. It allows the import of technologies, ideas and know-how from the rest of the world. The same is true for agricultural trade. Since most developing countries depend mostly on agriculture with a large portion of their populations involved in agriculture-related activities, agricultural trade can potentially improve household welfare and hence reduce poverty rates.

Agricultural and trade policies have a crucial role in reducing both rural and aggregate poverty in Tanzania. As discussed in section 4.1.1, most of the poor people are in rural areas and are employed in agriculture. The key aspect in these policies should be on how to increase the income levels of the rural poor (Sarris, A *et al*, 2006).

### 4.2.6 National and Regional Policy Dimensions and the Role of Stakeholders

***At the National and Regional Level***

Each EAC member state participates in this fight against food insecurity within the region. Below is a table with the existing policies and strategies among the member countries including Tanzania.

**Table 4.15: Review of EAC Countries' Policies that Affect Food Security in the EAC Region**

| Thematic areas related to trade and food security | EAC Countries' Food Security and Nutrition Policies/Strategies | | | | |
|---|---|---|---|---|---|
| | Uganda | Rwanda | Burundi | Tanzania | Kenya |
| Existence of policies and strategies on agriculture | Plan for Modernisation of Agriculture | None | None | National Agricultural Policy (revised in 2008) implemented through the Agricultural Sector Development Strategy (ASDP) | Strategy for Revitalising Agriculture (SRA) and National Agricultural Sector Extension Policy |
| Existence of specific policy or strategy on food and nutrition security | There is a Food and Nutrition Policy | *No information available except for some projects | *No information available except for some projects | Draft policy on food and nutrition | There is a Food and Nutrition Policy |
| Recognition of food crops as tradable commodities | Yes and has been put into practice for more than five | Yes | Yes | Yes, although has been subject to interruptions, but now given a | Yes, although occasional controls of wheat exports |

*Contd...*

| Thematic areas related to trade and food security | EAC Countries' Food Security and Nutrition Policies/Strategies | | | | |
|---|---|---|---|---|---|
| | **Uganda** | **Rwanda** | **Burundi** | **Tanzania** | **Kenya** |
| | years now, with food exports to neighbouring Kenya and Sudan being encouraged | | | special emphasis in the newly launched KILIMO Kwanza | experienced |
| Promotion of regional trade in food commodities | The policy has a focus on food supply and accessibility in the regional market | The state believes regional trade will resolve the food shortage | Positive about regional trade and has a liberal policy to allow imports from neighbours | Has always taken a cautious approach in encouraging farmers and traders to reach the regional food market | As the country with the highest negative food production balance, it promotes strategic liberalisation of regional food trade as a means of ensuring food security, improvement of food sector competitiveness, and sharing of information |
| Food Storage | The policies encourage state and individual household storage | The government does not have a strategic grain reserve but it encourages citizens to build household-level storage facilities (granaries) | No public centralised storage system but citizens are encouraged to build household-level granaries | Some of the public food storage facilities sold to private sector | Allows public and private sector investment in storage facilities as a way of bridging gaps between surplus and deficit areas |
| Market development through linking surplus and deficit food production areas | The policy intends to develop infrastructure to connect deficit and surplus | The policy promotes distribution of food from surplus areas to deficit areas | Emphasis on easy accessibility of food by all | National Road Development Programme geared to connect all regions with | The policies emphasise accessibility and distribution channels within the country and the region |

*Contd...*

| Thematic areas related to trade and food security | EAC Countries' Food Security and Nutrition Policies/Strategies | | | | |
|---|---|---|---|---|---|
| | Uganda | Rwanda | Burundi | Tanzania | Kenya |
| | areas within the country. However, it is silent on connecting deficit and surplus areas at the border points with other EAC countries | as trade is considered a key solution to address food deficit in the region | | tarmac roads and all districts with all-weather roads | |
| Compliance with EAC SPS Framework | It was not clearly indicated in the policy but the country is against import of Genetically Modified Organisms (GMOs) | Support efforts toward regional harmonisation of SPS measures | Support efforts toward regional harmonisation of SPS measures | Support efforts toward regional harmonisation of SPS measures | Support efforts toward regional harmonisation of SPS measures |

*Source: Common Food Security Strategy for the East African Community, 2009*

* Rwanda and Burundi do not have policies and strategies on agriculture, but as per the available information (Common Food Security Strategy for the East African Community, 2009), the two countries do have some projects addressing the issues under the agriculture sector. Information regarding Burundi and Rwanda in the subsequent rows of this table is based on that.

The EAC region has paid attention to the agricultural issues affecting the entire region, as well as to the issue of rural development. The region hence developed an EAC Agricultural and Rural Development Policy (EAC-ARDP) with an overall objective of cooperation in agriculture and rural development so as to achieve regional food security and rationalise agricultural production in the region. As an instrument for the EAC-ARDP, the member countries have developed an EAC Agriculture and Rural Development Strategy 2005-2030.

## 4.3 Synthesis

An expanded regional trade in food staples is necessary to accelerate agricultural production and development leading to growth in incomes and hence reduction in poverty in the EAC. This is depicted in the chart below.


Hence, regional trade can contribute in improving food security and rural livelihoods in the region in the following ways:

- Growth in regional trade in agricultural products can have direct benefits for food security and rural livelihood. Practiced by both small-scale producers as well as traders, regional trade in basic food stuffs creates employment in the field and in the market, boosting rural incomes and rationalising food distribution across a broader geographic area.
- Increased availability of food commodities in the food-deficit zones reduces prices for food staples, making them affordable for poor households.

### 4.3.1 Role of National Policies in Promoting Food Security and Rural Livelihood in Tanzania

In pursuance of Tanzania's National Food Security Policy and National Food Security Strategy, Tanzania's Ministry of Agriculture, Food Security and Cooperatives has set as its main goal improving the country's food security situation, in terms of food availability, stability of supplies and access to food and progress in achieving the hunger reduction targets (URT, 2006). The main features of Tanzania's Agricultural Policy as well as the Policy on Food and Nutrition are given below:

***Tanzania's National Agricultural Policy***

Tanzania Agriculture Policy (1997) recognises the need to improve agri-techniques and agriculture practices so as to enhance agricultural productivity. This includes introduction of appropriate technologies to augment labour productivity. The policies mandate the government to establish an effective information system on farm implements, machinery and equipments and to provide extension and regulatory services. Agricultural mechanisation is to ensure that farmers at all levels of production are knowledgeable about, have access to, and can choose and appropriately utilise sources of farm power, implements and machinery for mechanisation (Tanzania National Website: www.tanzania.go.tz/sectoralpol).

**Policy Objectives**

The objectives of the policy are to:

- ensure basic food security of the nation and increase nutritional standards;
- achieve production growth rates of at least four-five percent per annum respectively for food crops and livestock products;

- improve standards of living in rural areas through increased income from agriculture and livestock;
- enhance foreign exchange earnings by increased production and export of cash crops;
- produce and supply raw materials to local industries, both from crops and livestock;
- develop and introduce new technologies so as to increase the productivity of labour and land;
- promote integrated and sustainable use and management of natural resources;
- develop human resources within the sector in order to increase the productivity of labour;
- provide support services to the agricultural sector which cannot be provided efficiently by the private sector; and
- promote specifically the access of women and youth to land, credit, education and information.

**Policy Strategies**

The policy identifies the following strategies to achieve its objectives:

- agricultural research, extension and training;
- monitoring and evaluation of agricultural development, and identification of new opportunities (products, technologies, markets), and promotion of new production processes;
- collection and dissemination of market information in order to integrate the domestic markets and make foreign markets accessible;
- facilitation for infrastructure development, especially transport and storage;
- control of quality, hygiene and sanitary standards;
- control of vermin, epidemic pests and diseases;
- provision of adequate legal and regulatory framework;
- natural resources management;
- promotion of institutional structures in the agricultural sector; and
- taxes and subsidies.

*Tanzania's Food and Nutrition Policy*

The objectives of the National Food and Nutrition Policy are to:

- prepare a viable system for coordinating, balancing and guiding food and nutrition activities which are being undertaken by various sectors;
- provide guidelines and techniques to combat food and nutrition problems in the country, and to enable each sector to play its role;
- rectify the state of food availability and formulate proper strategies and techniques to ensure the availability and utilisation of food in accordance with nutritional requirements;
- involve all sectors which deal with issues pertaining to food and nutrition in realising and strengthening the methods of improving the nutrition situation;
- incorporate food and nutrition considerations in development plans and to allocate available resources towards solving the problem of food and nutrition at all levels;
- ensure nutrition as one of the indicators in assessing social development achievements of economic and health improvement projects; and
- formulate and develop research which facilitates solving of food and nutrition problems.

In order for the government to achieve the outlined objectives of the policy, the following areas have been analysed and addressed in the policy:

- food security;
- care for special groups;
- essential human services;
- food and nutrition;
- roles of various sectors in the implementation of the Food and Nutrition Policy in Tanzania.

*Other Programmes and Policies*

Other programmes and policies that concentrate on ensuring proper production and availability of food in Tanzania include: Food for Work Programme (FFW) by WFP; National Strategy for Growth and Reduction of Poverty (NSGRP); Agriculture Sector Development Programme (ASDP) and Tanzania Social Action Fund (TASAF).

In May 2009, the Government of Tanzania requested the World Bank to support a programme on *Accelerated Food Security in Tanzania*. This programme aims at achieving greater food security within the country by increasing food production and productivity and providing social protection for vulnerable groups and the rural poor.

*The 'KILIMO KWANZA' (Agriculture First) Resolution*

The resolution aims at transforming Tanzania's agricultural sector into a modern and commercial sector. This will have a positive impact on the poverty rates, especially in the rural areas. A number of actions have been taken under KILIMO KWANZA, including:

- integration of the Resolution into the government machinery to ensure successful implementation; and
- mobilisation of the private sector to substantially increase its investment and shoulder its rightful role in the implementation of Resolution.

## 4.4 Conclusions and Recommendations

The EAC is well endowed to have sufficient agricultural production to meet the food needs of its people. At the same time, and as shown in the 'analysis' section of this study, the region is characterised by food insecurity, especially Kenya as well as some parts of Tanzania, Uganda, Rwanda and Burundi. It, however, does not imply that the entire region is food insecure; there are some parts within member countries that are better endowed and hence the case for promoting regional trade in food and agriculture.

Cross-border trade (especially in agricultural products) within EAC has proved to improve the conditions of food production and food availability in member countries, particularly in areas where there is food insecurity. This applies to Tanzania as well. Hence, in order to improve food security as well as to promote rural development in Tanzania, cross-border trade should be encouraged.

Unfortunately, the general public within the EAC has not been sufficiently informed regarding the benefits of intensified regional cooperation and integration. Similarly, farmers and agricultural traders are unaware of the possible opportunities within the EAC regional market. The EAC Secretariat has been trying to conduct seminars in order

to disseminate information and sensitise local farmers in the EAC member countries, but more such programmes are still needed. The problem is compounded by the lack of knowledge and commitment by political decision-makers. For example, Tanzanian government seems cautious of any agricultural trade openings towards its Northern neighbours. The above demands additional capacities within the EAC member countries, as well as the EAC Secretariat to effectively address information and capacity constraints at all levels (GTZ, 2010).

In order to maintain food security and improve rural livelihoods, there is a need to observe the food safety standards throughout the region. Lack of mutual recognition of standards within the member states often acts as a barrier to trade particularly affecting the cross border agricultural trade in the EAC. The SPS procedures and requirements in the region are not harmonised in practice, nor are they adequately communicated to the farmers and agricultural traders. In fact local farmers and traders are not aware of these food safety measures. This insufficient knowledge hampers both the formal trade flows and consumer protection. Therefore, improving farmers' knowledge about the existence and importance of common standards and the relevant legal regulations is essential for developing and sustaining regional trade flows, especially of the agricultural products.

Tanzania is characterised by high transport costs which adversely impact the patterns of its trade with regional partners. It has been pointed out in most Tanzanian national reports that the core problems that do not allow farmers to reach the targeted markets are the high transport costs and poor transport conditions. The World Bank, the African Development Bank (AfDB) and other international donors are currently financing a number of projects to upgrade roads in the region and establish a network of national and regional transport corridors. Examples include the Arusha-Namanga-Athi River road, which will connect central Tanzania and Kenya, the Singida-Babati-Minjingu road, the Iringa-Dodoma road and several other road projects. The Isaka-Kigali rail route is also being constructed as part of the East African Transport and Trade Facilitation Project.

**Recommendations**

The governments of the EAC member countries with assistance from the EAC Secretariat should encourage formal cross border trade in agricultural products within the region. This can be done through the formulation and implementation of appropriate policies and strategies. Moreover, agricultural producers and traders should be involved in the formulation and implementation of relevant policies at both the national and regional levels.

To enhance the participation of all stakeholders in making the region food secure, the EAC Agricultural and Rural Development Policy (EAC-ARDP) and the Agricultural and Rural Development Strategy (EAC-ARDS) should aim at having in place suitable policy, legal and institutional frameworks. These stakeholders include: EAC Secretariat, the public sector, private sector, farmer organisations, food-processing units, non-governmental organisations and community-based organisations. There should be collaboration among the stakeholders based on the role of each of them as outlined in policies and strategies. This concerted and coordinated effort will certainly improve regional food security and rural livelihoods through improved regional trade.

More specifically, the following recommendations are offered to assist the Tanzanian government as well as the EAC Secretariat to ensure the achievement of the twin objectives of food security and rural development in the region:

***Recommendations to the Government of Tanzania***

- The government should pay attention to the needs of the farmers as presented by the national farmers' associations. This implies a close relationship between the two so as to enable policy makers to identify and address the needs and constraints of farmers through appropriate policies and strategies.
- In order to ensure increased production of food products, the government should selectively use support prices as a way to motivate farmers to produce more.
- The warehouse facilities should be improved as these will assist in the management of the harvests and thus diminishing the possibilities for food insecurity.
- The government should also set up Farm Service Centers which will be responsible for addressing the needs of the local farmers regarding agricultural machinery and inputs such as fertilisers.
- The government should set aside funds which will assist in strengthening and developing reliable internal transport networks.
- The government should pay extra attention to the cumbersome customs procedures, taxes, bribes and delays occurring on the border posts. While acknowledging that Tanzania has a better business environment than most of other EAC member countries (World Bank Doing Business Report 2009-2010), there is still a need to make more efforts in this regard.

***Recommendations to the EAC Secretariat***

- The Secretariat should focus on making sure that enough and adequate knowledge is disseminated regarding the regional market. In addition, there should be systems in place that can assist the agricultural producers and traders in forecasting the price levels, harvesting periods and market supply situations.
- The Secretariat should concentrate on ensuring that there is a reliable transport network throughout the region, whereby the agricultural products in the region can be easily moved from one country to another. This can include both roads and railways.
- The Secretariat should assist the governments of the member countries to apply harmonised food safety standards. Reaching this goal will have a very strong impact on the level of agricultural trade within the region.

***Recommendations to Other Stakeholders***

- Private producers should invest in increasing their productive capacities and productivity.
- Other stakeholders such as the private sector and CSOs can assist the government and the EAC Secretariat by carrying out research, seminars and workshops, etc. to address the possible constraints in realising the regional potential in agricultural trade with a view to ensuring food security and improving rural livelihoods.

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## Endnotes

1 Cotton, coffee, tobacco, cashew nuts, tea, pyrethrum and sisal

2 Fruits and vegetables, cut flowers, cardamom, oilseeds, and fish products

3 Swahili name "Mkakati wa Kukuza uchumi na Kupunguza Umaskini"

# 5 Uganda: Agricultural Productivity, Rural Livelihoods, Trade in Agriculture and Trade Facilitation

– Ndebesa Mwambutsya

## 5.1 Introduction

This comprehensive study provides new and valuable insights into the complex relationship between agricultural productivity and rural livelihoods on the one hand and trade in agriculture and trade facilitation on the other in Uganda. It builds on the previous research in the first phase research under the FEATS project which focussed on political economy of trade policy making. The findings of the second phase study quite clearly establish the importance of the agriculture sector in Uganda's economic and social set up.

### 5.1.1 Study Objectives

Keeping in view the project aims and based on the understanding developed during the first research study, the present research study focusses on the following objectives:

- Collection of information on and analysis of the recent trends in agricultural productivity, agriculture trade, livelihoods, and trade facilitation measures;
- An examination of the complex relationships involved using a holistic framework;
- Generation of new insights and knowledge that has practical implications; and
- Contribution towards finding solutions including thorough coherent policy framework that will assist Uganda in meeting its development goals as stipulated in the National Development Plan (NDP).

### 5.1.2 Methodology

Key steps and processes undertaken to accomplish the study involved cover:

- Literature search to expand and annotate research questions;
- Data collection, fact finding and testing of hypotheses through FEATS Uganda National Reference Group (UNRG) consultations, other meetings, on-line collaboration

with national, regional and international experts and partners, and targeted surveys (a questionnaire used to solicit relevant stakeholder feedback is at Annex 1);
- Consultation with the Project Advisory Committee; and
- Presentation of draft findings to another National Stakeholders Dialogue for validation and finalisation.

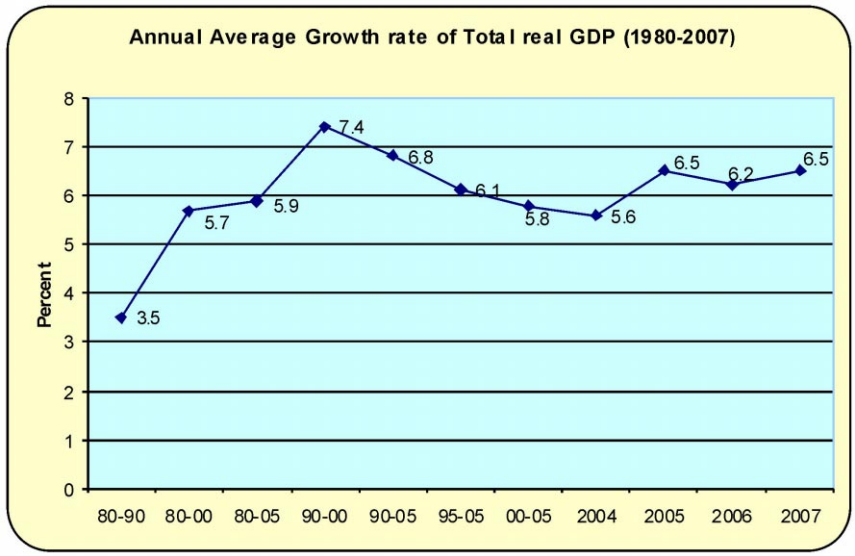
The study relied primarily on secondary data that is available from national and international sources. It was supplemented by primary data and information collected through meetings with key stakeholders, interviews, and short surveys.

## 5.2 Economic, Trade and Social Profile of Agriculture Sector

### 5.2.1 General Economic Overview

Agriculture should be placed in the context with respect to overall economic growth by shedding some light on general macroeconomic variables, mainly the gross domestic product (GDP). Since the late 1980s, Uganda has experienced relative political stability. This has allowed the country to consistently undertake extensive and sustained economic reforms, beginning with the Economic Reform Programme in 1987. As a result, the country has achieved macroeconomic stability and undertaken wide-ranging reforms such as market liberalisation, privatisation of public enterprises etc. This has enabled a rebound of growth, thus allowing Uganda to attain high GDP growth rates as illustrated in figure 5.1:

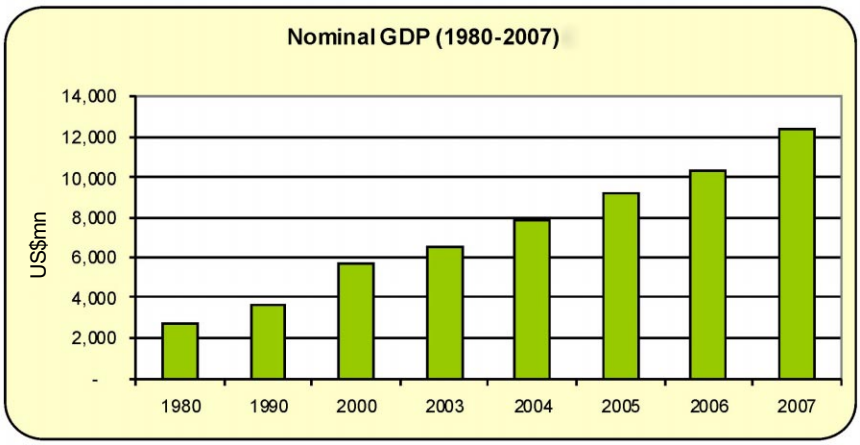
**Figure 5.1: GDP Growth Rate Trends**




*Source: UNCTAD Statistical Handbook (2008)*

Because of the impressive growth rates, GDP has grown from a paltry US$2bn in the 1980s to over US$12bn in 2007 as illustrated in figure 5.2:

**Figure 5.2: Nominal GDP Over Time**



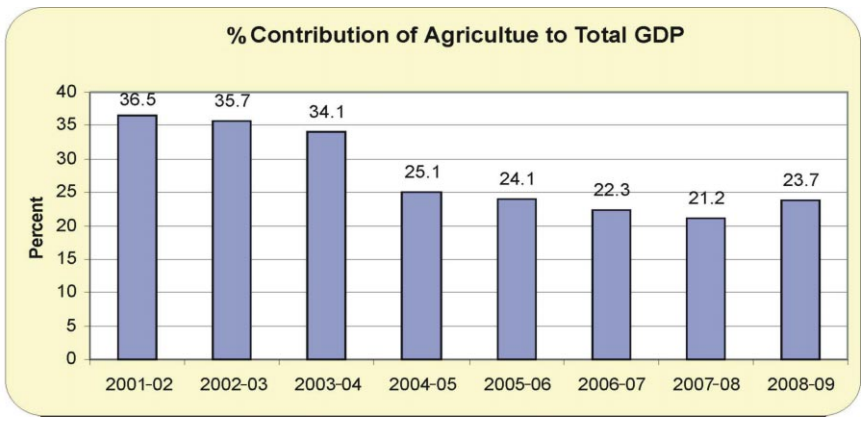

*Source: UNCTAD Statistical Handbook 2008*

### 5.2.2 Contribution of Agriculture to GDP

The share of agriculture to total GDP in Uganda has been declining since 2001 as shown in figure 5.3. Its share has declined from 50 percent in the 1990s to 23.7 percent in 2008-2009, yet it employs about 80 percent of the population.

Between 2001-2002 and 2008-2009, the share of agriculture to GDP fell rapidly (figure 5.3) while that of industry registered impressive growth rates. In 2008-2009 industry and agriculture converged at 25 percent.

**Figure 5.3: Agricultural Contribution to GDP**




*Source: 2009-2010 Budget Background Paper, Ministry of Finance, Planning and Economic Development (MoFPED)*

The declining share of agriculture in GDP *vis-a-vis* industry and the services sectors represents a significant and positive structural transformation in the economy according to conventional economics. However, the irony is that whereas the share of agriculture to GDP is declining, the proportion of Uganda's population employed in agriculture is increasing as will be discussed.

### 5.2.3 Production Trends for Main Agricultural Crops and Fisheries

In this sub section, we analyse trends in the production of major agricultural crops that have a potential for poverty reduction especially in rural Uganda. Over the years, production of major export crops has shown a mixed performance. Apart from maize which experienced a decline only in 2004, the rest of the crops seem to have experienced declines over the years 2004-2006.

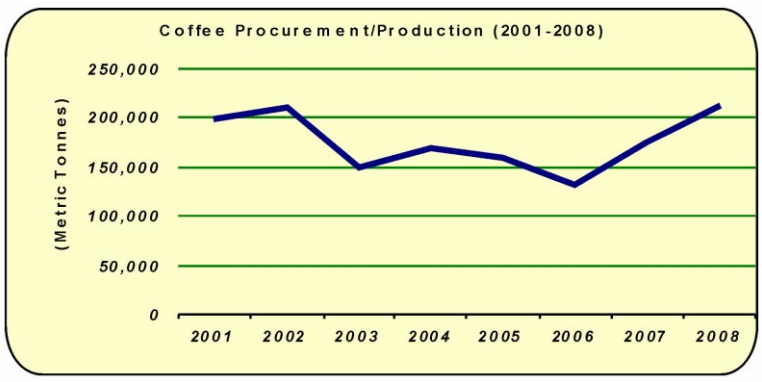
Since 2001, the agricultural sector growth rate has been declining, in other words the sector has been growing at a declining rate, yet it is a core sector of Uganda's economic growth contributing to food security, poverty reduction and employment. The decline in growth rates has also been experienced in the non-crop agriculture such as in the livestock sub-sector.

According to the Agricultural Sector Investment Plan 2009-2010 to 2013-2014, the decline seems to have been due to overdependence on rain fed agriculture. Rains have become unpredictable often causing crop failure in many parts of the country. The other key reason for the decline is the substantial drop in agricultural productivity levels. Substantial productivity drops have been noted in virtually all the major export crops. Where increase in production volumes has been observed to be substantial, it has been mainly on account of cultivation of more acreage.

***Coffee***

Coffee is Uganda's largest export crop and also its largest merchandise export. It is a low input small-holder crop with an average farm size of 0.2 hectares. It is the main source of

**Figure 5.4: Coffee Production Trends**




*Source: UBOS 2006 and 2009 Statistical Abstracts*

income for some 500,000 rural households. Over 80 percent of the coffee produced and exported from Uganda is Robusta, with Arabica making up the rest.

Production has had an unstable pattern with steep drops between 2002 and 2006 mainly because of the coffee wilt disease and unpredictable weather patterns. This fall in coffee production and exports has dire consequences for the peasant farmers' livelihoods as coffee provides employment for the bulk of rural farmers in most of southern Uganda.

With respect to coffee's contribution to poverty reduction, simulations done in 2007 estimated that 20 percent increase in production of coffee would lead to a decline in the poverty incidence of around 0.2 percentage points in different regions of the country as illustrated in table 5.1.

**Table 5.1: Poverty Headcounts: Impact of 20 Percent Increase in Production of Coffee (in percent)**

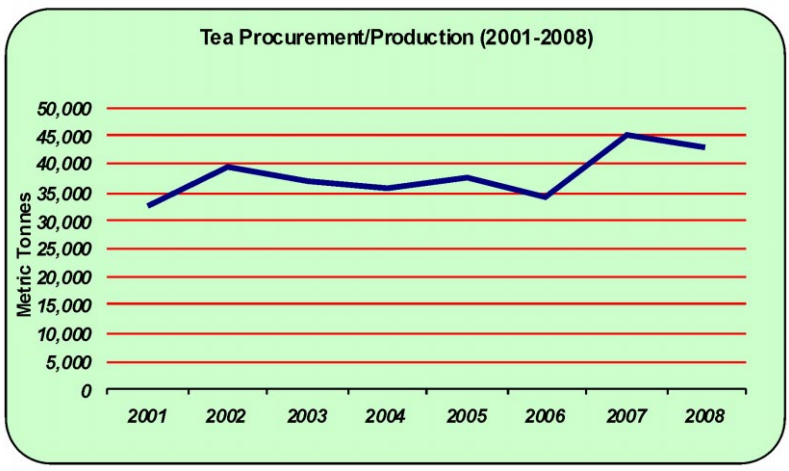
| | All | Rural | Urban | Central | Eastern | Northern | Western |
|---|---|---|---|---|---|---|---|
| **Coffee** | 33.60 | 37.21 | 9.62 | 19.72 | 34.79 | 62.90 | 26.20 |

*Source: DTIS Report of the Integrated Framework -2007*

***Tea***

The tea industry is performing well, having recovered from the devastation during the 1970s, with most nationalised estates having now been returned to their owners. Policy reforms including liberalisation and privatisation have stimulated production to record highs of 45,000 tons in 2007 with a slight decline in 2008.

**Figure 5.5: Tea Production Trends**




*Source: UBOS 2006 and 2009 Statistical Abstracts*

According to the Uganda Tea Association, around 45,000 tonnes of tea was produced and 37,000 tonnes exported in 2008.

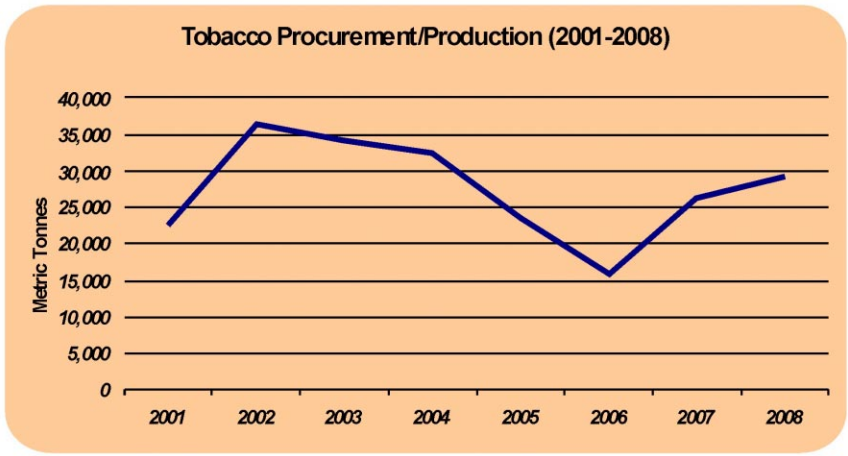
According to Uganda's National Export Strategy, 70 percent of the production is accounted for by 5 large private estates while smallholder production accounts for 27 percent. Other 20 small private estates account for the remaining 3 percent.

With respect to livelihood impact, with an estimated 16,300 hectares of tea under production (8,500 ha in large estates and 7,800 ha in smallholder cultivation), total employment in the tea sub-sector (both direct and indirect) is estimated to be around 40,750 people.

***Tobacco***

The tobacco sub-sector has also been on the decline since 2001. In fact the tobacco sub-sector's growth trends have been consistently below the 2001 production levels. This slow growth has negatively affected the tobacco farmers especially in the West Nile region where it has been the only export crop.

**Figure 5.6: Tobacco Production Trends**



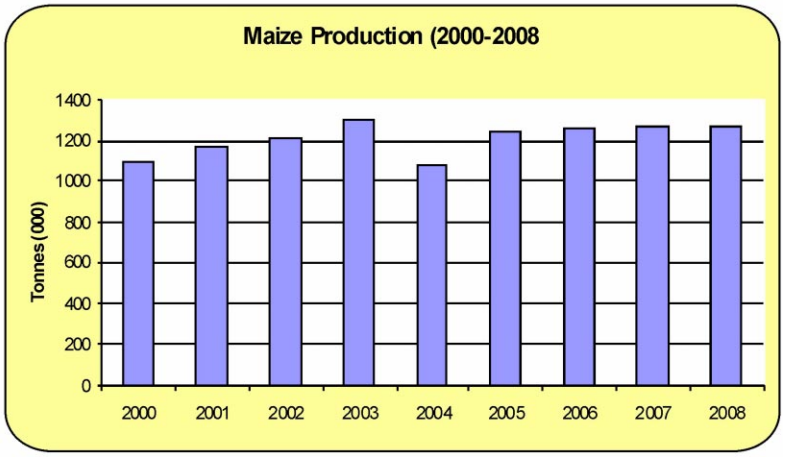

*Source: UBOS 2006 and 2009 Statistical Abstracts*

***Maize***

Official statistics put production figures of maize grain (the main cereal) at about 1,250,000 metric tonnes in 2008, having slightly increased from 1,200,000 tonnes in 2002. Most of the grain is grown on small holder peasant farms spread across the country. A few institutions including prison authorities do commercial farming.

Maize is one of the most important food crops for Uganda. In fact it is the second most important food crop after banana. Maize is also one of the non-traditional exports for Uganda. It is exported mainly in the COMESA region. The crop has registered slow growth rates since 2000 as shown in graph 5.7 on account of falling production and

**Figure 5.7: Maize Production Trends**



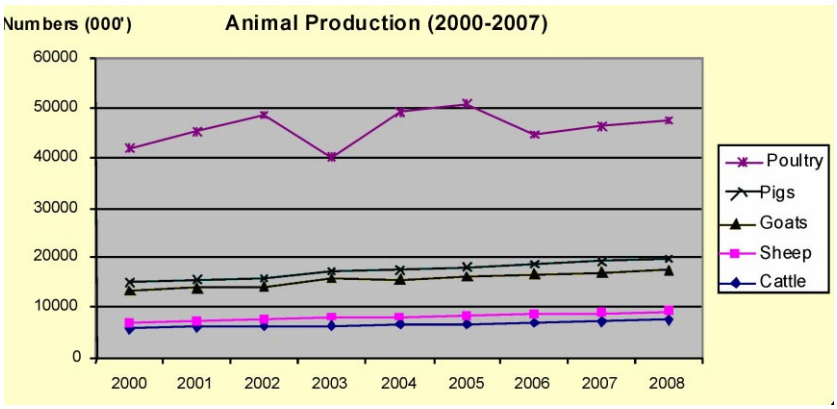

*Source: UBOS 2006 and 2009 Statistical Abstracts*

productivity as well as poor prices. The fall in prices has been blamed most for poor maize production and exports.

***Livestock***

The livestock sub-sector has registered increased growth trends since 2000. However the current production levels do not meet the domestic demand. There is a big potential in this sub-sector to meet both the domestic and regional demands. However, this has not been achieved because of low productivity levels in this sub-sector. As figure 5.8 illustrates, production trends especially for cattle, sheep and pigs have remained almost unchanged for much of the last decade.

**Figure 5.8: Animal Production Trends**



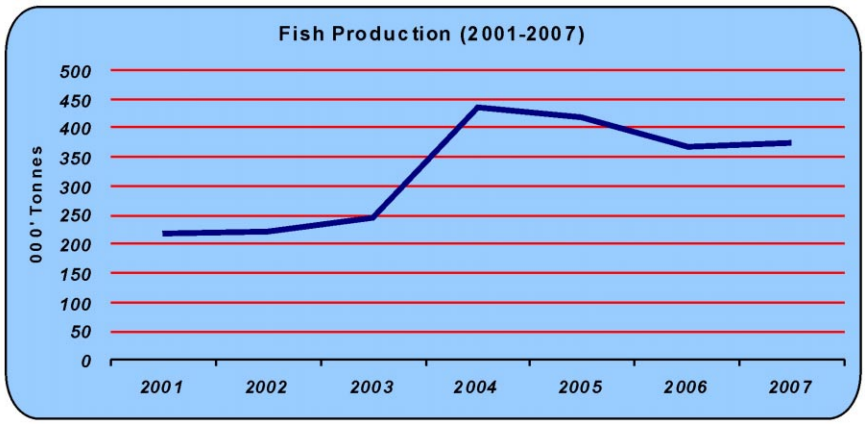

*Source: UBOS Statistical Abstracts 2006 and 2009*

Export of livestock products in the country is mainly limited to raw and semi-processed hides and skins as well as milk. Inadequate disease control and the absence of the relevant quality and processing infrastructure are some of the major limiting factors for exporting beef.

***Fish***

Fisheries is one of Uganda's key industries. According to the *Uganda National Bureau of Statistics 2009 Statistical abstract,* 20 percent of Uganda's surface area is water. The country has five water bodies. According to the *Agricultural Sector Investment Plan 2009-2010 to 2013-2014*, if well managed, fisheries have a production potential of well over 800,000 metric tonnes. The current production is at about 380,000, having declined in the recent past (figure 5.9) due to poor and unsustainable fish harvest practices.

**Figure 5.9: Fish Production Trends**




*Source: UBOS Statistical Abstracts 2006 and 2009*

Regarding the sectors contribution to poverty reduction, simulations of 20 percent increase in production for fish done in the Diagnostic Trade Integrated Study (DTIS) 2007 indicates that the impact on poverty would be a decline of around 0.02 percent.

**Table 5.2: Poverty Headcounts: Impact of 20 Percent Increase in Production of Fish (in percent)**

| | All | Rural | Urban | Central | Eastern | Northern | Western |
|---|---|---|---|---|---|---|---|
| **Fishing** | 33.79 | 37.43 | 9.62 | 19.77 | 34.93 | 63.60 | 26.23 |

*Source: DTIS Report of the Integrated Framework-2007*

This correlates well with the UN Millennium Goals review Study (2008) which indicates that the fishing sub-sector is one of the most important sub-sectors that provides employment to the poor in Uganda. As many as 278,862 people were employed in the sub-sector in 2003 and the total number of people depending directly on fisheries stood at 1,219,724.

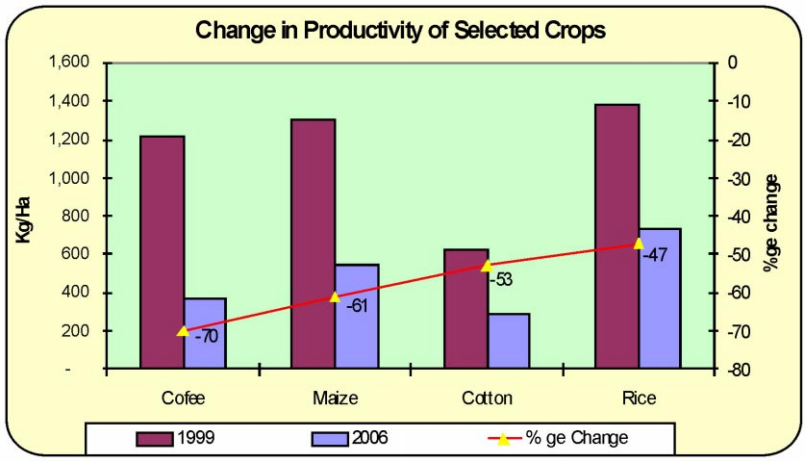
### 5.2.4 Productivity of the Main Agricultural Crops

As briefly highlighted in 5.2.3, agricultural productivity has been on the decline for much of the last decade. According to National Agricultural Advisory Services (NAADS), GDP productivity is measured by the value of total crop output per acre of cultivated land, while livestock productivity is made up of gain in the stock of animals and value of products (milk, cheese, meat, etc) per tropical livestock unit.

Between 1999 and 2006, the major export crops have experienced double digit drops in productivity. As illustrated in figure 5.10 for example, coffee and maize have had drops of over 60 percent.

According to evaluations done by the Plan for Modernisation of Agriculture (PMA), it appears the main cause of low productivity levels is lack of improved inputs application by the majority of the farmers.

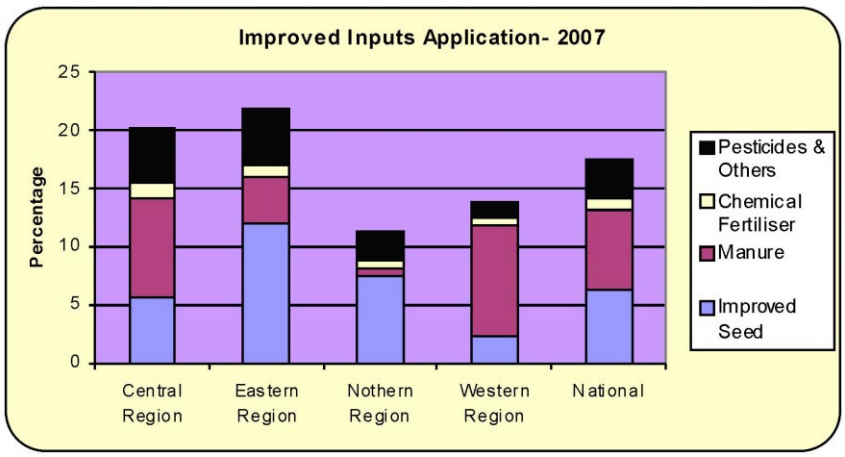
**Figure 5.10: Productivity of Selected Crops**




*Source: Ministry of Agriculture Development Strategy and Investment Plan (2009-10 to 2013-14)*

As illustrated in figure 5.11, in virtually all the regions of the country, application of major inputs including fertilisers, improved seeds, pesticides etc. is very low. Taking fertilisers as an example, the national level application is barely over one percent.

**Figure 5.11: State of Agricultural Inputs Application**




*Source: Ministry of Agriculture Development Strategy and Investment Plan (2009-10 to 2013-14)*

According to the Agricultural Sector Investment Plan 2009-2010 to 2013-2014; a comparative analysis of farm level yields and research station yields reveals a huge gap. As table 5.3 illustrates, productivity at the farm is much lower than the attainable potential.

**Table 5.3: Present Farm Yields against Attainable Potential for Selected Crops (Kg/Ha)**

| Crop | Yield on farmer's Garden | Yield on Research Station |
|---|---|---|
| Maize | 551 | 5000-8000 |
| Coffee | 369 | 3,500 |
| Beans | 358 | 2,000-4,000 |
| Bananas | 1,872 | 4500 |

*Source: Ministry of Agriculture Development Strategy and Investment Plan (2009-10 to 2013-14)*

This is also well corroborated with the World Bank Country Economic Memorandum Volume 2, 2007.

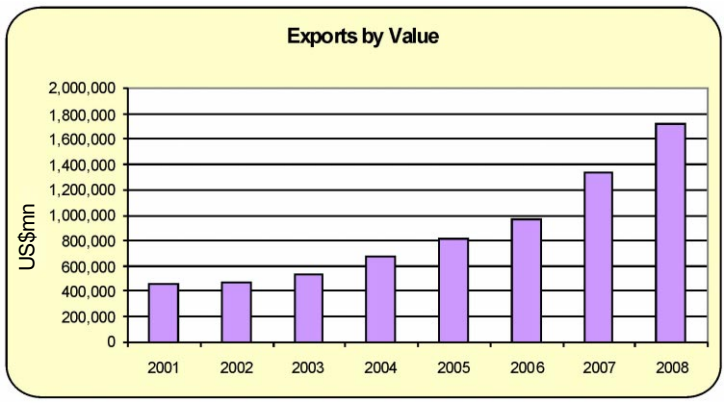
### 5.2.5 Agriculture Trade Profile

The profile here focusses mainly on export and import of agricultural crops.

***Exports***

Uganda has over the years continued to increase her exports. As illustrated in figure 5.12, national export earnings have increased 6 fold between 2000 and 2008.

**Figure 5.12: Total Export Trends (2000-2008)**



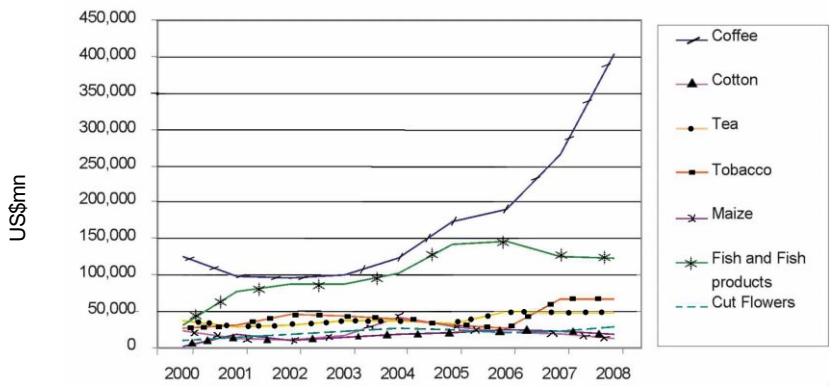

*Source: UBOS Statistical Abstracts 2006 and 2009*

This growth is largely accounted for by a diversified export base that has seen the country progress substantially from the export of traditional export crops of tea, coffee, tobacco and cotton to a much more diversified basket that has included flowers, fish, cereals, fruits and vegetables and various produces directed towards the regional markets of the East Africa Community (EAC) and COMESA

As illustrated in figure 5.13, agricultural products constitute the top exports of the country and among them maize, fish and flowers featured less in the country's exports in the decade before 2000.

The main agricultural export crop in Uganda is coffee. It is by far the most important in terms of export earnings, being Uganda's single largest merchandise export to international markets fetching US$175mn in 2008, and in terms of its importance for poverty reduction.

**Figure 5.13: Trends of the Top 7 Agriculture Exports (2000-2008)**



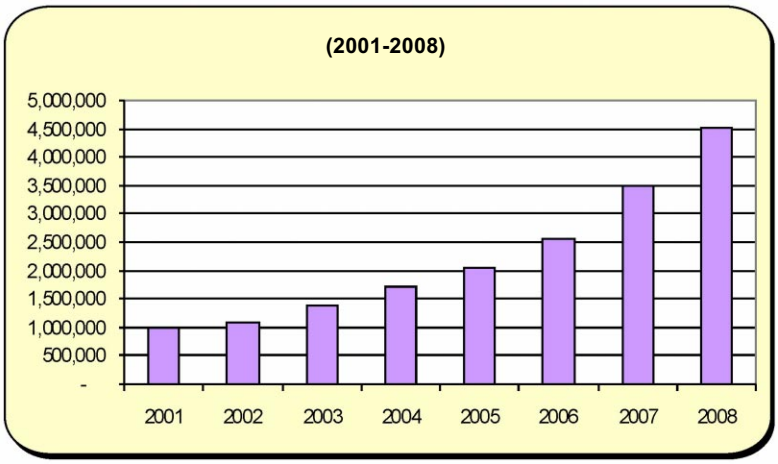

*Source: UBOS Statistical Abstracts 2006 and 2009*

There is also high informal trade that takes place between Uganda and her immediate neighbours. Of particular significance to this study is that over 60 percent of informal exports are agricultural exports, while 37 percent are industrial. Topping the list of informal agricultural exports are maize (19 percent), beans (17 percent), fish (8 percent), other grains (7 percent), and bananas (3 percent).

When mirrored against employment, poverty and income inequality, export expansion can have a direct impact on poverty reduction if the poor are directly involved in this expansion. For much of the last decade, poverty reduction has been visible in rural areas producing cash crops for sale and export.

In some sectors such as fisheries and coffee, direct employment has been seen to expand substantially. For example according to Lake Victoria Fisheries Organisation, between 2000 and 2008, fishermen on Lake Victoria alone have risen to 1,960,000 up from 129, 000[1] . According to Uganda's National Export Strategy (NES)[2] coffee, for example, employs more than 1.2 million people and supports more than 6 million livelihoods. The fish sector employs an estimated 250,000 people in the lake side fishing communities and about 5,000 in urban factories, and more than 5 million people depend on it for their livelihood.

**Figure 5.14: Total Imports Trends (US$000)**



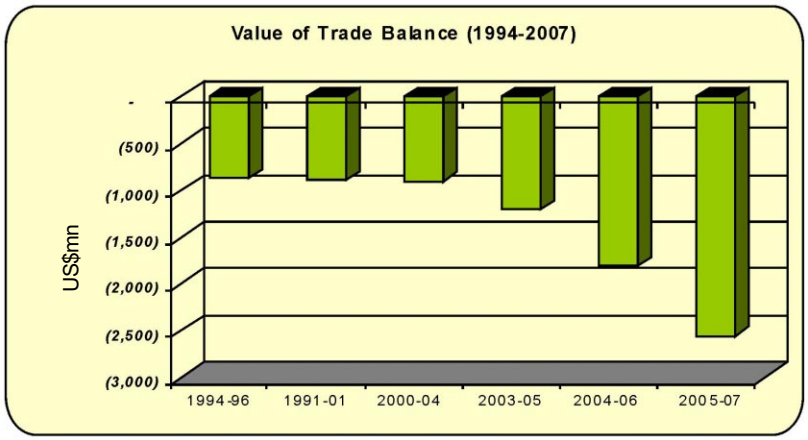

*Source: UBOS Statistical Abstracts 2006 and 2008*

***Imports***

Merchandise imports have been rising, with the increases being especially steep during the last decade. As illustrated by figure 5.14, between 2001 and 2008, merchandise imports rose nearly 400 percent, from around US$1bn to nearly US$4.6bn.

Accelerated growth in imports has resulted in a widening trade deficit, standing at US$2.5bn as illustrated by figure 5.15.

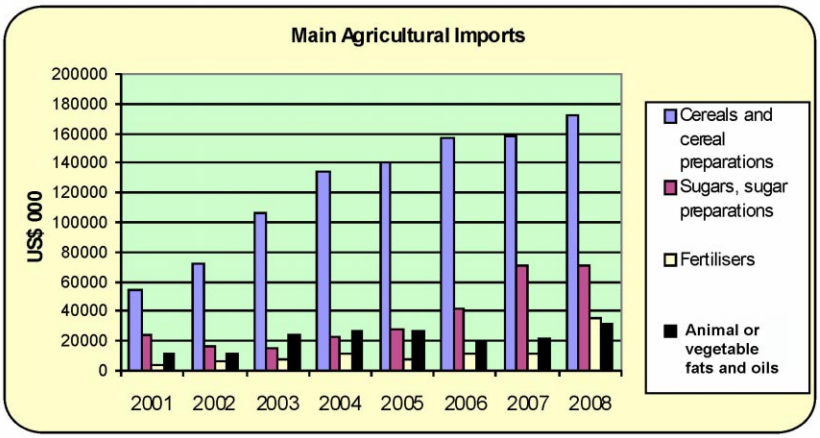
**Figure 5.15: Trade Deficit Trend**




*Source: UNCTAD Statistical Handbook (2008)*

The acceleration in imports since 2001 has been across-the-board in consumer, capital and industrial goods. Acceleration in imports has been equally registered in agricultural imports that include; cereals and cereal preparations, sugar and sugar preparations, fertilisers, vegetable and animal fats. Figure 5.16 serves to illustrate the trend of the main agricultural imports which have been on the rise.

**Figure 5.16: Trends of the Main Agricultural Imports**

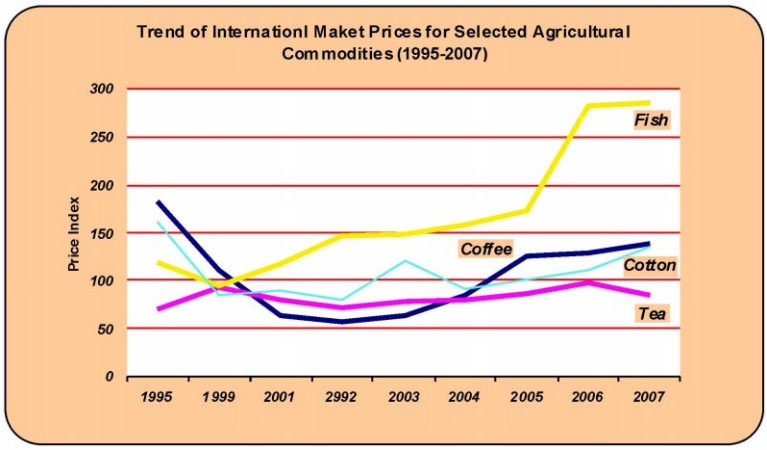



*Source: UBOS Statistical Abstracts 2006 and 2009*

***Commodity Prices and its Effect on Agricultural Trade***

Although the value of agricultural exports has been rising, international commodity prices have been erratic (figure 5.17). Much of the 2000 decade, however, saw price vagaries that were much less steep in comparison to the second half of the 1990s. For

**Figure 5.17: International Agricultural Commodity Prices (Indices)**




*Source: UNCTAD Statistical Handbook (2008)*

some main commodities such as coffee and fish, the price indices rose substantially and this partly accounted for the general increase in gross export returns.

Given these price oscillations, a steady growth in exports cannot be overly attributed to price increases. While price has had a positive impact in the latter part of the 2000s, a diversified export base that saw more commodities and more volumes exported is partly responsible for increased agricultural export revenues.

## 5.3 Employment in Agriculture, Rural Poverty, Nutrition and Food Security

This section sheds light on the linkages between production and trade in agriculture on the one hand, and livelihood indicators on the other. The key variables for livelihood indicators include employment, poverty reduction, and nutrition and food security, among others.

The contradiction between economic growth indicators and livelihoods indicators is glaring in Uganda. Further, findings indicate that there is an interesting correlation between agricultural productivity and livelihood indicators.

For example, there is an imbalance in the structure of the economy and labour force employment. Whereas the proportion of persons engaged in the agricultural sector has increased from 65.5 percent in 2002-2003 to 73.9 percent in 2005-2006, the share of agriculture has been declining. Furthermore the percentage of the labour force employed in the manufacturing sector decreased from 6.8 percent to 4.2 percent and the percentage of the labour force employed in the service sector decreased from 26.8 percent to 20.7 percent. This is notwithstanding the fact that the share of service sector in GDP is now more than 45 percent.

These contradictions indicate that the majority of the population is increasingly employed in agriculture, a sector whose growth rates are decreasing considerably. This is also the sector where employees are least paid compared to the other sectors. Further, it is noted that this is the sector where the majority of women in the rural areas are employed.

Another contradiction in the structure of the economy and livelihood indicators is that whereas on average, the larger economy of Uganda has been registering high growth rates for the last ten years, inequality as measured by the Gini Coefficient has also been increasing.

The other factors that could have crowded out the potential benefits of economic growth in relation to livelihood indicators is the high population growth trend experienced in Uganda as indicated in graphs above. At 3.2 percent growth rate per annum, Uganda's population is projected to reach 38 million in 2015. To attain relatively higher per-capita income levels in the face of a rapidly growing population is a big challenge.

Another related factor to agricultural growth indicators and livelihood concerns is gender inequality. Whereas it is generally understood that women shoulder the main responsibility of feeding the families, they are the least found in formal employment as the figure 5.19 indicates. Yet the women need employment in order to earn money to buy food to cater for the family.

As this study progresses, picture emerges that food insecurity in rural areas is positively correlated with falling agricultural productivity and rural earnings.

By and large, Uganda has registered somewhat impressive poverty reduction since the 1990s. In 1992-1993, 53 percent of the population was below poverty line. This dropped to 44 percent in 1997-1998 and to 31 percent in 2005-2006. The 31 percent under poverty line translates into about ten million Ugandans. If the falling agricultural growth and productivity rates are not addressed, many more Ugandans may fall under the poverty line as the agricultural sector still remains central in addressing challenges of poverty and poor quality of life for the majority of Ugandans.

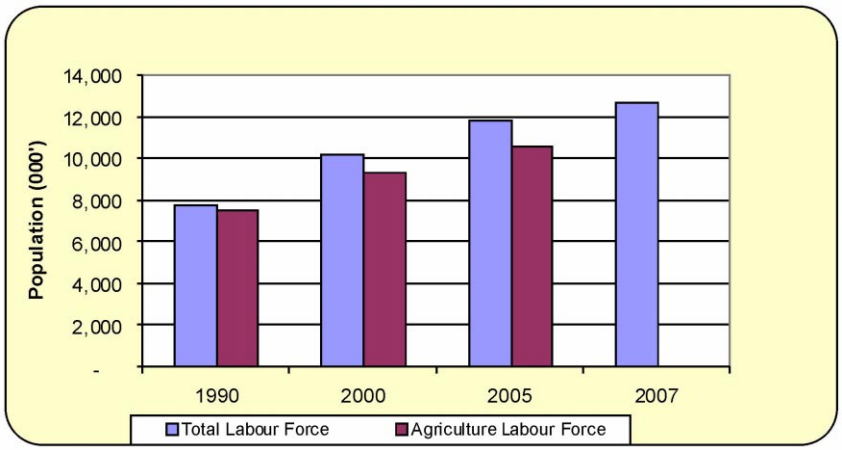
In the subsections that follow below, these issues are elaborated with the help of data and graphs.

### 5.3.1 Employment

Uganda's total labour force in 2007 stood at about 12.5 million people. With a population of more than 30 million people, this implies that more than 50 percent of the population is not in active employment.

Again as demonstrated in the illustration above, the number of people employed in agriculture has been on the increase since the 1990s. The above scenario sounds irrational as to why should people continue to seek employment in the agricultural sector, the one whose share of contribution to GDP is declining! There is one explanation – failure to get non-agricultural work.

**Figure 5.18: Total Labour Force Trends (1990-2007)**

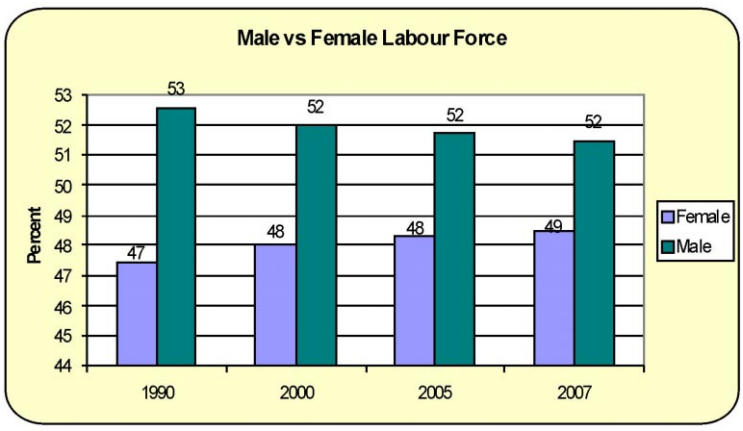



*Source: UNCTAD Statistical Handbook (2008)*

The available evidence suggests that the bulk of the people employed in the agriculture sector are subsistence farmers and fishermen. With this composition, it is less probable that agricultural productivity can substantially increase. As already highlighted, much of the agricultural productivity has remained low and in a number of cases declined simply because of this kind of subsistence labour that neither possesses the skills nor the improved inputs needed to enhance agricultural productivity.

This is also a sector where the majority of women in the rural areas are involved as illustrated in figure 5.19. The implication of this is that it is mainly women involved in subsistence agriculture where commercial benefits are low, and hence women are more likely to bear the brunt of poverty.

**Figure 5.19: Gender and Employment**

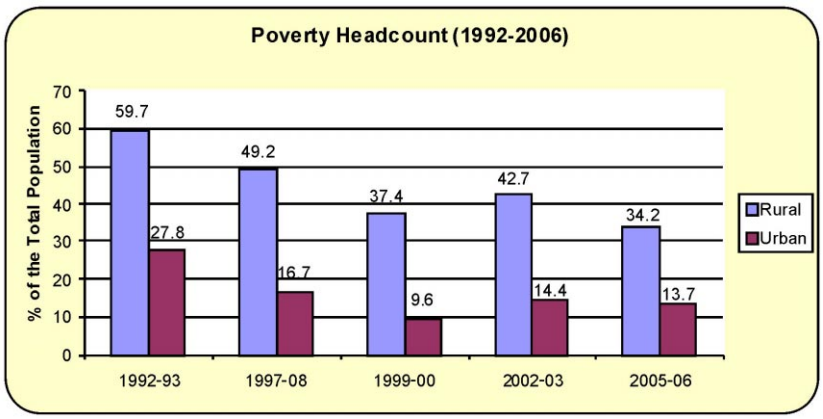



*Source: UNCTAD Statistical Handbook (2008)*

### 5.3.2 Rural Poverty

Economic growth in Uganda that accompanied the economic reforms of the 1990s has been largely responsible for the reduction in poverty during the last decade. According to the official statistics, poverty has been falling in both urban and rural areas although more so in urban than rural areas as illustrated in figure 5.20.

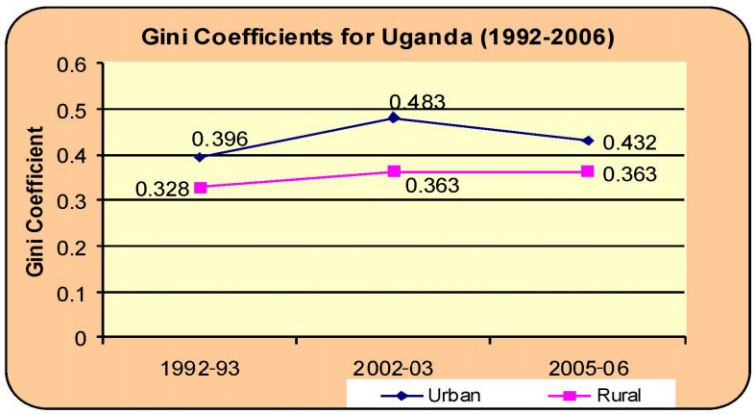
**Figure 5.20: Poverty Headcount Trends**




*Source: UBOS Satistical Abstract 2009 & Millennium Development Goals Country Progress Report 2007 – UNDP*

While poverty has declined across all sectors, it has declined the least for those involved in agriculture. The incidence (as measured by the headcount ratio) is highest for households headed by individuals engaged in agriculture. According to the 2005-2006 Uganda National Household Survey (UNHS), around 75 percent of the poor in Uganda are employed in agriculture.

**Figure 5. 21: Trend of Rural and Urban Inequality**



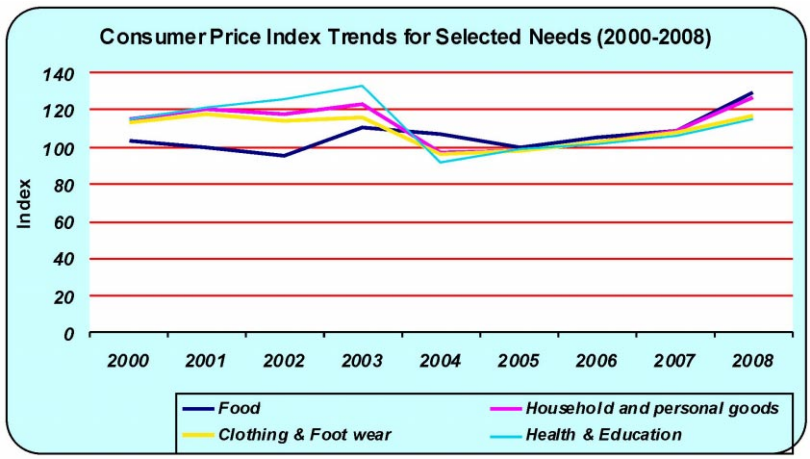

*Source: UBOS Statistical Abstract 2009*

From the equity and equality aspect, while sustained higher growth and expanding agricultural trade are clearly essential for poverty reduction, the benefits of high growth may not reach some of the poorest households who are tillers of the land. Most of the benefits go to the middle men higher in the value chain. There is inequality in the country and for much of the period of this study, it has been growing save for the mid 2000s when it slightly fell as illustrated in figure 5.21.

The revelation means that there is growing inequality between rural and urban areas. Improving rural agricultural incomes should thus be a cornerstone of Uganda's poverty reduction strategy.

A further analysis of the trend of prices for basic consumer products on which the poor spend their incomes may also shed some light on livelihoods. As figure 5.22 illustrates, the prices have an unstable pattern and for much of the period of the study, they have tended to increase. Between 2005 and 2009, the trend has been consistently upwards. The implication is that while poverty is high in rural areas where agricultural activity is concentrated, households have to spend more to meet their basic needs.

**Figure 5.22: Price Indices for the Poor**



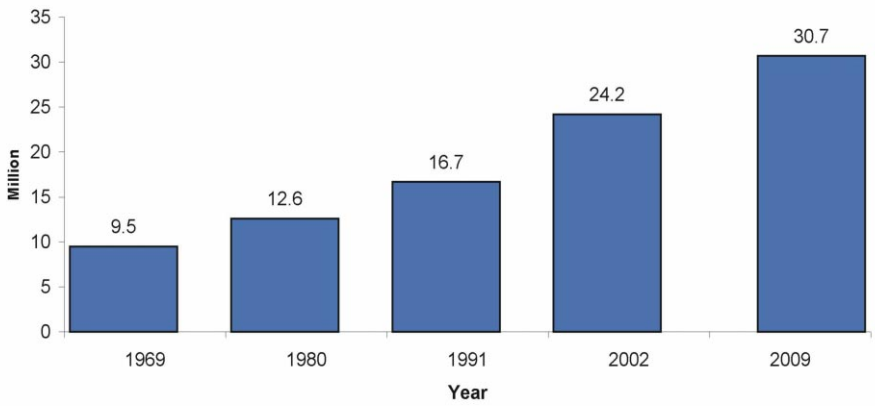

*Source: UBOS Statistical Abstract 2009*

### 5.3.3 Nutrition and Food Security

Food insecurity has clearly been on the increase since the late 1990s as will be illustrated in figure 5.24. The main culpable factor for this is the rapidly growing population. As figure 5.23 illustrates, Uganda's population has more than doubled in the last two decades.

The increase in population has not proportionally matched with increase in food security capacity both in terms of producing sufficient food for consumption and by increased incomes needed to buy food. While agricultural export volumes have grown as earlier indicated, this growth is far outmatched by population increases. Price variations also

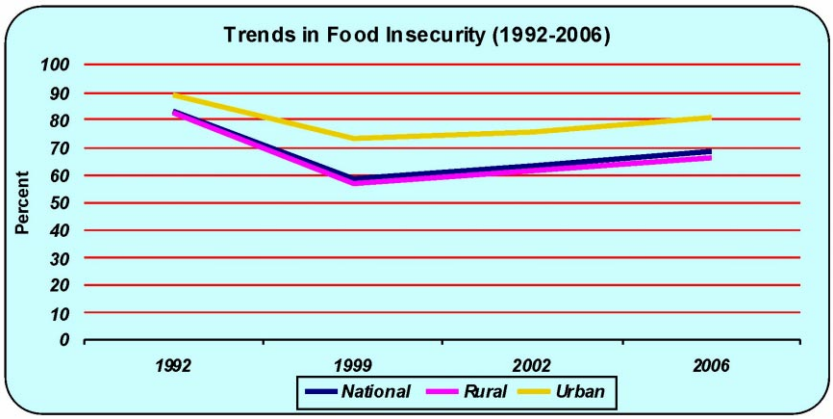
**Figure 5.23: Population Trends**




*Source: UBOS Statistical Abstract 2009*

do not allow farmers to receive good returns on their export commodities. Additionally, falling agricultural productivity cannot permit agricultural communities to build meaningful food security capabilities.

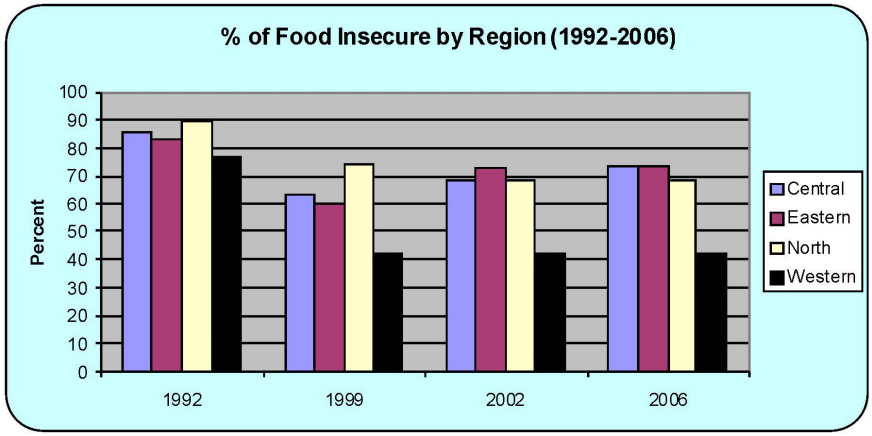
**Figure 5.24: Food Security – Rural vs Urban**




*Source: Millennium Development Goals Country Progress Report 2007 – UNDP*

Food insecurity levels also vary from region to region. As illustrated in figure 5.25, northern Uganda experiences the highest food insecurity levels. This is mainly on account of a prolonged period of insecurity and war in the region that has lasted almost two decades. This has adversely affected agricultural production both for home consumption and for trade.

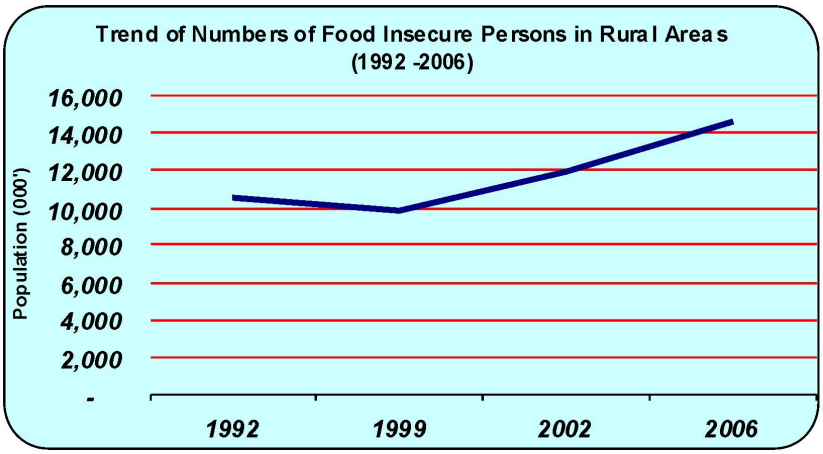
**Figure 5.25: Regional Level Status and Trend of Food Insecurity**




*Source: Millennium Development Goals Country Progress Report 2007 – UNDP*

Perhaps the most interesting revelation of the study with respect to food insecurity is that there is a steep increase in food insecure persons in rural Uganda, as illustrated by figure 5.26. The irony is that while rural areas are responsible for producing much of agricultural commodities exported, food insecurity continues to rapidly rise. This raises the question whether rural agricultural communities are receiving adequate food secure incomes from their produce to be able to buy the food they need. While we have noted that high population growth rates may be the main factor for the rising food insecure persons, one may not rule out the fact that farmers are not receiving adequate remuneration from agricultural trade practices.

**Figure 5.26: Trend of Food Insecure Persons in Rural Areas**




*Source: Millennium Development Goals Country Progress Report 2007 – UNDP*

## 5.4 Landlockedness and Trade Facilitation Constraints

By virtue of its landlocked status, Uganda is automatically disadvantaged with respect to transport and trade facilitation (TTF). Not only does it have to incur additional costs arising from the longer distances to the sea ports, it also needs to bear costs arising from TTF issues in its immediate neighbours which are outside of its control.

High TTF costs are experienced in external trade. These costs comprise charges for transport in Uganda along the main road arteries, international road freight, railway and rail ferry transportation, airfreight, sea freight, customs operations, clearing and forwarding (C&F), insurance, port services, and telecommunications. An analysis of these constraints is discussed.

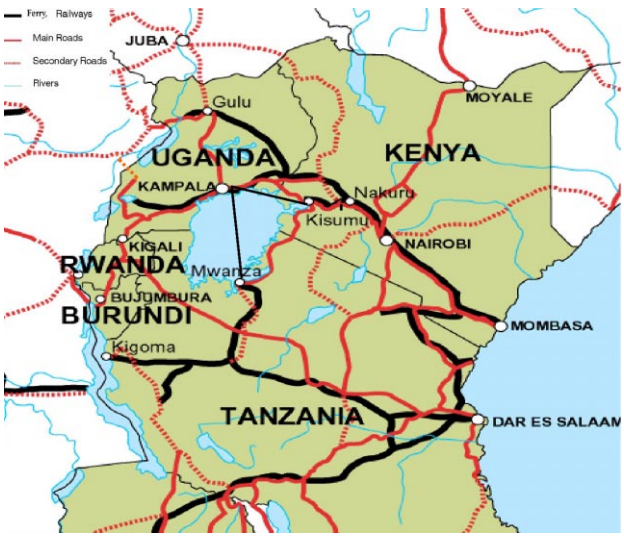
### 5.4.1 Constraints Related to Landlocked Status and its Effect on Agricultural Trade

The main issues and constraints of being landlocked relate to transport systems. Uganda is critically dependent on its neighbours – Kenya and Tanzania – for transportation of her goods and services.

The main routes used for Uganda's external trade are:

- The Northern Corridor with road, rail (including rail ferry) and pipeline transport services between the hinterland countries and the port of Mombasa in Kenya;
- The Central Corridor that comprises similar services, except the pipeline, pertaining to the port of Dar Es Salaam in Tanzania;
- An air corridor out of Entebbe International Airport; and
- Road services between Uganda and countries further inland.

**Figure 5.27: Map of Main Regional Road and Rail Routes[3]**




*Source: World Bank Trade Integrated Study 2007*

The Northern Corridor is the main route for Uganda's external trade flows, carrying an average of 88 percent of the traffic. 95 percent of Uganda's overseas imports and exports transit through Mombasa. Dar es Salaam caters for 3.5 percent and the remaining 1.5 percent is air freighted.

With respect to the internal road network, data from the National Roads Authority summarises the network and its condition as per tables 5.4 and 5.5.

| Table 5.4: Uganda Road Network (2009) | |
|---|---|
| **Category** | **Kms** |
| National | **10,800** |
| District | **27,500** |
| Urban | **4,500** |
| Community Access | **35,0000** |
| *Source: Uganda National Roads Authority* | |

| Table 5.5: Class of the Road Network (2009) | | |
|---|---|---|
| **Category** | **Paved** | **Unpaved** |
| National | 3,000 | **7,820** |
| District | 0.00 | **27500** |
| Urban | 450 | **3,129** |
| Undesignated Community Access | 0.00 | **35,000** |
| **Total** | **3,450** | |
| *Source: Uganda National Roads Authority* | | |

The National Roads Authority further indicates that out of the total road network, 30 percent is in good condition, 50 percent in fair condition, and 20 percent in poor condition. With respect to rural roads, given their importance for farmers' livelihoods and hence poverty reduction, a case can be made for accelerating rural road connectivity.

The main constraints under transport (both internal and external) are summarised as follows:

- Rail services in the two corridors are a major problem. Although there is enough track and rail ferry capacity to carry all of Uganda's external trade, this mode's share of traffic has declined to a dismal five percent[4] . Railways suffer from poor financial conditions, over-staffing and lack of institutional incentive structures which prevent them from competing effectively for traffic with road transport. Hence, operations of the railways are inefficient and the availability and reliability of rolling stock and infrastructure is poor.

- The poor performance of rail transport necessitates intensive use of higher cost road services (which exceed rail rates by 38 to 56 percent).[5]
- On the Central Corridor too, rail services are poor,[6] increasing container dwell time in Dar es Salaam Port. Customs bonds further add to costs.
- Many of the internal transport links that existed earlier through other modes, including rail lines and ferries, have fallen into disuse leaving road services as the only available means of transportation.
- As per data from Uganda National Roads Authority (UNRA) in the table 5.5, more than 30,000 kms of rural community access roads are unpaved, rendering them hardly usable in rainy seasons, yet these happen to be the most important roads for agriculture development and marketing.

Meeting shipping deadlines of export cargo, in general, is not a problem at the port but it has to incur costs related to customs bonds. Uganda has almost no control over all these matters, except to bring these issues to the table for discussion with its EAC partners.

Plans to improve the corridors have involved several donors working with the government to improve them. There have also been efforts among EAC states, particularly between Kenya, Uganda and Tanzania, to address the issues related to the railway system holistically. Main developments in this regard include:

- Awarding the operations of the railway system to a single operator, *The Rift Valley Railways*. Although questions still linger over efficiency improvements introduced by this concession, the three governments still remain committed to a common effort to addressing the challenge.
- A Road Reserve Fund has been created by the Uganda government to mobilise resources amounting to at least Uganda shillings 1 trillion every year (about US$700 mn) for considerable investment in rehabilitation of the internal road network.
- Donors, (in particular the EU) are supporting the rehabilitation of sections of the Northern Corridor especially roads between Uganda and countries further inland such as the Democratic Republic of the Congo (DRC) and Rwanda.
- The National Development Plan 2010-2015 (NDP) highlights among flagship projects the rehabilitation of internal railway system particularly lines linking Uganda to Sudan and lines from Kampala to Western Uganda towards DRC.

### 5.4.2 Other Trade Facilitation Constraints and their Effects on Trade in Agriculture

The main issues dealt with here relate to processes that may lead to the complexity and rise in the cost of trade transactions. These may relate to, among others, customs operations, clearing and forwarding (C&F), insurance, port services, telecommunications, etc. It is important that these activities take place in an efficient, transparent and predictable manner in order to reduce the complexity and cost of trade transactions.

Of the trade facilitation constraints, the most important ones are as follows:

- There is congestion at Mombasa port, which handles 95 percent of Uganda's external trade traffic. The effect of this on trade is that customs bonds add a substantial four percent to the costs of export and import commodities transiting through Kenya.[7]

- The costs of road transport have increased due to high tariffs on freight vehicles (raised from 7 to 25 percent with the introduction of the Common External Tariff (CET).
- Refund of VAT to freight companies is slow.
- Physical inspections of exports involving duty drawbacks and value added tax (VAT) refunds for many consignments regardless of the exporter's compliance record are problematic.
- Depending on export product and destination, an exporter may require many documents such as phyto-sanitary certificate, certificate of origin, veterinary health certificate, certificate of analysis (by a government chemist), fumigation certificate etc. Securing most of these documents adds considerable time demands on exporters especially for agricultural products.
- There are also local authority taxes, cesses and market dues imposed on different agricultural products to generate revenue for local governments (cesses exist mainly for coffee and cocoa). While these may be small, they pose a serious constraint on agricultural trade as the people who bear the tax burden are farmers and producers.

The following measures are being used to counter these constraints:

- Export procedures are relatively simple and are further being facilitated by the introduction of the new customs automation system Automated System for Customs Data (ASYCUDA++). The implementation of ASYCUDA++ is now streamlining and strengthening customs processes, reducing opportunities for corruption, but more importantly improving release time for goods.
- Investments have been made to improve efficiency at the Malaba customs border point by introducing a 24 hour operation regime as well as installing electronic data processing systems under a World Bank supported project.

## 5.5 Policy Context

This section highlights key features of existing development, trade, agriculture and trade policies and their linkages, if any, in the existing documents.

### 5.5.1 Development Policy Highlights

The Poverty Eradication Action Plan (PEAP) has guided national development over the last decade. With a focus on achieving the UN Millennium Development Goals (MDGs), the main target was to overcome poverty, with a target of reducing it to 10 percent of the population by 2017. PEAP ended in 2007. This has now been replaced by the National Development Plan (NDP) 2010-2011 to 2014-2015 with the theme of "Growth, Employment and Prosperity for Social Transformation". To achieve the theme, eight objectives have been formulated as follows:

- Increasing household incomes and promoting equity;
- Enhancing the availability and quality of gainful employment;
- Improving the stock and quality of economic infrastructure;
- Increasing access to quality social services;
- Promoting science, technology and innovation;
- Enhancing human capital development;
- Strengthening good governance, defence and security; and
- Promoting sustainable use of environment and natural resources.

As can be noted in the objectives above, improving livelihoods by focussing on household incomes and employment is an important goal of the NDP. The NDP was launched in May 2010.

### 5.5.2 Agriculture Policy Highlights

Since 2000, investment in agriculture has been guided by the Plan for Modernisation of Agriculture (PMA 2000). While the Plan had seven key priority areas, it is only in the area of advisory services where real progress was made. Coordinating activities of over 13 ministries that were expected to play leading roles in implementation became very difficult, thus rendering most areas unimplemented.

Redressing this challenge also got bedevilled by the emergence of different visions and strategies almost all at the same time, including the Zonal Agriculture Strategy of 2005, the Rural Development Strategy (RDS of 2005) and the Prosperity for all Vision of 2007 (PFA). The concurrent existence of PMA, RDS and PFA policy frameworks and visions has raised concerns over policy coherency and consistency with doubts over the extent to which this could in any way positively affect agricultural development.

To address this challenge, the Ministry of Agriculture is currently developing a new agricultural policy whose key highlights and pillars are as follows:

- Private sector investment in agriculture to encourage market oriented production process will be supported.
- Zonal agricultural strategy will be pursued to encourage regions to gain maximum exploitation of comparative and competitive advantage within different regions.
- Efforts will focus on supporting value chain development for strategic commodities.
- Support will be extended to both individual farmers and groups with special attention to gender equity.
- Government will continue to provide agricultural extension services via a decentralised service delivery structure to ensure that they reach all regions and farmers even at the lowest levels.
- Government will ensure that all resources for agriculture including soils and water are sustainably managed to support current and future generations.

The emerging policy is based on a vision of a competitive, profitable and sustainable sector to be achieved via a transformation from subsistence to commercial agriculture. While the intended policy has noble agriculture transformation goals, it remains unclear as to whether improving livelihoods is a significant and major priority of government agricultural policy and how it will be tackled. Overzealous pursuance of commercial objectives sometimes leads to disregard for the poor in respect of livelihood considerations and indicators.

### 5.5.3 Trade Policy Highlights

Trade processes are guided by the National Trade Policy 2007. Launched in 2008, the policy has as its main goals wealth creation, employment generation, social welfare and transformation of Uganda from a poor peasant society into a modern and prosperous one. The main highlights and principles of the policy include:

- Enhancing competitiveness in domestic, regional and international markets;
- Ensuring that trade practices conform to international laws and regulations;
- Developing domestic trade as a foundation for improved international trade practices;
- Securing and maintaining better market access at regional and international levels;
- Ensuring that the gains from growth in trade are equitably shared; and
- Supporting the country's vision to industrialise by supporting and complementing the industrial policy.

To achieve these goals, several instruments have been put in place including the National Export Strategy 2008-2012 that supports a series of interventions in 12 sectors, majority of them being in agriculture. Interventions highlighted include production expansion, deepening market information reach, export diversification and transformation etc. The other instrument is the Trade Sector Development Plan 2009-2014 that highlights a range of activities designed to implement the trade policy.

Stipulations of the trade policy relating to equitable distribution of the gains of international trade and the focus on creating employment can have far reaching positive implications on livelihoods. Linking the policy to industrialisation is also important for agricultural transformation. Since most of the agricultural output is marketed without adding value, very often farmers receive minimal gains from the entire value chain leading to persistent prevalence of poverty in agricultural communities. It is, therefore, noteworthy that the trade policy is cognisant of this phenomenon and attempts to address it.

### 5.5.4 Brief Account of Regional and Multilateral Agreements

Uganda has been participating in multilateral negotiations as a founding member of the WTO. This is mainly because it recognises the advantages that membership and participation in WTO provides to the country, as some key trade objectives can be better achieved at the multilateral level. In particular, adverse effects from trade diversion are avoided, the complexity of trade regulations is reduced, and better market access can be achieved in countries that are unwilling to extend preferential market access.

Moreover, highly sensitive issues, such as agricultural subsidy reductions in industrialised countries that have been at the center of the Doha Round of negotiations, can only be effectively addressed in a multilateral forum. The multilateral trading system also provides a legal framework that treats all members equally, irrespective of their economic status.

It is important to quickly point out that regional markets have an important place in Uganda's external trade. Kenya, DRC, Rwanda, and Sudan were amongst the top ten export markets for Uganda in 2009. They are also members of either EAC and/or COMESA with Uganda.

Uganda is an active supporter of EAC regional integration. It has been a member of the EAC Customs Union which as of 2010 is steadily progressing into a Common Market. Membership in the EAC has led to the lowering of the CET. This can have strong implications on poverty. As observed by the DTIS[8], if changes in the domestic tariff

structure reduce anti-export bias, they can promote exports, and hence growth, and in turn reduce poverty. This seems to have been the case for much of agricultural commodities, especially for border communities. Uganda's exports to its regional partners have increased since the advent of the EAC Customs Union.

Uganda can further enhance its trade links with regional markets by addressing the conflicts arising from being members of overlapping RTAs, in particular those pertaining to rules of origin (RoO) requirements; and advancing its accession to the COMESA FTA.

The Economic Partnership Agreement (EPA) is another key international agreement which is in advanced stages of being concluded. Uganda has initialed this agreement together with her East African neighbours. The agreement was expected to come into force in 2008 but the signing has been delayed as a final consensus has not been attained. It aims at ensuring the continued enjoyment of the EU trade preferences beyond the expiry of the Cotonou trade regime which ended in December 2007. Under the EPA framework, all goods from Uganda are expected to attract zero import duties in the EU market.

The significant issue to be pointed out about EPA is that signatories including Uganda offered to liberalise 82.6 percent of the value of their imports from the EU in three phases over a 25 year period with 65.4 percent of this expected to be liberalised by 2010. This offer when implemented is likely to expose farmers in the EAC to high competition with imports from EU, as well as reduce the import tax revenue on which EAC countries largely depend.

Although the agreement promises duty free market access, it has also attracted criticism from the civil society on account of stringent market requirements with respect to standards and safety issues that make market entry into the EU difficult for exporters.

## 5.6 Role of Policies and Stakeholders

This section examines the impact of agricultural trade liberalisation policy on productivity, agricultural trade performance, and rural livelihoods. It also highlights the main domestic stakeholders and the level of their respective capacities and involvement in relevant policy making and implementation. It also sheds light on the role of international donors with a focus on agricultural productivity and development of Corridors.

### 5.6.1 The Impact on Agricultural Productivity

The impact of economic liberalisation policy on agricultural sector in Uganda is well documented in a Study, "Production Responses of Uganda's Key Agricultural Commodities to Trade Liberalisation"[9]. This study undertaken in 2006 highlights the policy before liberalisation to have been characterised mainly by the following:

- The financing and delivery of agricultural research and extension was in the hands of several government departments characterised by limited capacity and little involvement of farmers in agricultural research.

- Pricing and marketing of agricultural produce lay in the hands of government controlled marketing boards.
- Marketing and pricing of agricultural inputs was rationed and controlled by the state.

The Economic Recovery Programme (ERP) of 1987 adopted a liberal policy and many of the above practices were left to the market forces and the private sector. In addition to a free market and price mechanism, the government also eliminated all restrictions on foreign trade, all export taxes except on raw hides and skins, and controls on foreign exchange transactions etc.

The concern for an economy like Uganda is to ensure that she maximises the benefits associated with economic liberalisation, including among others:
- Increased agricultural production responses to market forces;
- Access to low cost and competitively priced inputs;
- Attaining increased market access for her agricultural products; and
- Higher prices for agricultural commodities occasioned by competitive trade practices.

These should ideally lead to increased incomes to farmers to be able to support their livelihood needs. Benchmarked against the above desired impacts, the policy seems to have had mixed effects as elaborated below:
- Production responses seem to have gone up slightly to take advantage of the free market. However, the increase seems to have been more from the opening up of more land than from productivity improvements;
- External trade performance has expanded substantially with more commodities exported. This was due to export oriented policies, including emphasis on export diversification; and
- Price volatility of agricultural commodities seems to have overshadowed the net gains of free pricing mechanism. It is however noteworthy that when prices have been on the upward swing especially for coffee, farmers have not had their fair share in the gains. A proliferation of buyers, hullers, and processors in the marketing chain also accessioned more value adding practices in the chain but more gains went to them instead of farmers.

### 5.6.2 Main Domestic Stakeholders

The main policy-making and implementation actors in Uganda can be divided into six categories. These are; Central Government; local government; donors; private sector organisations; civil society organisations; and research institutions. However these institutions and organisations have varying capacities and power to influence the outcome and implementation of public policy.

***The Central Government Institutions***

The main Central Government institutions concerned with agriculture, trade and transport sectors include: Ministry of Agriculture; Animal Industry and Fisheries (MAAIF); Ministry of Tourism, Trade and Industry (MTTI); Ministry of Finance, Planning and Economic Development (MFPED); and Ministry of East African Community Affairs

(MEACA). There are also the Central Government semi-autonomous statutory authorities, such as National Development Authority (NDA), Uganda National Roads Authority (UNRA), Uganda Revenue Authority (URA), Uganda Export Promotion Board (UEPB), Plan for Modernisation of Agriculture (PMA) Secretariat, and Uganda National Bureau of Standards (UNBS). These Ministries and authorities are coordinated and report to the Office of the Prime Minister (OPM), Cabinet and Parliament.

The Central Government institutions are responsible for initiating, making, supervising and monitoring policy implementation. In cases where policy involves negotiations at regional, bilateral or multilateral levels, it is the responsibility of Central Government to negotiate and sign agreements and protocols. Although a number of Central Government institutions have capacities, some are still lacking in certain fields. The common constrain is that of limited funds. For example, the UNBS has limited funds to carry out its mandate of standards oversight function and the MTTI is grossly under-funded. The UNRA has institutional challenges in policy implementation and sometimes fails to utilise resources allocated to it. Another major challenge facing Central Government institutions is the lack of proper policy coordination and having multi-visions.

***Research Institutions***

The research institutions provide data on which policy decisions and implementation is based. They also collect and publish data and information that influences public policy. The relevant research institutions include: National Agricultural Research Organisation (NARO); Uganda National Bureau of Statistics (UBOS); Economic Policy Research Centre (EPRC); and Makerere University, Faculty of Agriculture. The research institutions such as UBOS have recently been revamped but still need more human resource capacity building. The national agricultural research on the other hand has national capacity but needs to be decentralised. It also needs more funds, especially in animal disease research and it needs to improve on research methodology so as to involve farmers in designing and implementing research.

***The Local Governments***

Uganda has a local government system. The local governments have the mandate to plan and execute some specific local based plans and projects. However, their main functions involve the implementation of policy, relaying results and feedback to the Central Government as well as participation in the annual budget process. The relevant local government institutions are the commerce, agriculture and roads departments of the respective district local governments. However their main challenge is human resource capacity. Uganda has expanded local government structures very rapidly without corresponding planning and resources to match the expanded structures.

***The Donors***

Uganda like many other donor recipient countries has had to rely on donor policy input for the last three decades since the 1980s. The donors have had many ways in which they influence policy making and implementation. Donor influence takes the form of lobbying or convincing the government to accept and to take a policy direction such as trade liberalisation. They also provide financial and technical assistance as incentives to the government. Donor support has no doubt shaped policy making and

implementation in Uganda, as they have leverage over finances and information. The main donors have been the IMF/WB and United Nations Development Programme (UNDP) at the multilateral level and EU at the regional level. The bilateral donor countries have influenced policy through their respective donor agencies such as United States Agency for International Development (USAID), Department for International Development (DFID), Japan International Cooperation Agency (JICA), Danish International Development Agency (DANIDA), etc.

***Civil Society Organisations***

The civil society organisations (CSOs) in Uganda are coming of age. They have been involved in both policy advocacy and monitoring and evaluation of development programmes and projects. The CSOs have engaged both government and donors in their quest to shape policy in Uganda with varying successes. The main CSOs include Uganda Debt Network (UDN), Uganda National Farmers Federation (UNFF), Southern and Eastern African Trade Information and Negotiations Institute (SEATINI), Food Rights Alliance (FRA), Development Network of Indigenous Voluntary Associations (DENIVA), etc. However, CSOs face a number of challenges in their activities. These include the lack of internally generated funds, the legal environment in Uganda which requires CSOs to seek permission from the government before carrying out public advocacy work, and the absence of formal and regular consultative mechanisms to provide advice to the government.

***Private Sector Organisations***

There are many private sector organisations (PSOs) lobby groups in Uganda that have been actively engaging with the state and donors. These associations have the potential, capacity and legitimacy to shape policy in Uganda. The Government of Uganda has included some of its representatives on state boards and committees. There is hardly any new policy that is adopted without their input. The most important and influential among them are the Private Sector Foundation of Uganda (PSFU), Uganda Manufacturers Association (UMA), Uganda Chamber of Commerce and Industry, Uganda Exporters and Importers Association, and Kampala City Traders Association (KACITA). These have carried out lobbying activities on an individual basis or through umbrella organisations such as PSFU. At times an individual from these associations has engaged the government informally to present the associations' concerns.

***Relative Capacities of Stakeholders***

In a donor recipient country like Uganda, the state and donors have more influence than the non-state actors (NSAs) in shaping public policies. The state institutions include cabinet, parliament and the bureaucracy. The President wields more power and influence than the technocrats. Parliament plays the role of policy and budget approval. However, policies that do not have direct and immediate monetary implications can be passed without parliamentary approval.

At the implementation level, Central and local government officials play a crucial role. Uganda has good policies and programmes, but the problem arises at implementation level. The technocrats at both Central and local government levels have no incentives to implement policies. In most cases the politicians interfere in the affairs of technocrats

who in turn are reluctant to effectively implement policies as there is a general legitimacy deficit.

As for the NSAs, the PSOs have been relatively more influential in the policy making process than the CSOs. This among other factors is because the state's and private sector's interests seem to largely converge. The National Resistance Movement (NRM) regime's development policies have been influenced by commercial and profit interests as pointed out earlier. The CSOs on the other hand are motivated by welfare and human rights imperatives, which at times conflict with the interest of the state and donors. As a result the state tends to ignore the policy input of the CSOs. On the other hand, CSOs are financially incapacitated in their advocacy and monitoring activities compared to the PSOs that have relatively better financial capacities.

Donor influence on policy making has also been significant. They provide development funds especially to agriculture projects such as National Agricultural Advisory Services (NAADS), as well as for road construction. Hence, their power to influence is derived from their financial and technical aid. However, donor influence is decreasing as the Government of Uganda is gradually reducing its donor dependence for its budget. Donor support is now less than 30 percent of the annual budget.

**5.6.3 Role of Donor Support to Agricultural Productivity and Corridors Development**

Besides behind-the-scenes policy influence, donors play a critical role in Uganda by supporting agricultural productivity and development of corridors. The scale of donor interventions is quite large and considerable resources have been lent to the Ugandan government as shown in table 5.6.

**Table 5.6: Main Donor Support for Trade Facilitation and Agriculture[10]**

| Donor | No. of Agriculture Projects | No, of Trade Facilitation Projects | Total Amount (US$mn) |
|---|---|---|---|
| World Bank (WB) | 5 | 10 | 220.00 |
| European Union (EU) | 11 | 14 | 1,007.52 |
| International Fund for Agricultural Development (IFAD) | 6 | 0 | 111.80 |
| USAID | 7 | 0 | 180.5 |
| Denmark via DANIDA | 9 | 1 | 76.00 |
| African Development Bank (AfDB) | 6 | 3 | 505.08 |
| DFID | 2 | 2 | 34.95 |

*Source: Private Sector Donor Group, Uganda*

With respect to corridor development, their role mainly focusses on:
- strengthening institutional capacity;
- enhancing safety and reliability of services on the Ugandan section of the railway line to Mombasa; and
- promotion of regional and international integration.

Several large and small projects are being implemented in the country. The major ones are in the road sector. These are co-financed by the government and various development partners including the EU, the African Development Bank (AfDB), the International Development Association (IDA) of the World Bank, and the DANIDA. Other donors include Kreditan fur Wiederaufbau (KWF), Nordic Development Fund (NDF), JICA, Norwegian Agency for Development (NORAD), IRC (Ireland) and Department for International Development (DFID), UK.

With respect to agricultural productivity, donors' role focusses on:
- support for agricultural research;
- support for agriculture advisory services; and
- support for private sector development.

Much of their role is delivered via consolidated support to the Ministry of Agriculture, Animal Husbandry and Fisheries (MAAIF) and the National Agriculture Advisory Services (NAADS) whose approach focusses on provision of support to demand-driven activities and farmer empowerment.

The main donors include IDA, International Fund for Agricultural Development (IFAD), the EU, Denmark, Ireland, the Netherlands, and the UK. USAID is also active with focus on programmes that reduce poverty through improved agricultural productivity, dissemination of improved production technologies, development of the rural financial sector, and improvement of the various product value chains.

Many have invested considerable resources. Taking IDA as an example, between 2001 and 2008, IDA invested a total of US$54mn to support NAADS activities. They have also been active in mobilising donors to harmonise support through NAADS.

While all these efforts are plausible, the magnitude of factors that inhibit agricultural improvement is momentous and can hardly be overcome with only donor support. Land tenure systems, subsistence agricultural practices, unskilled labour, lack of agricultural mechanisation and capitalisation, lack of improved seeds and varieties coupled with natural conditions of drought and disease all combine to keep productivity levels low.

## 5.7 Synthesis of Linkages

From the analysis above and through various interactions with key stakeholders from both the public and private sectors, several positive and negative linkages have emerged. These are synthesised below under the two thematic areas of the study.

### 5.7.1 Linkages between Agriculture Productivity and Trade in Agriculture

Although the casual linkage between productivity and trade in agriculture is not easy to establish, mainly because it is difficult to determine whether the increased or decreased productivity was on account of trade or other factors, yet, there are some discernable trends to link the two. The key linkages are described below:

***Positive Linkages***

- Agricultural trade in Uganda especially in exports is fully liberalised. This has provided price incentives to farmers and other actors in this sector. The price incentives in return have encouraged investment in agriculture. For example, for five years between 1994 and 1999, the increased price of coffee in the international market encouraged more investment in coffee production.

- The availability of market and price incentives has attracted more attention and investment in non-traditional crops. This has been further demonstrated in the availability of food markets in Sudan and Eastern Congo.

- Trading in live animals especially from South Africa has positively contributed to agricultural productivity through the introduction of high breed cows, goats and poultry into Uganda. Further, the increased milk sales and relatively better prices for dairy farmers has correspondingly motivated farmers to adopt extensive dairy farming especially in Western Uganda.

- Trade in agriculture related inputs such as hoes, chemicals, machinery, fertilisers etc., is said to have contributed to agricultural productivity.

***Negative Linkages***

- According to a report (Anderson, 2009)[11] increased exports have not translated into more earnings to the peasant farmers. This mismatch of increased exports amidst poor earnings does not motivate farmers to invest in increased productivity. There is also a tendency for productivity to decrease in tandem with international commodity prices.

- Increased exports coupled with poor management of natural resources have had a negative impact on land and water productivity. For example, increased fish exports without proper regulatory mechanisms have led to the depletion of fish in Uganda's lakes. The fish stocks on Lake Kyoga and Lake Victoria are dwindling whilst those in Lake George and Lake Edward have been over exploited almost to the point of extinction. Therefore, as export volumes increase for certain sectors, agricultural productivity declines. The more acreage is claimed to meet the market needs, the less productive the land becomes.

- It is also well established that the terms of trade for agricultural commodities on the world market have been declining. This, in turn, affects investment in increased agricultural productivity.

- The poor peasant farmers benefit less from increased trade exports/sales. This is on account of the absence of marketing infrastructure such as farmers co-operatives. It is also on account of lack of storage and means of good transport. The greatest beneficiaries of increased exports, namely the middlemen, do not invest the proceeds in the agricultural sector. The farmers who should be investing in agriculture earn less, thus a decline in agricultural productivity.

- The liberalisation of agricultural imports has exposed the Ugandan farmers to the vagaries of international competition. This has negatively affected the fruit and vegetable sectors. As a result, investment in value addition in these sectors does not give adequate returns, and this affects the farmers who recieve less and are not motivated to invest in increased productivity.

On the linkages between agricultural productivity and trade in agriculture, this study found that central government institutions understand the linkages relatively better than the local governments. The study findings further established that the CSOs better understand productivity linkages as they affect livelihoods more than the exporters. On the other hand, agricultural exporters understand the linkages between agricultural productivity and trade constraints better than CSOs. Highlights below further serve to elaborate these points.

- With regard to the Central Government institutions, there is evidence to demonstrate that they understood the linkages. For example, the Ministry of Agriculture, Animal Husbandry and Fisheries, National Planning Authority (NPA), National Agricultural Advisory Services (NAADS) and Plan for Modernisations of Agriculture (PMA) do have policy statements that link agriculture productivity to trade.

- The National Trade Policy (NTP) also has evidence linking agricultural productivity to agricultural trade and livelihoods. For example the NTP has household and national food security and nutrition as its objectives. Another of the NTP objectives is enhancing production and productivity.

However, gaps still exist and these are explained as follows:

- Policy documents have good policies on paper that addressed most of the productivity, trade and livelihood concerns, but there is a big implementation deficit. This is on account of many factors but highest among them is the legitimacy deficit. The states in Africa in general and Uganda in particular have a legitimacy deficit. One way of constructing legitimacy is through neo-patrimonial networks. This leaves most of the bureaucrats demoralised and indifferent to aspects of policy implementation.
- Government policies show a weak relationship between agricultural productivity, food security and employment. The development policy amodel in Uganda puts emphasis on farming as a commercial enterprise and not as a livelihood venture.
- Labour productivity in agriculture is not given due attention by the government policies in Uganda.
- There is a lack of policy regulatory mechanisms to address the challenges of over fishing and soil erosion.

- There is a need to have institutional marketing structures to facilitate trade and avoid middlemen who otherwise benefit most from agriculture and yet do not invest in improved agricultural productivity.

Main capacity building needs as suggested by various stakeholders to address the above deficit include the following:

- On the challenges of agricultural labour productivity, there is need to design training and education programmes to improve agricultural labour productivity.
- On the problem of natural resource depletion, the training need here is to have policies and education programmes on natural resource management especially controlling soil erosion and optimal use of lake resources. There is also need for training in a better rangeland management practices and uses. This is also true for pastures under the livestock sub sector.
- There is scant use of fertilisers in Uganda as also little knowledge about fertiliser use. Capacity building for farmers is necessary if they are to adopt fertiliser application in their fields.
- The organisational marketing infrastructure to link rural producers to the urban markets is inadequate. There is need to train farmers to form co-operatives and build their skills for co-operative marketing to avoid middlemen.

### 5.7.3 Linkages between Trade Facilitation and Landlockedness

Key positive linkages under this theme are summarised to include the following:

- A well facilitated customs management institution that has widely distributed customs points manned by qualified customs personnel is required. Uganda realises that with its landlockedness status, ensuring efficiency in customs administration is one major way through which it can reduce the cost of doing business.
- The Northern Corridor is well linked with many trunk roads. For a landlocked country, an internal network of roads is important to ease movement of goods. There are substantial investments in upgrading most of these into all weather roads.
- Harmonisation of trade facilitation process and policies at a regional level is another key positive linkage between trade facilitation and landlockedness. Uganda recognises this and has consistently sought to secure harmonisation of these processes and policies across East African States.

Key negative linkages have been identified to include:

- Documentation requirements remain numerous and relate to various institutions. A lot of time and resources are wasted in acquiring required documents. In France, for example, only two documents are required, a Bill of Lading and a customs export or import declaration form. Ugandan exporters require 6 documents, a figure that has not improved since 2008.
- The cost of exporting is still high. Between 2008 and 2010, the cost of exporting a container increased by eight percent. At US$3,190, the cost of exporting in Uganda is way above the benchmark of US$450 paid by exporters in a country like Malaysia.
- According to the World Bank's Doing Business Report for East Africa 2010, Ugandan exporters require 37 days to export (compared with only five days in Malaysia). This is partly because Uganda is landlocked.

- The majority of feeder and community roads are not all-weather roads. These are often not usable during rainy seasons, thus making it difficult to move produce from many rural producing areas. The linkage of these roads to improving trade is not yet adequately understood by many local governments under whose jurisdiction they fall.
- Incidences of corruption leading to delays in clearance of goods have been reported in customs management. For a landlocked country, corruption would only serve to add to delays and increase the cost of doing business.

The level to which these linkages are understood varies greatly between central government and local governments. To a great extent, the linkages are understood by the country's central planning institutions (MoFPED), Customs Authorities, MTTI and the ministry responsible for regional integration processes, MEACA. This is evidenced by:

- Increasing budget allocations towards infrastructure, especially roads. For example in the 2010-2011 budget, more than 10 trunk roads are due for upgrading to tarmac status.
- Increasing emphasis on a regional approach. There are provisions for Common Infrastructure Fund in the budgets of all the 5 member states of the East African Community.
- There is considerable attention on upgrading and improving border points. For example, DFID is to invest more than US$5mn and the World Bank has invested over US$8mn already.
- With respect to local governments, attention seems to be more on generating local revenue from road tolls and business licences without due consideration to their overall impact on trade performance. An example is cocoa cess in Bundibujo district.

Views enlisted from stakeholders suggest various ways of increasing the understanding of these linkages among policy makers. Key among them are:

- Trade facilitation capacity building programmes;
- Enhancing institutional coordination among trade facilitation institutions; and
- Awareness programmes especially geared towards local governments.

Existing trade policies to a certain extent take these linkages into account. Examples are:

- A trade policy that has a strong focus on regional integration as a means of promoting free trade and harmonisation of trade facilitation policies especially within EAC.
- A NDP with a major focus on infrastructure development as a priority for improving trade flows and reduction in the cost of doing business.
- Consistent policy direction towards an expanding budget for infrastructure including the creation of road fund.

However, gaps still exist. These are:

- lack of policy coherence;
- institutional coordination and communication yet to be sufficiently addressed;
- slow speed of adoption of advanced customs facilitation systems, i.e. ASCUDA++; and
- lack of a totally uniform trade facilitation and regulatory regime across all the three East African states.

Interviews with stakeholders suggest various forms of strengthening positive linkages and addressing negative ones. Suggestions/measures have included the following:

- Passing into laws many bills that seek to regulate trade practices at the local government level. The latest of these is the Business Licences Bill that seeks to regulate licensing procedures and harmonise them with national goals of improving trade facilitation.
- Harmonisation of all trade facilitation and transportation regulatory regimes between member states of the EAC Common Market. It is hoped that once this is done expeditiously and consistently, it will lead to the reduction of trade transaction costs especially for a landlocked country like Uganda that depends heavily on the regulatory regimes of third countries in order to export her goods.
- Strengthening NTBs Monitoring Mechanisms within member states of the EAC Common Market. It has been argued that such mechanisms can quickly identify illegitimate hindrances to the movement of goods and instigate deterrent actions.
- One-stop center for exporting and importing where all documents could be processed. Whereas URA can perform the duty of a one-stop center for imports, UEPB or the proposed export centre in the NDP should act as a one-stop point for exporters.

The main capacity building needs of various stakeholders that need to be addressed to strengthen the positive linkages under trade facilitation and landlockedness include:

- Effective trade development planning and management at the local government level. MTTI is making considerable progress in this direction, supported by the EU Economic Partnership Agreement support funds.
- Skills and a better understanding of regional integration protocols by all major actors. This is important to enable them to understand and measure ahead of time the impact of these integration processes on Uganda's trade performance.
- Digitisation of major trade facilitation systems including documentation issuance and management.
- More investment in building capacity of customs officials to efficiently manage customs boarder points.

These capacity development needs as highlighted above must be undertaken together with considerable investment in physical infrastructure especially roads and rail network.

## 5.8 Recommendations

Based on the information and analysis in the study, several recommendations addressed to specific main stakeholders are offered.

### 5.8.1 Recommendations to the Government

- The policy making and planning bodies, particularly the National Planning Authority, should integrate and link economic and non-economic factors in their development plans and programmes, e.g. food security, nutrition, gender, labour rights, employment, etc. Government should adopt and mainstream a human rights based approach to development (HRBAD).

- There is need to have synergy between the ministries of agriculture and trade on the one hand and the welfare and human development ministries such as labour, gender, community development and education on the other. Community development departments at local level governments in conjunction with labour departments should design programmes for improving agricultural productivity levels of rural farmers.

- The NAADS main goal should be narrowing the gap between present farm yields against attainable potential yields at the research stations. This should be the main indicator of NAADS success.

- Agricultural inputs are imported and are expensive. Therefore, the government should subsidise farmers to enable them to acquire these inputs at low cost otherwise the return on investing in agricultural productivity will remain very low.

- The government should prioritise investing its resources and energy in agricultural productivity improvement targeting land, labour and water resource productivity as well as disease, pests and weed control.

- The government needs to invest in irrigation technology as a public good to minimise farmers' reliance on rain fed agriculture.

- The share paid to farmers after selling their produce is very low compared to the other actors in the value chain. Therefore, the government should encourage the development of trade and marketing institutional infrastructure to remove or minimise middlemen from the value chain.

- Productivity decreases in tandem with international commodity prices. The government should therefore come up with a systematic targeted price stabilisation fund for strategic crops or livestock sector.

- The government should balance commercial imperatives of agricultural policy with welfare imperatives such as employment, improved livelihoods, food security and nutrition and gender equality. In summary, there is a need to have a paradigm shift from market oriented to livelihood oriented production targets. The government should desist from overzealously pursuing commercial objectives at the expense of livelihood considerations.

- The government should pursue trade and transit agreements with the neighbouring countries. The protocols and procedures governing cross-border movements in an international corridor are set out in bilateral, and occasionally multilateral agreements covering trade and transit. These effectively ease movement of goods for a landlocked country. The government should establish a Department/Authority of Transport and Trade Facilitation (TTF).

- The government should invest in increasing route capacity. This requires steady capital investment especially in new roads, and expansion as well as rehabilitation of existing ones.

- The government should put in place a Public-Private Partnership (PPP) policy framework to guide the joint efforts in addressing the TTF and agricultural productivity constraints.

### 5.8.2 Recommendations to Research Institutes and Universities

- Researchers and research institutes should study more the impact of external trade liberalisation on agricultural productivity for specific crops so as to furnish trade advocates with data and evidence in their quest for fair trade advocacy and to enable policy makers to find a good mixture for balancing agricultural trade liberalisation and enhancing agricultural productivity.

- Research studies have established that increased exports have not necessarily translated into more earnings to the farmers. Therefore, there is a need for the researchers to find out why this contradiction exists and then recommend appropriate measures to overcome this so that farmers can earn more.

- There is little research on different forms of agriculture related productivity in Uganda. These include, labour, land, water resources, livestock and capital productivity. There is a need for further research into this area.

- The researchers in Uganda should unravel the paradox of why official statistics show that rural poverty is declining at the same time as the share of agriculture to GDP is declining, particularly since this phenomenon exists where the majority of the rural population is employed.

- Research institutions should, in collaboration with the Ministry of Agriculture, design institutional mechanisms for agricultural technology adoption to improve productivity. This would overcome the current anomaly of the big gap between the farm yields and research station yields.

### 5.8.3 Recommendations to the Development Partners

- Development partners such as donor countries and multilateral institutions should shift from prioritising aid targeting price incentives to prioritising aid targeting land and labour productivity. Donors should increase aid in areas such as disease control, soil erosion control and development and adoption of improved seeds and animal breeds. Donors should set up a fund to lend to the private sector for investing in improved seeds multiplication.

- Donors should assist the Government of Uganda to set up an Agricultural Bank to offer soft loans to finance agricultural productivity improvement.

- Development partners should allow more preferential treatment for a developing country like Uganda. For example, the Uganda-EU or Uganda-US trade should not be reciprocal. The preferential trade arrangements for LDCs like Uganda should continue. Uganda and EAC should be allowed to continue restricting some agricultural food imports until such a time when Ugandan farmers are able to compete.

- The global development analysis should shift from the existing market orientation towards a mixture of market and livelihood orientation. As such donors should fund livelihood related agricultural activities in order to achieve the MDGs, and the state in Uganda should not be discouraged from investing in strategic agricultural sectors, e.g. through targeted subsidies etc..

- Development partners should fulfill their obligation and commitment to Goal 8 of the Millennium Development Goals, especially the part which requires development partners to address the special needs of landlocked developing countries by increasing their TTF funding.

### 5.8.4 Recommendations to the CSOs

- CSOs should increase their capacity building endeavours in order to sensitise their constituents to the need to link productivity to livelihood indicators. Farmers associations should start programmes to train their constituents towards skills for increased productivity.

- Farmers associations should aim at removing middlemen by building marketing institutions to enable them to sell directly to the exporters and urban markets through collective marketing.

- Farmers associations should link up with researchers and research institutions for collaborative work towards improving agricultural productivity. They should also sensitise the farmers in the use of improved productive technologies, such as improved seeds and use of farm manure or chemical fertilisers and improved animal breeds.

- CSOs should prioritise and step up advocacy campaigns to change the attitude of the government from the latter's overzealous pursuit of commercial objectives towards a balance of commercial and livelihood objectives.

### 5.8.5 Recommendations to the Private Sector and Business Organisations

- With respect to trade facilitation, the private sector should actively participate in trade facilitation infrastructure development under Public Private Sector Partnership.

- Again on trade facilitation, together with government, the private sector should invest in *interconnections*. The nodes along the Northern Corridor provide a range of services including intermodal transfer, equipment exchange and cargo inspection. If the interconnections are to operate efficiently, it is necessary to provide sufficient capital investment for infrastructure and ensure effective management of the services provided at these interconnections. The private sector can play a critical role while at the same time reaping commercial benefits.

- A multiplicity of trade support institutions and business organisations play almost similar roles along the agriculture value chain. It is important that synergies are built among these institutions to ensure effectiveness of their services and optimisation of agriculture support services and resources.

- The private sector should increase its capacity for trade advocacy.

- The private sector should invest in improved seed multiplication and, together with the government, in irrigation technology.

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16. Plan for Modernisation of Agriculture (PMA) 2000, MAAIF, Kampala, Uganda
17. World Bank Doing Business Report for East Africa 2010
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## Endnotes

1 This is a quoted to Dick Nyeko (LVO Executive Secretary) in the New Vision of December 16, 2009

2 NES is Uganda's main Planning Framework for Export Development launched in 2007 to last up to 2012

3 The map is not drawn to scale

Notes: Rail routes shown include the Kasese line of Uganda Railways Corporation (URC) that is closed and its Northern line to Gulu and Pakwach that has nil or very few services running presently

4 This is the latest figure as per the Competiveness and Investment Climate Strategy Annual Report 2009.

5 These figures are as per the DTIS Report of the Integrated Framework of 2007.

6 Unlike the Northern Corridor, the availability of road services is limited on this Corridor. This could be a reason for the reduction of Uganda traffic in Dar Es Salaam Port (Figure 5.27).

7 Based on Uganda DTIS 2007.

8 DTIS of the Integrated Framework, 2007

9 Premium Consulting Ltd (2006), Production Response of Uganda's Key Agricultural Commodities to Trade Liberalisation, Kampala: European Union supported Uganda Programme for Trade Opportunities (UPTOP)

10 The figures aggregated relate to support towards agriculture, fisheries, road and rail infrastructure and customs improvement processes in a Study done in 2008 by the Private Sector Donor Group.

11 Anderson Edward, (2009), Growth Incidence for Non-Income Indicators: Evidence from Ghana and Uganda, Manchester: CPRC

# Annex 1

***Research Questionnaire for Stakeholder Interviews***

**Dear Esteemed Respondent,**

CUTS International is conducting the above study in Uganda in order to generate critical knowledge needed to support and guide policy efforts towards increasing livelihood opportunities for the majority of Ugandans that depend on agriculture.

We consider you among the key stakeholders whose day to day work brings you into direct interface with the main issues being addressed by the study. We therefore request you to spare about 5 minutes of your valuable time to provide feedback to us on a number of study areas outlined below.

1. Please outline below what you understand by agricultural productivity?

   _____
   _____
   _____
   _____

2. What do you think are the main drivers to increased agricultural productivity?
   (i) _____
   (ii) _____
   (iii) _____
   (iv) _____

3. (a) Available studies indicate that agricultural productivity on average has decreased in Uganda in the last ten years

   **Agree** **Disagree**

   Comments

   _____
   _____
   _____

   (b) Would you agree that trends in agriculture productivity have affected agriculture trade performance negatively?

   **Agree** **Disagree**

   Comments

   _____
   _____
   _____

(c) How would you characterise the impact of Agricultural trade performance on different aspects of rural livelihoods indicated below?

- On food security **Positive** **Negative**

Comments

_____
_____
_____

- On poverty reduction **Positive** **Negative**

Comments

_____
_____
_____

- On employment **Positive** **Negative**

Comments

_____
_____
_____

4. (a) Farmers, in general, and women, in particular, face many land access constraints in Uganda.

**Agree** **Disagree**

If you agree, please outline some. If you disagree, please state why.

_____
_____
_____
_____

**(**b) Limited accessibility to land by women impacts considerably on the following rural livelihood elements.

- On food security **Positive** **Negative**

Comments

_____
_____
_____

- On poverty reduction **Positive** **Negative**

Comments

_____
_____
_____

- On employment **Positive** **Negative**

Comments

_____
_____
_____

5. (a) Rural farmers still face major constraints in accessing urban markets for their produce

**Agree** **Disagree**

Comments

_____
_____
_____

(b) Considerable interventions are there to address these constraints

**Agree** **Disagree**

Comments

_____
_____
_____

6. ( a) Landlocked status continues to be a substantial constraint to trade in agriculture

**Agree** **Disagree**

Comments

_____
_____
_____

(b) Considerable intervention measures have been put in place by the government, EAC and the international community to address these constraints

**Agree** **Disagree**

Comments

_____
_____
_____

(c) These intervention measures have been successful

| Agree | Disagree |
|---|---|

Comments

_____
_____
_____

We thank you for your time and ideas.

# 6 Agricultural Productivity, Rural Livelihoods and Trade in Agriculture in Zambia

– Dale Mudenda

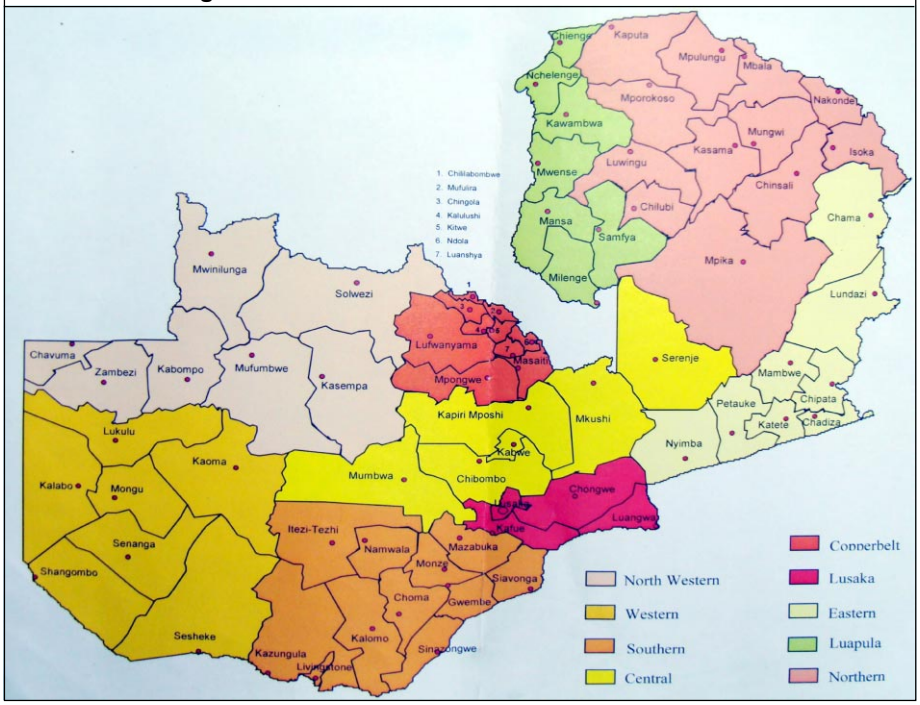
## 6.1 Introduction and Context

During the 2000s, the Zambian economy registered positive economic growth for over 8 years consecutively for the first time. This came after the stagnation of the 1980s and negative economic growth in the 1990s when the economy largely represented an extraordinary case of an undiversified and landlocked economy, exhibiting a very high dependence on a single mineral resource for its foreign exchange earnings, and making it highly susceptible to external shocks.

The economy has since 2001 steadily grown at an average of 4.5 percent, moving from stagnation and dependence on aid towards greater prosperity, and easier access to domestic and foreign direct investment. With improved economic management and several years of strong economic growth, Zambia has turned around its image as a country performing considerably below its potential. The growth has resulted in the quadrupling of GDP per capita from US$355 in 2002 to US$1183 at current prices.

The boom in the mining sector together with prudent macroeconomic policies, facilitated by substantial debt relief under the Heavily Indebted Poor Countries (HIPC) and G8 programmes, as well as ongoing structural reforms, of which trade liberalisation is an integral part, have contributed to Zambia's impressive economic performance during most of the period under review. Inflation dropped from 26.7 percent in 2002 to 8.2 percent in 2006 owing to monetary and fiscal discipline as well as the growth of domestic food supplies. The recent positive and stable growth record has been accompanied by productivity improvement (see table 6.1), and presents a distinct break with the past of high growth volatility.

**Figure 6.1: 72 Districts and 9 Provinces of Zambia**




Despite its recent impressive performance, Zambia remains one of the poorest countries in the world. The United Nations Development Programme's Human Development Index (HDI) in 2007 ranked Zambia at 165 out of 182 countries. About two thirds of the population continues to live on less than U$1 a day. At independence in 1964, the country's income level was 75 percent above the African average and four times that of East Asia. The per capita income now is below that of the African average and a quarter of that obtained in East Asia.

**Table 6.1: Selected Macroeconomic Indicators (2002-2008)**

| | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
|---|---|---|---|---|---|---|---|
| Real GDP (US$mn, 1994 prices) | 615.6 | 601.4 | 627.8 | 708.0 | 931.6 | 890.4 | 1,008.3 |
| Current GDP at market price (US$mn) | 3,696.7 | 4,326.6 | 5,423.2 | 7,156.9 | 10,675.4 | 11,541.4 | 14,817.4 |
| GDP per capita at current market price (US$) | 355.1 | 402.7 | 489.0 | 625.5 | 904.8 | 949.1 | 1,183.0 |
| Real growth rate | 3.3 | 5.1 | 5.4 | 5.3 | 6.2 | 6.2 | 6.0 |
| Inflation (annual average) | 22.2 | 21.4 | 18.0 | 18.3 | 9.0 | 10.7 | 12.4 |
| Labour Productivity | -3.66** | 1.64** | 7.81** | 7.49** | 0.76** | | |
| Exchange rate (annual average) | 4,398.6 | 4,733.3 | 4,778.9 | 4,463.5 | 3,603.1 | 4,002.5 | 3,745.7 |

*Source: IMF, MFNP and CSO **Central Statistics Office/Ministry of Labour and Social Services*

One of the challenges faced by the Zambian Government is to diversify the economy and ensure that the growth process also includes the poor. In its Fifth National Development Plan (2006-2011), the government recognised agriculture as a niche sector that can contribute to inclusive and sustained economic growth in Zambia. Thus, this paper focusses on the linkage between poverty, agriculture and trade in Zambia.

### 6.1.1 Rationale of the Study

Agriculture is one of the critical sectors in the positive economic performance of typical least developed countries (LDCs), especially in sub-Saharan Africa. The sector shoulders a great deal of the economic burden of these countries with most of their problems being linked directly or indirectly to the performance of the agricultural sector. The dominance of agriculture in African economies is indicated by its substantial contribution to GDP, foreign exchange earnings and employment. The sector has an important and potentially pivotal role in enhancing overall economic growth and improving welfare. In 1993, the World Bank observed that the sector contributed an average of 35 percent of GDP, 40 percent of export earnings and close to 70 percent of employment in Africa.

The definition of agriculture provided by the Central Statistical Office (CSO) in Zambia consists of forestry, growing crops, fishing, and raising of livestock and poultry. The subsector breakdown reflects the approach of the Zambian authorities to defining the sector as well as sectoral data compilation.

The agricultural sector in Zambia was traditionally given secondary attention. However, with the advent of the poverty reduction strategies in the 1990s, agriculture has been identified as the engine of growth for Zambia. With limited options for diversifying away from the copper industry, the Government of Zambia placed renewed emphasis on developing the agricultural sector as the vehicle for economic growth and improving the lives of the poor. The importance of agriculture has been stressed in Zambia's long term development goals as embodied in Vision 2030, and its medium term derivatives such as the Fifth National Development Plan (FNDP). Its role is also implied in a number of policy documents such as the Commercial, Trade and Industrial (CTI) policy, the Diagnostic Trade Integrated Study (DTIS), and the National Agricultural Policy. Most policy changes in the sector affect a large majority of the Zambians whose livelihoods depend on it.

On the international front, agriculture has been at the centre of multilateral trade negotiations at the World Trade Organisation (WTO). The Doha Round draft agriculture modalities promise progressive liberalisation of international trade in agriculture, while providing some safeguards to protect agriculture in LDCs like Zambia. Other regional trade agreements (RTAs), most importantly Economic Partnership Agreements (EPAs) with the European Union (EU), too have covered trade in agriculture and their outcomes are likely to affect the majority of the population. Moreover, the country has great potential to export many agricultural products that could aid employment and financial resources generation for poverty reduction. In spite of the acknowledged potential and global interest that the sector has drawn, very little systematic empirical work has been undertaken to inform policy makers on rural poverty and livelihoods, landlocked nature

and under-developed trade facilitation measures, and sub-optimal agricultural productivity, especially among small-scale farmers.

Cognisant of the above, this study aims to provide basic data and analysis on Zambia's agricultural sector to strengthen policy for effective inclusion of farmers in the global economy as a way of enhancing poverty reduction.

### 6.1.2 Study Design

***Overview of the Design***

This study was undertaken in Zambia in two phases by drawing on both qualitative and quantitative analytical approaches. Phase one draws more on secondary literature in addressing the above objectives. This part of the work was descriptive, providing clear, up-to-date information available in the public domain about, among others, the agriculture sector and its contribution to the economy, trade constraints, livelihood, productivity and trade facilitation. The second phase focussed on a case study of an agricultural area that was purposely chosen. The objective of the case study was to further interrogate the findings of phase one among the affected communities.

***Data Collection Methods, Techniques and Sources***

The data collection and analysis for the study was based on the following framework:

- *Secondary Data Collection (Desk Review/Analysis)*: The reference period for this study is 2002-2008; hence most of the secondary data collection efforts focussed on this time period. It is noteworthy, however, that longer macroeconomic data series have been included where available. The main sources of secondary data are the Central Statistical Office, Bank of Zambia, Ministry of Finance and International Financial Statistics.

- *Primary Data Collection (Stakeholder Interviews)*: The main basis of primary data procured for this study lies in the responses obtained from key informants and experts in agricultural stakeholder institutions. This was complemented by a case study based on a key informant interview from Mumbwa District. The responses provided insights that helped to refine the understanding and interpretations of the secondary data. The data was collected using a semi-structured approach which allowed for further probing of issues. The core questions sought to understand the constraints in the role of agriculture in livelihood of small-scale farmers as it relates to both domestic and international trade. Among the institutions that were interviewed are the Zambia National Farmers Union (ZNFU), the Organisation Development Community Management Trust (ODCMT), World Vision, and Ministry of Agriculture and Cooperatives. An interview was also conducted with officials from the Agriculture and Commodities Trade in Eastern and Southern Africa, an agricultural trade arm of the Common Market for Eastern and Southern Africa (COMESA).

***Limitations***

This study relied on secondary data sources from both national and international organisations and authorities. However, the social and economic data showing trends in the Zambian agriculture sector are mainly inconsistent across the major sources such as the Food and Agriculture Organisation (FAO), the World Bank and Zambian government ministries. Moreover, most agriculture data is made available with a huge time lag of, at times, up to two years making it difficult to provide up-to-date data. Other contributions of the agricultural sector such as employment, international trade and investment flows are sometimes immeasurable, very difficult to generate, and, at times, significantly underestimated. This is partially explained by the fact that the sector constitutes a large number of peasant farmers that do not formally enter the markets. In addition, agricultural exports in some border areas are not recorded mainly because there are no formal border facilities. This leads to the underestimation of the sector especially as it relates to exports[1]. Despite these limitations, the report still provides useful trends and indicators that inform the social and economic impact of agriculture in addition to the trade dimension.

## 6.2 Agriculture in Zambia

### 6.2.1 Structure

Before analysing the role and importance of agriculture in Zambia, it is important to understand the structure of the producers in the country. Different authors have categorised producers in many different classes comprising small-scale farmers, emergent/ medium scale farmers, and corporate and commercial farmers. These groups tend to concentrate on producing different crops. Table 6.2 shows the differences among these groups. Generally, agricultural production is dominated by the small-scale producers who account for more than 70 percent of the farming population. The World Fact Book (2003) reveals that the number of households in the small-scale category has been increasing, while the numbers of medium and large-scale farmers have remained largely unchanged over the years. Increased unemployment which was estimated at 50 percent in 2006 has led people into agriculture as small-scale farmers.

Small-scale farmers produce over 70 percent of the national food requirements. They play a critical role in the supply of staple foodstuffs, mainly maize. Despite this role, at least 25 percent of the small-scale farmers are food insecure each year. Most of the crops they produce are not captured in the post harvest surveys. This makes it difficult to assess outputs against exports in this area. Most of the agricultural gains are often confined to large-scale producers and the emergent farmers.

Large-scale farmers produce most of the cash crops for export. In addition the local supply of livestock comes principally from large-scale farmers. It is against this background that Zambia has committed itself to the commercialisation of small-scale farmers by promoting higher value crops as a quick way of reducing poverty in rural areas. However, it is difficult to commercialise all small-scale producers. This is because the poorest producers face daunting challenges making it difficult for them to participate in high risk yet high value and specialised input intensive technologies required for

| Table 6.2: Structure of Zambian Farming Sector | | | | | | |
|---|---|---|---|---|---|---|
| **Type of farmers** | **Approximate number of producers** | **Farm size** | **Technology; cultivation practice** | **Market orientation** | **Location** | **Major constraints** |
| Small-scale Producers | 800000 households | < 5ha (mainly cultivate 2 or less ha of rain-fed land) | Hand hoe, minimal inputs, household labour | Staple foods primarily for home consumption | Entire country | Remoteness, seasonal labour constraints, lack of input and output markets |
| Emergent Farmers | 50000 households | 5-20 ha | Oxen, hybrid seed and fertiliser, few with irrigation, mostly household labour | Staple foods and cash crops. Primarily market orientation | Mostly along rail lines (Central and Southern provinces) and Eastern and Western Provinces | Seasonal labour constraints, lack of credit, weak market information |
| Large-scale Commercial Farmers | 700 farms | 50 - 150 ha | Tractors, hybrid seed, fertiliser, some irrigation, modern management, hired labour | Maize and cash crops | Mostly Central, Lusaka and Southern provinces | High cost of credit and indebtedness |
| Large Corporate Operations | 10 farms | 1000+ ha | High mechanisation, irrigation, modern management, hired labour | Maize, cash crops, vertical integration | Mostly Central, Lusaka and Southern provinces | Uncertain policy environment |
| *Source: World Bank 2003* | | | | | | |

such cash crop production. Segeil P. (2008) estimated that about (+/-) 30 percent of Zambian smallholder households can be expected to succeed as commercial farmers over time.

***Brief History of Zambian Agriculture***

Zambia has a total land surface of about 75,261,400 hectares of which 47 per cent is arable land. Despite this huge land endowment that presents a lot of agricultural potential, the country has been depending on the copper industry since the colonial days. The mining sector has since independence been the main earner of foreign exchange. In 2007 the sector generated over 75 percent of the foreign exchange. The role of agriculture was simply regarded as that of producing food for domestic consumption. The

agricultural policies were restrictive, distortionary and counterproductive due to heavy government intervention and participation and the dominance of one crop (maize). Cash crops and excess agricultural output was exported through government owned statutory marketing boards. However, efforts were made to integrate the agricultural sector with manufacturing of selected commodities within the country. This was more apparent in the textiles and beverages subsectors. Overall, government policies and strategies failed to stimulate sustained growth in the sector. The sector also lacked private sector participation in the areas of agricultural marketing, input supply and processing. In 2008, it was estimated that only 14 percent of the arable land was being cultivated.

Since the adoption of market oriented economic policies in 1991, the economic activity has slightly diversified with the establishment of private agricultural product processing facilities and private sector participation in out-grower schemes and export promotion initiatives. More primary agricultural products are being produced and exported. With the advent of the poverty reduction strategies, agriculture was recognised in 1999-2002 as an engine for poverty reduction as it provided livelihood for the majority of the Zambian population. Its potential as a poverty reduction and developmental tool remains immense. With about 60 percent of the population living in rural areas, there is an apparent high potential labour resource for agriculture. Overall, the population density is 13 persons per sq km (34 per sq mi), with most areas sparsely inhabited (DFID, 2002). Against the country's irrigation potential conservatively estimated at 423,000 hectares, only about 50,000 hectares are currently irrigated. Therefore, Zambia has a resource endowment for development of a wide range of crops, livestock, and fish given the diversity of its agro-ecological zones (MACO, 2004).

### 6.2.2 Institutional Players and Land Tenure Systems

The adoption of market oriented economic policies in the 1990s led to a shift in functions and responsibilities of both the government and the private sector. The government through the Ministries of Agriculture and Cooperatives (MACO) and Ministry of Livestock Development is responsible for agriculture policy, cooperative legislation and services such as livestock, fisheries, agricultural extension and research, and phyto and non-phytosanitary standards. The Ministries are mandated to ensure full participation of private sector as well as establishment of statutory boards to implement policies.

A number of crop specific statutory agencies, such as the Food Reserve Agency (FRA), Tobacco Board of Zambia and the Coffee Board of Zambia have been established. In addition, MACO in partnership with stakeholders has set up Trusts as innovative tools for service delivery. These include the Golden Valley Agricultural Research Trust (GART), the Zambia Agriculture Research Institute (ZARI), Cotton Development Trust (CDT), Livestock Development Trust (LDT), In–service Training Trust (ISTT) and Zambia Export Growers Trust (ZEGA Trust). MACO has also facilitated the formation of the Agricultural Consultative Forum (ACF) to promote dialogue amongst sector stakeholders (National Agricultural Policy, 2005). The other players include the Zambia National Farmers Union (ZNFU) which represents the interests of commercial farmers, and the loosely organised peasants and small-scale farmers association.

Another important player is the Ministry of Lands which oversees the matters of land administration. There are two land tenure systems in the country. These are customary and leasehold tenure. Customary tenure is also referred to as traditional African customary tenure. It has a communal character and may not be titled. About 94 percent of the land in the country is held under customary tenure system. It is controlled and allocated at the discretion of the traditional authorities. In surveys on Land Rights by Alwang and Siegel, (2003) and Jorgensen and Loudjeva (2005), it was observed that access to land is not a constraint to most small-scale farmers. They noted that smallholders who demand more land from their village chief do get land. Lack of land was reported by only 4 percent of the respondents in the survey as a reason for poverty. Despite the small plot sizes under cultivation in small-scale farms, a typical household does not have the capability of cultivating more land suggesting there are other constraining factors to farm output and income growth.

Jorgensen and Loudjeva (2005) also argue that in the short term, land reform should not be a priority in Zambia until complementary reforms have ensured improved road network, access to fertilisers at competitive prices, and functioning extension services. Further, a World Bank Report of 2008 identifies a survey by Smith (2001) having concluded that lack of title does not constrain access to capital but rather the majority of small-scale farmers expressing a desire for formal land titles did so because they wanted to avoid dispossession (78 percent), protect fixed investments (55 percent), and ensure transfer to heirs (50 percent). Although multiple answers were permitted, only seven percent of respondents indicated that they wanted titles in order to use land as collateral for credit.

However, in the long run, lack of title is a constraint to growth due to the risk it creates for the future returns on investment becoming an obstacle to expansion of small farms into commercial operations and the formation of more efficient farms that realise economies of scale. The World Bank Report (2009) notes that formal land titling has only been pursued by farmers who already have links to commercial agriculture. Many argue that the real constraint is lack of "serviced and accessible land" implying that rural infrastructure services are the binding constraint to farm operations. The report further argues that there is also a backlog of land registration indicating that inefficiencies in the current administrative system is a bottleneck to the commercialisation of Zambia's agriculture, and not the lack of available land.

Leasehold or statutory tenure is usually held on state land. This land is mostly titled and covers farming and urban areas. The leasehold tenure provides for title deeds for a renewable period of 99 years. It is estimated at 4,500 square kilometres or 6 percent of the country. The rest of the land is reserve land meant for forests and national parks. This is also controlled by the state.

Another important institution in the agricultural system is the Ministry of Energy and Water Development (MEWD) which is responsible for energy policy and water resource management. The Ministry of Tourism, Environment and Natural Resources (MTENR) is responsible for all matters related to natural resources management and the protection of Zambia's heritage as well as promotion of tourism. Finally, the Ministry of Finance and National Planning (MFNP) is responsible for resource mobilisation, national and regional planning.

### 6.2.3 Zambia's Agricultural Policy

As mentioned earlier, the agricultural sector is one of the most important sectors in the economic development of Zambia. Its multifaceted role ranges from food security, employment creation, foreign exchange generation, rural development and overall poverty reduction to socio-economic development. The government's long-term development objectives as set out in the National Vision 2030 are to: reach middle-income status; significantly reduce hunger and poverty; and foster a competitive and outwardly oriented economy. As a critical sector in the attainment of this vision, the government's agricultural policy objectives as outlined in the FNDP (2006-2010) – the successor of the Poverty Reduction Strategy Paper (PRSP) – and the National Agricultural Policy (NAP) (2004 - 2015) are to:

- assure national and household food security by guaranteeing sufficient food for at least 90 per cent of the population;
- ensure that the existing agricultural resource base is maintained and improved upon;
- generate income and employment to maximum feasible levels;
- contribute to sustainable industrial development;
- expand significantly the sector's contribution to the national balance of payment (the policy sets a target of increasing the share of agriculture in total foreign exchange earnings from 3-5 percent to 10-20 percent); and
- boost the sector's growth to 10 percent after 2006 and increase its contribution to GDP from 18-20 percent to 25 percent, while raising incomes for the agricultural household.

The NAP (2004-15), which constitutes the agricultural chapter of the FNDP and closely focusses on the achievement of the first target of United Nations Millennium Development Goals, provides the overall mission of the agriculture policy as achieving accelerated growth and competitiveness in the agricultural sector which will lead to the goal of poverty reduction and income growth. The government's stated strategy is to support private sector led development, while the government focusses on infrastructure and support services.

Agricultural diversification and the development of private-led marketing systems are major objectives in the FNDP, the NAP and its implementing strategies. However, commentators have observed some gaps between the policy pronouncements and implementation. The process is shrouded in ambiguity and this has weakened public-private partnerships. Although the policy gives the private sector an upper hand, the biggest share of the agriculture budget focusses on the provision of subsidised fertilisers and buying of maize from farmers, while spending on research and extension services remains inadequate. This is not consistent with the goal of improving productivity and promoting diversification of agriculture, and it distorts the market for fertilisers, in contrast with the goal of promoting the development of private suppliers (WTO, 2009).

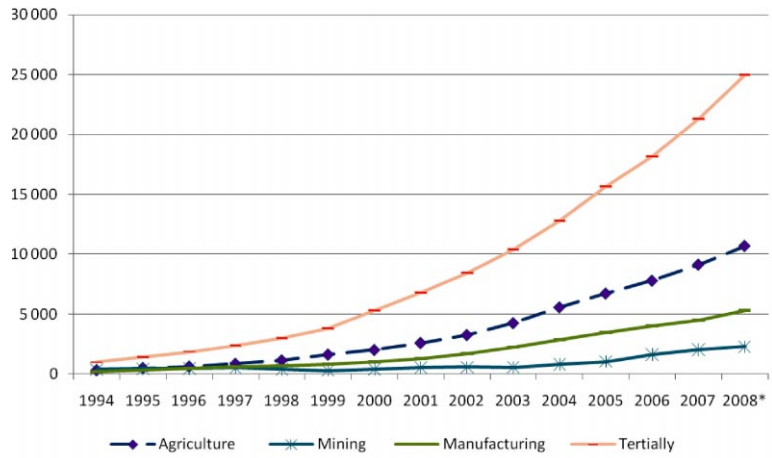
The sector contributes to economic development in several ways that include direct contribution to GDP, employment, investment and foreign exchange. Each of these contributions is discussed in the next section.

### 6.2.4 Contribution of Agriculture to GDP

The composition of Zambia's GDP has not changed significantly during the past decade. The proportion of agriculture and industrial output has remained virtually unchanged at around 20 and 10 percent respectively. The share of services is estimated to have declined from over 51 percent to around 46 percent between 2002 and 2008. Despite mining being the country's biggest export earner, contributing over 75 percent of the foreign exchange, its share of GDP is relatively small, at around 4 percent according to official statistics. Figures 6.2 and 6.3 as well as table 6.3 show the trends in sectoral contribution to GDP.

The contribution of the agriculture sector to output, especially crop production, has been highly variable mainly because the sector is weather-dependent. Frequent droughts in some years and unusually heavy rains during others have often resulted in widespread crop failure which is further exacerbated by land degradation, poor husbandry practices and lack of appropriate seed varieties. The sector accounts for less than one fifth of GDP; well below the average of 32 percent in sub-Saharan Africa. As figure 6.2 shows, the sector's contribution to GDP measured at current prices has increased from 15.5 percent in 1996 to 20 percent in 2000. By 2008, agriculture comprised 19.3 percent of GDP. The percentage change in sector's contribution to GDP averaged at 1.5 percent between 2005 and 2008.

**Figure 6.2: GDP by Source: 1994-2008 (1994 =100)**




*Source: Constructed from CSO data base*

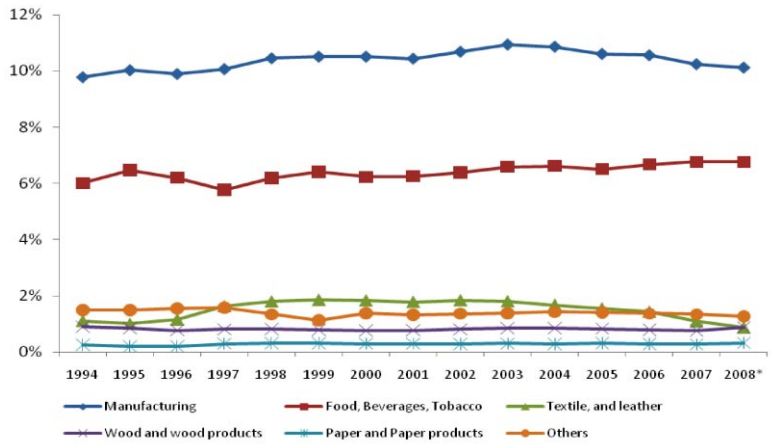
The direct contribution of agriculture to GDP may be somewhat misleading because many of the agricultural products are used by other sectors of the economy. For example, a large part of the service sector, such as transport and trade, is related to agriculture. GDP data further reveals that agro-processing industries which depend directly on agriculture constitute 60 percent of Zambia's manufacturing. This is shown in Figure 6.3.

| Table 6.3: Composition of GDP (2002-2008) | | | | | | | |
|---|---|---|---|---|---|---|---|
| | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008[a] |
| | (Annual percentage change) | | | | | | |
| **GDP by economic activity at 1994 market prices** | | | | | | | |
| Agriculture, forestry and fishing | -1.7 | 5.0 | 4.3 | -0.6 | 2.2 | 0.4 | -0.1 |
| Mining and quarrying | 16.4 | 3.4 | 13.9 | 7.9 | 7.3 | 3.6 | 5.9 |
| Manufacturing | 5.7 | 7.6 | 4.7 | 2.9 | 5.7 | 3.0 | 3.6 |
| Electricity, gas and water | -5.2 | 0.4 | -1.7 | 5.4 | 10.5 | 1.0 | -1.2 |
| Construction | 17.4 | 21.6 | 20.5 | 21.2 | 14.4 | 20.0 | 9.9 |
| Services | 3.8 | 4.5 | 4.2 | 5.4 | 6.7 | 7.1 | 7.2 |
| Wholesale and retail trade | 5.0 | 6.1 | 5.0 | 2.4 | 2.0 | 2.4 | 2.6 |
| Transport, storage and communication | 1.8 | 4.8 | 6.4 | 11.0 | 22.1 | 19.2 | 15.8 |
| Financial institutions and insurance | 3.5 | 3.5 | 3.5 | 3.3 | 4.0 | 4.1 | 5.4 |
| Real estate and business services | 4.4 | 4.0 | 4.0 | 3.2 | 3.2 | 3.1 | 3.1 |
| Restaurants and hotels | 4.9 | 6.9 | 6.4 | 11.7 | 16.1 | 9.6 | 5.7 |
| Community, social and personal services | 1.6 | 1.6 | 0.6 | 11.4 | 9.0 | 12.5 | 14.5 |
| Public administration and defence | -1.0 | 0.2 | 0.2 | 6.2 | -8.7 | 14.8 | 3.4 |
| Education | 7.0 | 3.0 | 0.3 | 22.2 | 35.3 | 13.6 | 24.4 |
| Health | 1.0 | 2.5 | -0.8 | -2.2 | 5.2 | 1.0 | 19.5 |
| Recreation, religious, culture | -2.0 | 4.5 | 4.3 | 34.1 | 22.8 | 9.3 | 32.2 |
| Personal services | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 |
| | (Percent) | | | | | | |
| **Share of main sectors in current GDP** | | | | | | | |
| Agriculture, forestry and fishing | 20.0 | 20.7 | 21.4 | 20.7 | 20.3 | 19.7 | 19.3 |
| Mining and quarrying | 3.5 | 2.8 | 3.1 | 3.2 | 4.2 | 4.4 | 4.2 |
| Manufacturing | 10.4 | 10.9 | 10.9 | 10.6 | 10.4 | 9.7 | 9.4 |
| Services | 51.8 | 50.8 | 49.2 | 48.1 | 47.3 | 46.5 | 46.1 |
| *Source: Compiled by author from MoFNP data base* | | | | | | | |

The main agricultural derivatives used in the manufacturing sector are processed food and beverages, textiles and leather, and wood and wood products. These are the main components of the manufacturing subsectors. They comprised over 60 percent of the manufacturers between 2000 and 2007.

With poor state of communications in most rural areas, the private sector may also not be able to access most of the remote areas. Hence, farmers tend to sell their surplus crop to households within their localities. Further, those in border areas (especially along the DRC border) tend to sell to the neighbouring countries through informal trade. Moreover, some small businessmen buy crops from farmers (usually on barter terms of trade) and

**Figure 6.3: Share of Agricultural Related Products in Manufactures 1994-2008 (1994=100)**

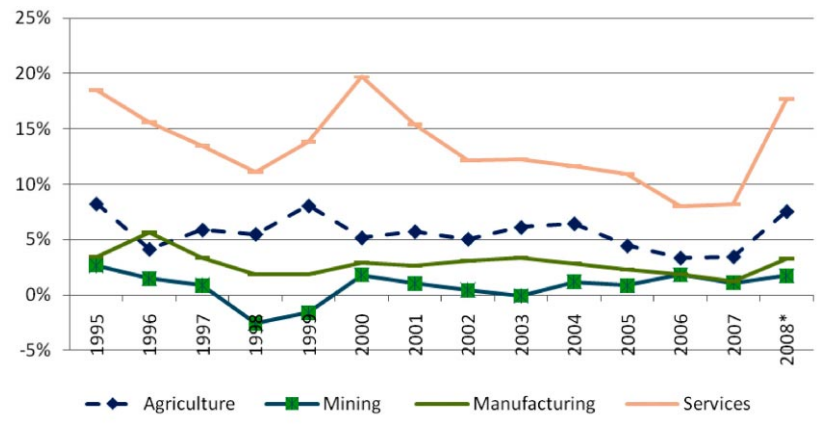



*Source: Compiled by author from MoFNP data base*

sell it on the informal markets, through which the urban poor access most of their foodstuff. Although substantial in size, yet the nature of this market is informal as its transactions are mostly not recorded in national accounts.

The formal market comprises the government's buying agents and the established businesses that do make returns to the national revenue authority. With the liberalisation of the agricultural sector, the government is not obliged to purchase all crops from the small-scale farmers. The private sector actively engages itself in purchasing large amounts of the crop that the government does not purchase.

**Figure 6.4: Percentage Effect on the Overall Change in GDP by Sector at Current Prices**




*Source: Compiled by author from MFNP data base*

On the whole, the percentage effect of agriculture on overall change in GDP has only been second to services. Its overall average effect marginally declined from 6.2 percent between 1995 and 2000 to 4.8 percent between 2003 and 2008. This is depicted in figure 6.4.

### 6.2.5 Employment and Dependence on Agriculture

There are three broad categories of farmers in Zambian agriculture: small-scale or subsistence farmers, medium-scale farmers, and large-scale farmers that are largely referred to as commercial farmers (GRZ, 2004). Small-scale farmers are largely spread across the country with over two-thirds of them living more than 10 km away from the main roads and railway lines. They use traditional tools such as hoes and draught power for their activities. They are susceptible to weather variations because they largely depend on rain for their agricultural activities. The commercial farmers are largely merchandised and irrigate their crops. They mainly grow food and cash crops.

Despite government efforts to commercialise the small-scale farmers since 1991, the number of households in this category has been increasing, while that of the medium and large-scale farmers have remained more or less the same (Hantuba, 2001). The government envisaged commercialising these farmers through private out-grower schemes and contracting, as well as through cooperatives.

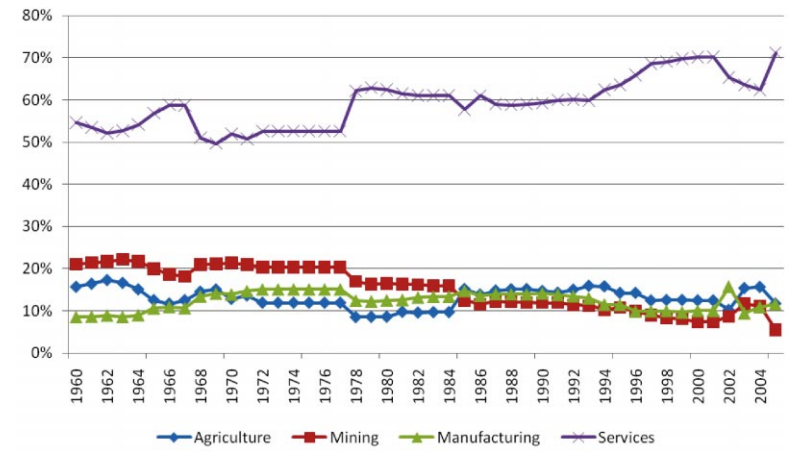
In terms of employment, agriculture sector is the largest employer in Zambia. It absorbs about two thirds of the labour force and thus is the main source of income and employment for the majority of Zambians in rural and peri-urban areas. Agriculture offers both informal and formal employment opportunities in the country. However, only a few of those employed in the agricultural sector are formally employed, that is, they are not engaged on a contract that guarantees them periodic pay such as a monthly salary. In terms of formal employment, the sector accounted for an average of 15 percent between 1960 and 2006. It has consistently been the second largest source of formal employment after the services sector which absorbs over two thirds of the formally employed Zambians. This is because of the large pool of government employees in the education and health services.

Most of the farmers are informally employed in that they are managed by a self-employed household head and do not draw any regular salary from their agricultural activities. Moreover, they do not engage others in their production.

Whereas 82,800 people were formally employed in the agriculture sector in 1992, only 56, 139 were formally employed in 2006. The reduction in employment during this period could be explained by the retrenchments in most formerly government-run and owned cooperative societies and other support institutions that were closed during the reforms. At the same time, the expansion of the private sector remained rather slow to rejuvenate the formal employment levels in the sector.

Similarly, total employees in the mines declined by over 50 percent from 62,100 in 1992 to 26, 253 in 2006 (IMF 2008, CSO). This could be explained by the adoption of capital intensive mining and manufacturing techniques at the expense of labour intensive models

**Figure 6.5: Proportion of Formal Employment by Sector (1960-2006)**




*Source: Compiled by author from IMF/CSO data*

used by the parastatals. The trends in the services sector is bolstered by the rapidly growing transport, construction and tourism subsectors as a result of increased private investment after the liberalisation and privatisation of the economy and parastatals during the 1990s reforms. The mining sector employs formally the smallest number of people. Its proportion has been declining from an average of 20 percent (between 1960 and 1978) to an average of 8 percent between 1998 and 2006.

However, the use of formal employment underestimates the role of agriculture in its employment generation from which the majority of the Zambians draw their livelihoods. In 2005, 4,131,788 persons were in the labour force. Of these only about 479,327 were in formal employment.

The combination of formal and informal employment reveals that over 70 percent of the Zambian labour force estimated at 1,551,952 households was engaged in agricultural production activities. 94 percent of those employed in the agriculture sector are from the rural households, while only 21 percent of the urban households were involved in agricultural production (CSO 2006). Given the average household size of 5.4 people in rural Zambia, this implies that over 8.3 million of the estimated 12 million Zambians live on agriculture. The indicative distribution of agricultural households engaged in agriculture by type of activity in each province in the 2006 farming season is shown in table 6.5. The table shows that most (98.8 percent) of the agricultural households are engaged in crop production and an average of 25 percent participated in raising livestock.

| Table 6.4: Overall Employment by Sector and Gender: 2003, 2005 and 2006 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Economic Activity | Living Conditions Monitoring Survey (LCMS): 2002-2003 | | | Labour Force Survey (LFS) 2005 | | | LCMS: 2006 | | |
| | Male (percent) | Female (percent) | Total | Male (percent) | Female (percent) | Total | Male (percent) | Female (percent) | Total |
| All Zambians (000) | | | 3,517 | 2,213 | 1,917 | 4,131 | | | 4,213 |
| Agriculture, Forest & Fishing (percent) | 65 | 79 | 72 | 69 | 78 | 73 | 64 | 79 | 71 |
| Mining and Quarrying (percent) | 2 | - | 1 | 2 | - | 1 | 3 | - | 2 |
| Manufacturing (percent) | 5 | 2 | 3 | 4 | 3 | 4 | 5 | 3 | 4 |
| Electricity, Gas & Water (per cent) | - | - | - | 1 | - | - | 1 | - | - |
| Construction (percent) | 2 | - | 1 | 2 | - | 1 | 2 | - | 1 |
| Trade, Wholesale & Retail (percent) | 8 | 9 | 9 | 10 | 10 | 10 | 9 | 10 | 9 |
| Hotels and Restaurant (percent) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Transport & Communication (percent) | 3 | - | 2 | 3 | 1 | 2 | 3 | - | 2 |
| Finance, Insurance & Real Estate (percent) | 2 | 1 | 1 | 1 | - | 1 | 3 | 1 | 2 |
| Community, Social & Personal Services | 11 | 7 | 9 | 7 | 7 | 7 | 9 | 6 | 8 |
| *Source: CSO 2002/3, 2005 and 2006* | | | | | | | | | |

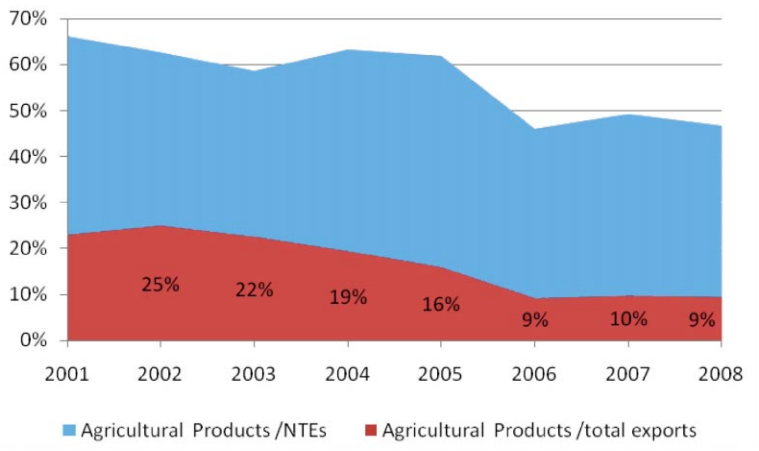
| Table 6.5: Distribution of Agricultural Households by Province and Type of Activity (2006) | | | | | |
|---|---|---|---|---|---|
| **Region/ Province** | **Agriculture Households** | **Crop Growing** | **Percentage** | **Households Owing Livestock** | **Percentage** |
| **Total** | 1 551 952 | 1 533 329 | 99 | 421 553 | 27 |
| **Rural** | 1 389 089 | 1 361 307 | 100 | 395 612 | 28 |
| **Urban** | 162 863 | 160 909 | 99 | 25 941 | 16 |
| **Province** | | | | | |
| **Central** | 175 525 | 172 015 | 98 | 47 730 | 27 |
| **Copperbelt** | 125 790 | 121 387 | 97 | 14 590 | 12 |
| **Eastern** | 299 428 | 296 733 | 99 | 106 000 | 35 |
| **Luapula** | 163 485 | 162 014 | 99 | 30 579 | 19 |
| **Lusaka** | 58 351 | 57 009 | 98 | 16 281 | 28 |
| **Northern** | 257 394 | 253 533 | 99 | 65 478 | 25 |
| **Northwestern** | 112 602 | 110 913 | 99 | 20 079 | 18 |
| **Southern** | 206 242 | 205 417 | 100 | 80 356 | 39 |
| **Western** | 153 135 | 151 910 | 99 | 40 500 | 26 |
| *Source: CSO. 2007* | | | | | |

### 6.2.6 Contribution to Foreign Exchange Earnings

Although the government's stated policy since 1964 has been to diversify away from copper to agriculture and industry, the sector continued to be viewed as of secondary importance to the economy. The introduction of privatisation, price de-controls and trade liberalisation stimulated the entry of private sector participants in the export sector either as producers or crop specific sponsors under the out-grower schemes. The implementation of these polices in the 2000s resulted in increased production of export crops and export oriented agricultural outputs.

In the period 1980-2004, the country nearly doubled the number of products exported. While in 1980 the five largest Zambian exports accounted for 96 percent of its exports, in 2004 they made up around 80 percent of exports (World Bank, 2008). Between 2001 and 2008, the contribution of the agricultural sector to foreign exchange earning more than doubled from US$207mn in 2001 to US$476mn in 2008. This revenue has been earned at various levels of the production and export chain. However, the rate of the increase has been slower than that of copper. The rapid growth in copper and copper by-product manufactured exports reduced the share of agricultural exports from 25 percent of total exports in 2001 to 9 percent in 2009 (figure 6.6). A number of agricultural products are exported as raw materials while the bulk is exported as processed products such as foodstuffs, textiles and garments.

**Figure 6.6: Share of Agricultural Products in Total Exports**

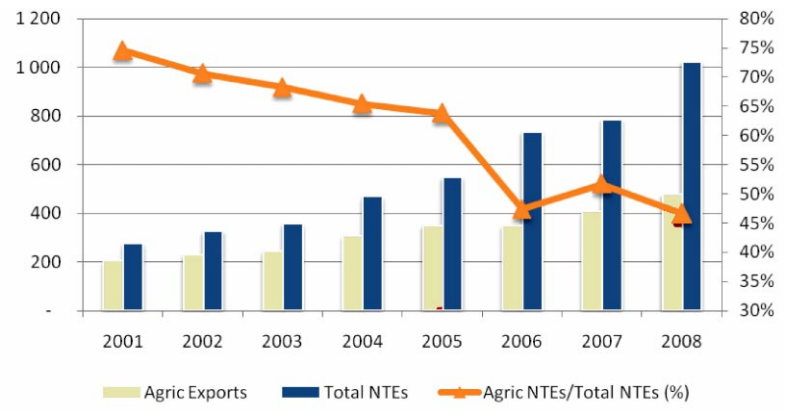



*Source: Compiled from ZDA Exporter Audit Reports, various issues*

Similarly, the share of agricultural exports in total Non-traditional Exports[2] (NTEs) has consistently declined from 75 percent in 2001 to 47 percent in 2008. This is explained by the rapid growth in the export of engineering products stimulated by the good performance of copper production, especially between 2005 and 2008.

The decomposition of the agricultural exports is presented in table 6.6. Most of the agricultural exports are mainly primary agricultural products that accounted for more than half of the category between 2004 and 2008. The largest exports and highest contributions are in primary agricultural products that comprise tobacco, maize, coffee and tea. Primary agricultural exports as identified by the Zambia Development Agency (2008) are discussed in the next section.

**Figure 6.7: Proportion of Agricultural Exports in NTEs 2001-2008 (US$000)**




*Source: Compiled from ZDA and CSO data sets.*

### 6.2.7 Primary Agriculture Exports

Zambia exports a limited range of primary and processed agricultural product to both regional and international markets. The prominent exports and main destinations are presented in table 6.6.

**Table 6.6: Prominent Agricultural Exports**

| Product | Export Markets |
|---|---|
| Sugar, floriculture and horticultural products, textiles, coffee, tobacco, cotton, honey, beeswax, leather, spices | South Africa, US, EU |
| Sugar, maize, tea | Zimbabwe, Democratic Republic of the Congo |
| Sugar and a limited range of processed foods | Burundi, Rwanda, Botswana, Swaziland |
| Beef, sugar, tea, eggs | Angola, Kenya, Malawi, Tanzania, Namibia |
| Cotton lint, coffee, tobacco, spices | Asia |

*Source: Compiled by author based on ZDA exporter audit reports and CSO data base.*

*Tobacco:* Tobacco is the largest earner of foreign exchange in the agriculture sector. ZDA estimated that 98 percent of national production of tobacco is exported mostly in its raw form. The main varieties are Burley and Virginia tobacco. The sector generated US$72,677,723 in 2006. This declined to US$63,297,480 in 2007 on account of reduced small-scale farmers' participation in the sector as a result of reduced sponsorship from both government and sponsoring firms. Leading export markets in the sector during the year were Zimbabwe, Malawi, South Africa, Germany and Canada. Others were Poland, Belgium, Switzerland, Spain and Denmark. It is exported in its raw form mainly because of the limited capacity to process it locally as well as the lack of established auction floors. Thus, the crop is exported to neighbouring countries such as Malawi and Zimbabwe for auction and processing.

*Cotton:* Production of cotton is concentrated in the Eastern, Central and Western provinces of Zambia. The crop is mainly produced by small-scale farmers under various out-grower schemes by multinational corporations around the country. Apart from cotton farming, small-scale farmers also grow other crops such as maize, tobacco, soybeans, groundnuts and sorghum. This makes cotton a very sensitive crop, as its production levels largely depend on the prices offered by these sponsors. Cotton exports include cotton lint and fuzzy cotton. The two generated over US$71mn in 2006 and US$46.5mn in 2007. The decline could be explained by the decline in the international prices and not reduced national production. The leading export markets during the year were South Africa, Switzerland, United Kingdom and China.

*Coffee:* Zambia is well suited to irrigated coffee production with ample land and water resources. The sub-sector has potential to generate substantial foreign exchange for the country. Coffee production is predominantly the domain of large commercial growers. Modernisation of coffee production was supported by financial assistance from the World Bank's Coffee II funds and the EU's Export Development Programme.

**Table 6.7: Composition of Agricultural Exports (percent)**

| Product | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
|---|---|---|---|---|---|---|---|---|
| Animal products | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 2 |
| Floriculture | 17 | 13 | 9 | 9 | 9 | 5 | 9 | 6 |
| Horticulture | 18 | 19 | 19 | 12 | 6 | 7 | 9 | 8 |
| Primary agriculture | 25 | 33 | 40 | 53 | 56 | 51 | 45 | 52 |
| Processed & refined foods | 21 | 19 | 18 | 16 | 19 | 30 | 28 | 26 |
| Garments | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 |
| Leather & leather products | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 2 |
| Textiles | 17 | 11 | 11 | 8 | 8 | 6 | 4 | 4 |
| Total agric exports (US$ 000) | 206 174 | 230 636 | 243 257 | 306 584 | 349 983 | 348 408 | 406 605 | 476 943 |

*Source: ZDA: Exporter Audit reports (various issues)*

*Tea:* The main exporter is the Kawambwa Tea Company Limited. The company is involved in the production of bulk and packed tea. The main destinations of the tea exports are Kenya and Democratic Republic of the Congo (DRC).

*Maize*: Maize is also one of the major primary exportable commodities in the country. The crop takes up more than 75 percent of the land planted by smallholder farmers. This implies that improved access to regional maize export markets can offer the greatest income benefits and multiplier effects to small farmers than any other field crop can at the moment. Despite this potential, the promotion of regional maize trade is neither at the centre of Zambia's poverty reduction strategy nor is reflected in Zambia's national agricultural policy documents. The export policy emphasises the production of cotton, tobacco, floriculture and horticulture in which international agribusiness firms have invested heavily by means of out-grower schemes.

Despite not being prominently promoted for trade, Zambia benefits from both exports and imports of maize during the surplus and deficit years respectively. In eight out of the last 15 years, the country had deficits and had to import. The production was excellent on the six of the remaining years. During these surplus years, the government, local famers, millers and traders benefitted from the export of food crops to high priced neighbouring countries such as the DRC, Angola, Zimbabwe and Namibia.

Given the high prices in neighbouring countries, it makes commercial sense for Zambia to export small quantities of maize while at the same time importing larger volumes from cheaper sources even in deficit seasons. The 2005-2006 marketing season offers a good example, when Zambia imported large volumes from South Africa and smaller volumes from Tanzania, yet continuing to export maize to the DRC. Because of Zambia's location advantage in supplying the Katanga Province, it is possible for Zambia to remain a reliable regional supplier, even in deficit years. In 2007, the export of maize amounted to earnings worth US$37,557,319 which represents more than 441 percent increase from US$6,929,856 received in 2006.

Zambia has not exploited its geographical location and huge production potential of cereals to benefit its farmers. The country continues to battle the challenges posed by the need to balance political and economic pressures that propel the maize marketing policy in the country. The trade in maize is highly controlled in the country. Imports are restricted through issuance of import permits. Import permits are often given to millers as opposed to traders due to the perception that traders would only add unnecessary margins and fuel price increases to maize meal prices.

The export of maize is governed by the Government Notice No 2 of 1964. Anyone intending to export maize has to get an agricultural export permit. The government invokes the export restrictions by not giving out export permits whenever there is a maize deficit that threatens food security in the country.[3]

Often, the government has preferred direct public import and export of maize through the Food Reserve Agency[4] (FRA), supplemented in some years by government administered quotas for private cross-border trade. Maize price projections for the 2006-2007 marketing season (Haggblade, 2006) showed that the imposition of the export bans resulted in prices falling between 20 percent and 40 percent below their historic norms. The restriction on cross-border maize trade acts as a disincentive to maize production by both commercial and small-scale farmers.

In addition, horticultural and floricultural products and paprika have remained prominent exports in the country. These are mainly grown by large-scale farmers who have the appropriate technology and skills.

**Processed Foods**

The second largest source of foreign exchange among agricultural products is the processed foods category. These comprise sugar, wheat flour, high protein cereal foods, vegetables and seed oils, stock feed, wheat and maize bran. Other key products which are exported and also consumed locally include molasses, beverages, vinegar, fruit juices, cereal maize, honey and orange concentrates. According to the ZDA (2008), the sector's export earnings in 2007 rose by 11.03 percent from US$103,573,260 in 2006 to US$114,425,678. The growth in the export trend was attributed to wider market access in both regional and international markets. While sugar has a huge regional market, the existence of the Everything But Arms (EBA) for the export of sugar to the EU has contributed to the increase in these exports. The textile industry has experienced some growth over the years mainly due to opportunities being provided by the Africa Growth and Opportunity Act (AGOA) programme of the US.

**Commercial Agriculture and Out-Grower Schemes**

The positive contribution of the agriculture sector to export earnings can be attributed to the increased role of the private sector in agricultural production and exports promotion. The private sector invested heavily in capital and skill intensive high value agricultural export products. Among these are floriculture and horticultural products, sugarcane, cotton, tobacco and coffee.

One of the efforts that have been employed to expand sustained output and enhance small-scale holders' productivity, and therefore ease marketing arrangement both domestically and internationally, is through contract farming by means of out-grower schemes (OGS) and producer associations. Out-grower schemes are being promoted as a means of commercialising small-scale farmers. The main objective of OGS is the provision of services that were previously provided by government, such as extension services, inputs, credit and marketing by the private sector, all linked to timely payment. The OGS is popular in high value export crops, such as those in the horticultural industry and cotton, sunflower and castor oil.

Crops such as cotton are produced by small-scale farmers. The key private players in the sector are Dunavant Cotton and the Lint Company of Zambia (Lintco). Dunavant buys approximately 57 percent of the national crop. According to the World Bank, currently about one-third of Zambia's smallholders participate in some form of OGS arrangement, of which 85 percent are engaged in cotton production. It is estimated that 220,000 small farmers operated under the Dunavant's OGS in 2006. Other crops produced by smallholders under OGS are tobacco, paprika, chilli, honey, and to some extent sugar, coffee, and dairy products. However lack of appropriate government policy on the regulation of these OGS has often resulted in acrimony between small-scale producers and scheme sponsors. Often producers feel that they are made to bear the cost with little or no profits accruing to them.

Producer associations in the areas of horticulture and floriculture have helped to stimulate a surge in the export of these commodities. The big firms assist with provision of seeds, chemicals, fertilisers, training and other forms of technical support, and strictly supervise the growing of vegetables to ensure that the EU phytosanitary standards are met. The development of the sectors has seen the establishment of the Natural Resources Development College-Zambia Export Grower Association (NRDC-ZEGA) Training Trust, which is a major contributor to human resource development endeavours in the agricultural sector and particularly in the horticultural sector in Zambia (ZDA, 2009).

The EU is a popular destination for sugar, cotton yarn and lint, floriculture and horticultural products that are mainly exported under the Zambia Export Growers Association. In addition, Zambia also exports cotton to the US through third party countries under the AGOA. The country is eligible to export a wide range of commodities to the US under this initiative. However, the country has not been able to take full advantage of this market mainly because of high transportation costs, stringent penetration requirements and other supply side constraints.

Further, Zambia is a signatory to both the COMESA and the SADC. These blocks also provide Zambia with a huge market for processed foods such as sugar, maize meal and other non-traditional exports. The markets remain unsaturated.

Overall, Zambia's share of food and other farm products in total exports has increased in value during the 2000s. Even small-scale farmers have diversified their production from food crops to cash crops. In 2002-2003, it was estimated that one out of five small-scale farmers grew cotton, 45 percent derived income from animal products and 17 percent from horticulture.

### 6.2.8 Contribution to Food Security

Food security continues to be a problem among small-scale producers and the country at large. Tables 6.8 and 6.9 provide a snapshot of Zambia's national food balance for the 2008-2009 marketing season.

**Table 6.8: Food Balance Sheet for 2003-2004 (in metric tonnes)**

| | Maize | Sorghum/ Millet | Rice | Wheat | Cassava | Other | Total tubers |
|---|---|---|---|---|---|---|---|
| A. Opening stocks (1st May 2002) | 100,156 | - | 0 | 2,000 | - | - | 92,493 |
| B. Production (2002-2003) | 1,157,861 | 55,632 | 10,744 | 135,968 | 958,113, | 132,026 | 2,120,854 |
| C. Urban Production (2002-2003) | 49,341 | | | | | | 44,407 |
| Total availability (A+B) | 1,307,358 | 55,632 | 10,744 | 137,968 | 958,113 | | 2,257,753 |
| D. Staple food requirements | | | | | | | |
| 1. Human consumption | 981,298 | 52,850 | 16,707 | 131,702 | 589,359 | 125,425 | 1,616,699 |
| 2. Food reserve stocks (net) | 55,700 | - | - | - | - | - | 51,058 |
| 3. Stock feed | 50,000 | - | - | - | - | - | 45,000 |
| 4. Breweries | 35,000 | - | - | - | - | - | 27,000 |
| 5. Seed | 10,000 | 1,000 | - | 1,500 | - | - | 10,983 |
| 7. Losses | 60,360 | 2,782 | 537 | 6,798 | 19,162 | 6,601 | 81,602 |
| Total requirements | 1,187,358 | 56,632 | 17,244 | 140,000 | 609,521 | 132,026 | 1,832,341 |
| E. Surplus/deficit | 120,000 | 0 | (6,500) | (2,032) | 348,592 | 0 | 425,412 |
| F. Food relief requirements | 0 | - | - | 0 | - | - | 0 |
| G. Commercial import requirements | 0 | 0 | (6,500) | (2,032) | 0 | 0 | 0 |

*Source: Ministry of Agriculture and Cooperatives*

| Table 6.9: National Food Balance Sheet for 2008-2009 Marketing Year (in metric tonnes) | | | | | | | |
|---|---|---|---|---|---|---|---|
| | **Maize** | **Paddy rice** | **Wheat** | **Sorghum & millet** | **Sweet and Irish potatoes** | **Cassava flour** | **Total (Maize mealie-meal equivalent) 12** |
| A. Availability: | | | | | | | |
| (i) Opening stocks (1st May 2008) | 390,350 | 2,799 | 25,848 | 2,273 | 0 | 2,176 | 376,327 |
| (ii) Total production (2007-08) | 1,211,566 | 24,023 | 180,000 | 43,926 | 116,719 | 1,160,853 | 2,384,674 |
| Total availability | 1,601,916 | 26,822 | 205,848 | 46,199 | 116,719 | 1,163,029 | 2,761,001 |
| B. Requirements: | | | | | | | |
| (i) Staple food requirements: | | | | | | | |
| Human consumption | 1,140,560 | 36,048 | 189,600 | 42,975 | 110,883 | 670,917 | 1,879,285 |
| Food Reserve Stocks (net) | 157,000 | 0 | 0 | 0 | 0 | 0 | 141,300 |
| (ii) Industrial requirements: | | | | | | | 0 |
| Stock feed | 66,843 | 0 | 0 | 0 | 0 | 0 | 60,159 |
| Breweries | 15,425 | 0 | 0 | 0 | 0 | 0 | 13,883 |
| Seed | 18,510 | 0 | 0 | 1,028 | 0 | 0 | 17,557 |
| (iii) Losses | 60,578 | 1,201 | 5,400 | 2,196 | 5,836 | 23,217 | 84,270 |
| Total requirements | 1,458,916 | 37,249 | 195,000 | 46,199 | 116,719 | 694,134 | 2,196,454 |
| C. Surplus/ deficit (A-B) | 143,000 | (10,427) | 10,848 | 0 | 0 | 468,895 | 564,548 |
| D. Commercial import requirements | | 10,427 | (10,848) | | | | |
| E. Food aid import requirements | | | | | | | |
| *Source: Ministry of Finance and National Planning* | | | | | | | |

Apart from these commodities, the country also imports a lot of foodstuffs such as rice, maize and wheat during years of crop failure. However, the country has improved its food security between 2005 and 2008 when it actually exported maize and wheat.

In terms of rice, Zambia like most of its neighbouring countries is a net importer. This is despite the huge potential that the country has in the production of rice in the northern,

western and eastern provinces if its production structure and marketing efforts are well coordinated.

It is estimated that in 2007, COMESA countries imported a total of 604,000 metric tonnes, while SADC countries imported over 1, 119,000 metric tonnes of rice. Zambia is involved in cross-border trade in rice with most of its neighbours. These regional deficits pose a great opportunity to see how best this business can be enhanced. Zambia could develop an export-led strategy for rice.

Given the reduced state support to the sector after 1991, some farmers have revived traditional crops, particularly cassava and other tubers. However, maize still dominates Zambia's agriculture. Reliance on rain-fed agriculture implies extremely fluctuating harvests. Although the area under maize cultivation almost doubled between 2000 and 2006, in one year out of three crop production still fails to satisfy national consumption needs (MoFNP 2009).

### 6.2.9 Foreign Direct Investment in Agriculture

Domestic and foreign investment is important for the improved performance of the agricultural sector. During the past decade, Zambia has attracted some good levels of foreign direct investment (FDI). The FDI is mainly directed at commercial agriculture. Using pledges as a proxy, the amount of FDI flowing to the sector has been fluctuating over the years. It increased from Zambian Kwacha (ZMK) 8.2bn in 2000 and peaked at ZMK65.8bn in 2008 before declining to ZMK9.4bn for first three quarters of 2009.

**Table 6.10: Trends in Investment Pledges (ZMK 000,000)**

| Sectors | 2000 | Percentage share | 2005 | Percentage share | 2008 | Percentage share | 2009* | Percentage share |
|---|---|---|---|---|---|---|---|---|
| Agriculture | 8 169 | 10 | 30 264 | 12 | 65 884 | 6 | 9 437 | 3 |
| Construction | 9 949 | 12 | 5 428 | 2 | 19 549 | 2 | 9 437 | 3 |
| Health | - | 0 | 70 | 0 | 32 775 | 3 | 22 296 | 7 |
| Financial Institutions | 340 | 0 | - | 0 | 35 946 | 3 | 38 000 | 12 |
| Manufacturing | 29 327 | 37 | 114 278 | 47 | 717 280 | 62 | 43 081 | 13 |
| Mining | 2 322 | 3 | 62 404 | 26 | - | 0 | 64 340 | 20 |
| Service | 8 698 | 11 | 17 432 | 7 | 51 919 | 5 | 14 336 | 4 |
| Tourism | 18 835 | 24 | 8 386 | 3 | 180 094 | 16 | 88 896 | 27 |
| Transport | 2 287 | 3 | 6 356 | 3 | 48 924 | 4 | 36 334 | 11 |
| Total | 79 928 | 100 | 244 618 | 100 | 1 152 372 | 100 | 326 156 | 100 |

* for first three quarters of 2009
*Source: ZDA Data Base*

The increase in FDI to the agricultural sector could be attributed to the liberalisation of the sector as well as the inflow of farmers, especially in high value crops from Zimbabwe. In addition, Chinese investors have committed billions of Zambian Kwachas in the cultivation of crops for bio-fuel production. Most of the agricultural based FDI is in cotton, tobacco and bio-fuel cash crops.

### 6.2.10 Contribution of the Livestock Sector

Estimates show that Zambia's livestock industry contributes up to 7.45 percent of Gross National Product (GNP) and 35 percent of the country's agricultural production. The sector is dominated by small-scale farmers that raise cattle, goats, pigs and poultry. However, livestock production remains far below its potential due to several factors that include outbreaks of diseases such as corridor and foot and mouth. Traditional communal grazing has, in part, been blamed for the frequent outbreak of cattle diseases in many rural areas. Since 2003, the government has launched the Livestock Restocking Programme to restore breeding stock and increase animal draught power, and the Animal Disease Control Programme to preserve the current population of livestock (GRZ, 2006).

**Box 6.1: Agriculture and Attainment of MDGs**

A well formulated and implemented agricultural policy in Zambia is critical not only for the reduction of poverty but also for the attainment of the Millennium Development Goals and long term development. Generally the MDGs are self-reinforcing and agriculture can play a critical role in their attainment either directly or indirectly as follows:

*Eradication of poverty and extreme hunger*: An increase in the production of food will contribute to the reduction of hunger in Zambia. In addition, the diversification of cropping patterns to incorporate high value crops will enable farmers to earn a reasonable income and reduce poverty.

*Achievement of universal primary education:* The development and adoption of appropriate farming technology that reduces labour input will result in a reduction in the demand for on-farm family labour, thereby releasing children to attend school. In addition, an increase in the earning capacity of farmers resulting from diversification to the cultivation of high value crops such as cotton, tobacco and fresh vegetables will enable farmers to send their children to school. Special targets should be set with learning institutions for the enrolment of girls.

*Promotion of gender equality and empowerment of women:* The agricultural sector is one of the key avenues through which gender equality and empowerment of women can be promoted. For example, this can be achieved through input support programmes and other credit programmes specially targeting women and other vulnerable households. Out-grower promoters and agro-processing companies could also be encouraged to ensure that women are offered equal employment opportunities.

*Reduction of child mortality:* Child morbidity and mortality is currently unacceptably high. Improved access to nutritious food could indirectly contribute to the reduction of child mortality. The agricultural extension system, once adequately funded and functioning could be utilised to promote immunisation and disease control programmes that could indirectly contribute to the reduction of child mortality.

*Contd...*

*Improvement of maternal health:* Improved access to nutritious food will have a bearing on maternal health in Zambia. An improvement in incomes resulting from diversification to the cultivation of high value crops and promotion of contract farming will also contribute to the general improvement of maternal health in the country.

*Combating HIV/AIDS, malaria and other diseases:* Malaria and HIV/AIDS are currently the main causes of morbidity and mortality in Zambia. The agricultural sector is one of the key avenues through which awareness campaigns on HIV/AIDS can be promoted, through the agricultural extension system, corporate agribusiness firms and NGOs. This could be done in close collaboration with the Ministry of Health.

*Ensuring environmental sustainability:* Zambia's agriculture policy aims at ensuring that the existing agricultural resource base is maintained and improved upon. This calls for the application of agricultural production systems that are sustainable in the long-term. The environmental damage caused by the application of inappropriate agricultural production systems that involve the application of huge amounts of inorganic fertiliser, the excessive use of agro-chemicals, use of slash and burn systems, burning of crop residues and ploughing along the slopes is well documented.

Adapted from *Bobi K. Nebwe (2010) Agricultural Contribution to the Achievement of the Millennium Development Goals – accessed from:* www.acf.org.zm

**Table 6.11: Number of Household Owning Livestock by Type and by Province (in 000) 2006**

| Region/ Province | Agriculture Households | Households Owning Livestock | Percent cattle | Percent goats | Percent pigs | Percent sheep |
|---|---|---|---|---|---|---|
| **Total** | 1 551 952 | 421 553 | 62 | 59 | 43 | 3 |
| **Rural** | 1 389 089 | 395 612 | 62 | 59 | 43 | 3 |
| **Urban** | 162 863 | 25 941 | 61 | 34 | 36 | 2 |
| **PROVINCE** | | | | | | |
| **Central** | 175 525 | 47 730 | 78 | 73 | 13 | 3 |
| **Copperbelt** | 125 790 | 14 590 | 36 | 47 | 32 | 0 |
| **Eastern** | 299 428 | 106 000 | 58 | 48 | 59 | 4 |
| **Luapula** | 163 485 | 30 579 | 50 | 49 | 22 | 6 |
| **Lusaka** | 58 351 | 16 281 | 50 | 49 | 22 | 6 |
| **Northern** | 257 394 | 65 478 | 30 | 62 | 47 | 5 |
| **Northwestern** | 112 602 | 20 079 | 15 | 69 | 30 | 9 |
| **Southern** | 206 242 | 80 356 | 65 | 47 | 26 | 1 |
| **Western** | 153 135 | 40 500 | 80 | 11 | 19 | 0 |

*Source: CSO 2007*

| Table 6.12: Animal Population and Distribution Among Small-Scale Farmers 2006-2007 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Province** | **Cattle** | | **Goats** | | **Pigs** | | **Sheep** | |
| | No. | Percentage share in Total | No. | Percentage share in Total | No. | Percentage share in Total | No. | Percentage share in Total |
| National | 2 994 343 | 100 | 1 428 498 | 1 00 | 672 926 | 100 | 167 287 | 100 |
| Rural | 2 794 067 | 93 | 1 307 172 | 92 | 620 166 | 92 | 154 282 | 92 |
| Urban | 200 276 | 7 | 121 326 | 8 | 52 760 | 8 | 13 005 | 8 |
| Central | 241 247 | 8 | 187 140 | 13 | 30 750 | 5 | 20 308 | 12 |
| Copperbelt | 100 610 | 3 | 60 059 | 4 | 31 508 | 5 | 13 872 | 8 |
| Eastern | 232 611 | 8 | 194 457 | 14 | 290 103 | 43 | 25 561 | 15 |
| Luapula | 18 650 | 1 | 85 627 | 6 | 40 567 | 6 | 62 700 | 37 |
| Lusaka | 140 295 | 5 | 88 974 | 6 | 50 008 | 7 | 10 568 | 6 |
| Northern | 125 649 | 4 | 245 190 | 17 | 65 292 | 10 | 12 009 | 7 |
| North Western | 56 005 | 2 | 74 600 | 5 | 40 567 | 6 | 13 050 | 8 |
| Southern | 1 650 000 | 55 | 459 311 | 32 | 96 869 | 14 | 9 219 | 6 |
| Western | 430 000 | 14 | 33 140 | 2 | 36 112 | 5 | - | 0 |
| *Source: CSO, 2007* | | | | | | | | |

The total and geographical distribution of livestock in Zambia is presented in table 6.11. Most of the cattle, pigs and goats are in the southern part of the country with more than 80 percent found in the Southern, Western and Eastern Provinces. Consumption centres in the Lusaka and Copperbelt Provinces create movement towards these markets in the North.

Table 6.12 shows that the country had 2,994,343 cattle during 2006-2007, with 93 percent being owned by rural households. The Southern province recorded the highest number of cattle, representing about 55 percent of the total cattle owned. Western and Eastern provinces followed with 14 and 8 percent, respectively. In terms of goats, 59 percent of households owning livestock reported owning goats. The population of goats was estimated at 1,428,498. The Southern province had the highest number of goats owned with a share of 33 percent followed by Northern province with 17 percent. The Western province represented only 2 percent of goat population.

Sheep is less popular among farmers in Zambia. The country had 167,287 heads of sheep. About 92 percent were reported to be owned in rural areas. At provincial level, Luapula province had the highest number of sheep followed by Eastern province with 37 percent and 15 percent, respectively, of the entire sheep population. There was no significant number of sheep reported from Western province.

The number of pigs was estimated to be 672,926. Of these, 43 percent were reported in Eastern province followed by Southern province with 14 percent. The Copperbelt, Western and Central provinces had 5 percent each. Although most of the livestock are kept by small-scale farmers, most of the beef is supplied by the large-scale farmers. This is because small-scale farmers keep cattle principally for draught and cultural purposes. Within agriculture, livestock production serves as a source of employment, income, savings, cash for school fees and/or medical emergencies, dowries, draught animal power, food, means of coping with crop losses, and fertiliser (manure) for many rural Zambians.

According to Global Development Solutions (GDS, 2006), the cattle population declined by almost half from 5 million to 2.9 million between 1991 and 2006. This has affected the small scale farmers. The animals are characterised by a high adult mortality rate (5 percent); low conception and calving rates (50 percent); long calving intervals; an average herd growth rate of only 3 percent (some sources estimate 5 percent); and an estimated herd off-take (cattle sales for income) of 8-9 percent. By contrast, commercial farm cattle have a calf mortality rate of 1 to 2 percent, reproductive rates of approximately 65 percent, and an off-take of 17 to 18 percent.[5]

**Table 6.13: Cattle Production and Trade in Zambia**

| | 2001 | 2002 | 2003 | 2004 | 2005 |
|---|---|---|---|---|---|
| Cattle: Stock (# Heads) | 2,600,000 | 2,600,000 | 2,600,000 | 2,600,000 | 2,600,000 |
| Beef and Buffalo Meat: Slaughtered/Prod Animal (# Heads) | 255,000 | 255,000 | 255,000 | 255,000 | 255,000 |
| Beef and Buffalo Meat: Carcass Weight/Yield | 1,600 | 1,600 | 1,600 | 1,600 | 1,600 |
| Beef and Buffalo Meat: Production (MT) | 40,800 | 40,800 | 40,800 | 40,800 | 40,800 |
| Beef and Veal: | | | | | |
| Export Value ($1,000) | 27 | 44 | 44 | 44 | na |
| Export Quantity (MT) | 11 | 55 | 55 | 55 | na |
| Import Value ($1,000) | 0 | 0 | 8 | 12 | na |
| Import Quantity (MT) | 5 | 0 | 2 | 17 | na |
| Beef and Veal, Boneless: | | | | | |
| Export Value ($1,000) | 0 | 15 | 15 | 15 | na |
| Export Quantity (MT) | 0 | 10 | 10 | 10 | na |
| Import Value ($1,000) | 1 | 0 | 39 | 0 | na |
| Import Quantity (MT) | 0 | 0 | 26 | 0 | na |

*Source: FAO*

Table 6.13 shows the production and trade in beef in Zambia. When compared to neighbouring countries such as Botswana and Namibia, Zambia still lags behind in terms of external market penetration.

There is a huge potential for significant domestic and regional market development if productivity and efficiency gains can be achieved. Moreover, the livestock sector, and especially cattle rearing has great potential to contribute to the rapid alleviation of poverty through its linkages with several sectors such as the meat processing industry, milk processing, leather processing and products, and hides. In this way, the livestock sector supports efficient agro-processing and provides industrial forward and backward linkages in the economy. These are essential for economic growth and ultimately, for poverty reduction. Moreover, the sector has immense potential exporting capacity, both regionally and to the EU, and producers could take full advantage of the market access provided through the EPA currently being negotiated between Zambia and the EU[6].

## 6.3 Analysing Agricultural Production and Productivity

A small number of commercial farmers is export-oriented, with their productivity levels similar to those obtained in developed countries. Small-scale, subsistence farms have productivity levels typical of sub-Saharan Africa.

### 6.3.1 Crops Productivity

Table 6.14 shows the trends in output and farm productivity. It reveals that although the amount of hectares being cultivated has been increasing over the years, the output of key crops that include maize, soybean, burley tobacco and sorghum has been declining, while that of millet, mixed beans, seed cotton has been fluctuating. Land productivity remains lower than successful countries in the region for most of the crops. For instance, whereas the yields for rice are as high as 3.6 metric tonnes per hectare in COMESA, it stood at 1.35 tonnes in Zambia. However, it is much higher than the 1.04 tonnes in SADC. The productivity in maize is far below than that of regional neighbours such as South Africa.

In their study, Zulu *et al* (2004) observed that cotton farm yields in Zambia appear to be relatively good compared to most Southern and Eastern African producers. For instance, the yields in 2002 were estimated to be around 600 kg/ha. The same paper observes that these yields continue to lag well behind those in Zimbabwe and West and Central Africa, and lint quality is substantially lower than in Zimbabwe.

In terms of labour productivity, a World Bank study showed that the same is much higher in industry as compared with agriculture. The huge gap between farm and non-farm labour productivity implies that Zambia, which has 70 percent of its labour force employed in agriculture, uses its labour extremely inefficiently.

**Table 6.14: Area Planted, Yields and Crop Production, 2001-2008**

| | Area Planted in Hectares (Ha) | | | | Yield in MT/Ha | | | | | Production in Metric Tonnes (MT) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Crop/Year** | **2001-2002** | **2005-2006** | **2006-2007** | **2007-2008** | **2001-2002** | **2005-2006** | **2006-2007** | **2007-2008** | **2008-2009** | **2001-2002** | **2005-2006** | **2006-2007** | **2007-2008** |
| Maize | 600,000 | 784,524 | 872,812 | 928,224 | 1.5 | 1.8 | 1.6 | 1.3 | 1.68 | 900,000 | 1,424,439 | 1,366,158 | 1,211,566 |
| Sorghum | 375,000 | 43,627 | 31,596 | 24,349 | 0.07 | 0.5 | 0.4 | 0.4 | 0.54 | 27,000 | 21,047 | 12,773 | 9,993 |
| Millet | 70, 000 | 69,529 | 56,817 | 45,508 | 0.8 | 0.7 | 0.4 | 0.8 | 0.75 | 55'000 | 48,159 | 21,707 | 33,934 |
| Paddy rice | 11, 000 | 14,358 | 20,067 | 25,177 | 0.9 | 1 | 0.9 | 1 | 1.35 | 10,000 | 13,964 | 18,317 | 24,023 |
| Sunflower | 13000 | 39,416 | 28,829 | 32,491 | 0.5 | 0.4 | 0.3 | 0.4 | 0.38 | 7100 | 15,003 | 8,953 | 12,662 |
| Groundnuts | 135000 | 144,250 | 147,320 | 144,201 | 0.41 | 0.6 | 0.4 | 0.5 | 0.56 | 55000 | 84,010 | 55,215 | 70,527 |
| Soybeans | 13000 | 44,034 | 38,947 | 32,404 | 2.3 | 1.3 | 1.4 | 1.8 | 1.84 | 30000 | 57,815 | 55,194 | 43,715 |
| Seed cotton | 50000 | 152,262 | 89,312 | 111,307 | 1.24 | 0.8 | 0.6 | 0.7 | 0.84 | 62000 | 118,425 | 54,886 | 71,821 |
| Mixed beans | NA | 54,532 | 55,663 | 59,588 | NA | 0.5 | 0.4 | 0.8 | 0.56 | NA | 27,697 | 24,164 | 44,464 |
| Burley tobacco | NA | 6,439 | 55,508 | 1,815 | NA | 1.2 | 0.4 | 2.6 | 1.59 | NA | 7,742 | 5,382 | 4,659 |
| Virginia tobacco | 2,900 | 8,521 | 8,265 | 9,299 | 1.2 | 1.7 | 1.9 | 1.8 | 1.13 | 3500 | 14,685 | 15,562 | 17,005 |
| Cassava | 165000 | 362,355 | 391,844 | 396,874 | 5.7 | 2.9 | 3 | 2.9 | NA | 950000 | 1,059,887 | 1,185,599 | 1,160,853 |
| **Total Area** | | 1,565,146 | 1,652,159 | 1,698,115 | | | | | | | | | |

*Source: Ministry of Agriculture and Cooperatives /Central Statistical Office, NA –not available*

Most of the small-scale producers are not mechanised and have no economies of scale, leading to low labour productivity and low incomes, and hence poverty. Generally there is a downward trend in agriculture productivity among small-scale farmers for most of the crops mainly due to lower relative profitability, droughts and floods, inadequate or late access to inputs and credits, and low prices for such crops as rice and maize. The unstable markets for drought resistant crops such as millet, sorghum, soya beans, sunflowers, and cassava which provide a wider food base for rural households has also affected productivity (DFID, 2002).

Generally the low productivity among small-scale farmers is partly a result of many years of development neglect, when Zambia's agriculture was mainly seen as a source of cheap food sold or given freely in urban areas. This effectively taxed the rural farmers leaving them with little or no extra resources for investment. During the 1990s major reforms were carried out within Zambia's agriculture sector, including market determined prices, reduction of producer subsidies, and other measures. The nature of these reforms implied that mostly large-scale firms and firms with market access benefited, while many small-scale farmers struggled to access markets, inputs and information. The government however continued to intervene in agricultural markets. These interventions created misallocation of resources and raised indirect costs. The indirect costs to agriculture, which include direct taxes and indirect costs through macroeconomic and other distortions, have diminished substantially in most countries, except in Zambia (World Bank, 2009). These costs created by the economic structure of Zambia are high compared to other African countries, and have even increased since the beginning of the 1980s.

The low productivity observed in the above table also accounts for the poor export performance of Zambia's food crops. The table reveals that crop items in which productivity is high such as tobacco, soybeans and maize are also the crops that Zambia exports. It imports the crops in which the country has lower productivity such as rice. It is evident that if Zambia is to exploit its export potential there is a need to increase small holder productivity in these crops.

### 6.3.2 Livestock Productivity

An estimated 42 percent of Zambian landmass is suitable for agriculture/livestock activities with 21 percent of the total land area suitable for rangeland grazing. However, the total livestock population of goats, cattle and pigs are far less than the human population. This contrasts greatly with countries like Namibia and Botswana that have established export-oriented beef industries. The herds in these countries outnumber human population. According to GDS (2006), a number of factors can be attributed to the little or lack of incentive to commercialise livestock among small-scale farmers in Zambia, including poor crop and animal husbandry, low access to farm power and mechanisation, and decreasing soil fertility, especially in traditional farming areas.

### 6.3.3 Factors Affecting Agricultural Productivity

Literature in this area provides a number of factors affecting agricultural productivity in Zambia. These include:

***Neglect of the Sector/Government Failure***

According to the World Bank (2008), low productivity in rural areas is partly a result of many years of development neglect, when Zambia's agricultural produce was mainly seen as a source of cheap food sold in urban areas. Further, state withdrawal from the sector during the reforms after 1991 left a huge gap and there were no middlemen and information especially in sparsely populated, remote rural areas. Extension services provided by the government before the reforms declined. The purpose of these services were to help farmers in identifying markets, adopting new techniques, reducing fertiliser costs, reducing livestock diseases and others. A study in Zambia by Bramilla and Porto (2006) found that households with access to extension services had higher productivity than those which did not. The small-scale farmers, i.e. the poor were the ones most affected by the decline in extension services as the large-scale farmers could easily absorb the fixed cost of finding the knowledge or access alternative information channels.

The re-introduction of inputs support services by the government has experienced a host of problems. This is more apparent in the government's Fertiliser Subsidy Programme. The government has issued confusing policies, repeatedly promising to withdraw from the fertiliser market but then re-entering the market under popular pressure to assist the rural poor. Often the government issues contracts for fertiliser purchases at the last minute and allows little time for successful bidders to import and deliver fertiliser. Because of this, importers are forced to use higher cost import routes, which has nearly doubled the price the government pays (Mwape, 2004).

Moreover, the programme is not well targeted and many recipients are not farmers (only 20 percent of small farmers use fertilisers) but traders, who resell fertilisers at large mark-ups, to the well-connected and high-income groups located close to tarmac roads and district centres (World Bank, 2008a). Thus, the system opens the door to rent-seeking and corruption, distorts the market, depresses the supply of fertiliser on the commercial market, and crowds out private operators. The annual uncertainty about the timing and level of government purchases is particularly damaging to the small-scale producers' productivity and incentive to actively participate in agricultural production.

In addition, some authors such as Govereh et al 2000, the IDL group (2002), the World Bank (2008), Bramilla, B. and *G.* Porto (2006) and Alwang and Siege1 (2003) identified the following constraints to agricultural productivity:

***Dependence on Rain***

The vast majority of farmers rely on rainfall to irrigate their crops. The country is prone to drought, which has devastating impact on harvests, as was the case in 2005. Despite this susceptibility, the country has 40 percent of Southern Africa's water reserves at its disposal, which has substantial potential for hydroelectric power generation and could, with a large amount of investment, be diverted to agricultural usage. In 2006 only 11.8 percent of Zambia's irrigation potential was being utilised. Often farmers irrigate their crops manually, the labour intensive process consists of a rope and bucket to draw water from shallow wells.

The government has not facilitated the adoption of better irrigation technology such as treadle pumps. Irrigation set up is often informally done by individual farmers and with very little capital. The process is often spontaneous and not systematic. The main reason for this is a lack of knowledge about available technologies and access to those technologies. One viable option to increase productivity in a cheap but highly effective manner is the implementation of the treadle pump. This pump has already been implemented in several areas in Africa including Zambia. Studies have found that it has made it possible to reduce irrigation time from 12 to 4 person hours/day, while allowing farmers to increase their irrigated plot size by about 40 percent.

In addition, the promotion of irrigation among commercial farmers could improve productivity and generate employment. The World Bank (2007) study projected the employment and income implications of commercial agriculture expansion and estimated that expanding irrigated commercial agriculture has the potential to generate, for example, two full time jobs per hectare in coffee production, half in wheat/soya, one in fodder crops, two in local horticulture and as many as 25 in floriculture. Depending on the types of benefits, the expected wage would be around US$3.6-4.5 a day, "which is much higher than the average return a day of US$1.2 for a small-scale cotton farmer, US$0.3 for a small-scale maize farmer without fertiliser subsidies, and US$1.3 for small-scale commercial maize farmers with 50 percent fertiliser subsidies". The wage differential reflects productivity differentials.

***Research and Development for Improved Seed Varieties***

Another major area the government ought to look to if optimal levels of productivity are hoped to be reached is improved seed varieties. Given the fact that agriculture makes up such a significant amount of GDP, it is imperative that this area be as effective as possible. Although investments in this area may take a significant time to mature; the results would have enormous impact on the overall production and quality of crops. There are many initiatives currently underway in various African countries, but it is important that Zambia invests its own resources so as to conduct research specific to its needs. The reason for this is that benefits of the genetic alterations are often specific to certain crops and soil types, and thus much of the work being done in other countries may be incompatible with the specific needs of Zambian farmers.

***Weak Business Orientation of Farmers***

Most of the peasant or small-scale farmers take farming as an inherited practice for ensuring food security. They do not regard farming as a business in which they should heavily invest, but as a way of life. There is need to change this culture if the performance of the sector is to improve. This culture is compounded by high illiteracy levels among peasant farmers. The government ought to support an aggressive education policy - one that will afford the farmers with the skills that they need to adopt new technologies and practices. It is irrelevant to discuss how much productivity can increase with the introduction of one product or another, or new techniques of planting and harvesting crops, if the people do not know how to implement these innovations.

Education also plays another very important role in agriculture. It informs farmers of what works and what does not. In this age there is a strong push for genetically modified

crops mainly because the economic impacts are so profound. However in the midst of these developments there is room for error and potentially costly mistakes. By sponsoring extensive research and adopting a programme that could inform farmers of the results of these findings, the government would in effect minimise the possibility of farmers planting seeds that may not be suitable for their soil, or worse, could actually produce products that are dangerous to consume.

Finally, education must work towards commercialising Zambia's agricultural sector by developing entrepreneurial skills among rural agribusiness farmer groups and extension workers where they exist.

***High Transaction Costs***

Zambia has inherently high transaction charges arising from high transportation, communication and financial costs. Most of the poor farmers are concentrated in remote areas far away from railway lines. The bad roads, long distances to markets, lack of inputs and the collapse of channels for providing credit all impact poor people operating in these areas. They have limited or no access to the markets in urban areas along the railway line, let alone international markets. The high transaction costs cut into the domestic and international competitiveness making it difficult for them to trade themselves out of poverty.

In their study, Bramilla and Porto (2006) collected farm level productivity data from a number of districts in Zambia. They demonstrated how maize and cotton productivity correlate negatively with weak service performance as measured by the Investment Climate Surveys. In the cotton sector, the firm productivity rank of Zambian districts is 90 percent correlated to the rank of availability of phone lines in the same district, 90 percent correlated to the rank of reliability of transport services, and 87 percent correlated to the rank of cost of finance. In the maize sector, the firm productivity rank of Zambian districts is 77 percent correlated to the rank of availability of phone lines, while the correlation to reliability of transport services and cost of finance could not be statistically confirmed.[7]

***Land Tenure System***

Most of the land is held as communal land, which reduces potential private investments. The utilisation of these lands to their fullest potential will require changing land tenure and farming practices combined with public investment in basic infrastructure such as feeder roads and bridges.

***Trade Policies***

The PRSP cites 'unfair trade practices with the country's international and regional neighbours; low competitiveness; and an overall reduction in investment flows in the sector' as the most significant constraints to growth.

The above mentioned have been compounded by restrictive government trade policies that prevent exports of selected cereals, thereby denying farmers from taking advantage of high prices in neighbouring countries. Estimates show that if maize production increases by 30 percent, restricting trade leads to a 50 percent price fall in the domestic market. But

| Table 6.15: Estimated Maize Price in Zambia Under Alternative Trade Regimes (percentage change from normal) | | |
|---|---|---|
| **Harvest** | **Impact on Price with Closed Border** | **Impact on Price with Open Border** |
| Bumper harvest (30 percent above normal) | -50 percent | -26 percent |
| Drought (30 percent below normal) | +163 percent | +36 percent |
| *Source: Haggblade et al. (2008)* | | |

when exports are allowed to neighbouring countries, such as DRC, it reduces the price fall by half. Similarly, restricting imports during drought periods exacerbates price increases (table 6.15).

Given the smallness of the Zambian market, improved productivity without corresponding markets within the region and internationally drives the prices down leading to small-scale farmers abandoning the new technologies. Evidence reveals that the government could promote maize production and exports to promote farm productivity, food security and poverty reduction.

***Limited Agricultural Finance***

The liquidity problems and general lack of agricultural credit is one of the core constraints to the full tapping of Zambia's agriculture. The current economic environment favours commercial banks lending to government rather than the productive sector. The scarce resources available for the productive sector in the agriculture sector are targeted at commercial farmers. Usually farmers in Zambia are paying interest rates of above 30 percent. This has made it difficult for small-scale farmers to acquire capital, and even large-scale farmers to replace machinery on the farms making it difficult to expand operations. Growth of agriculture is stunted, as there is little reinvestment, since farmers have been eating into their capital.

The inadequacy of private financing for the agricultural sector is further compounded by inadequate government investment in the sector. According to the World Bank (2008), only 5 percent of Zambia's national budget goes to agriculture of which more than half is earmarked for the Fertiliser Subsidy Programmes (37 percent) and maize marketing (15 percent). Only 3 percent of the agricultural budget goes to much needed irrigation and other rural infrastructure, and 11 percent to operating costs, including agriculture extension and research.

***Low Producer Prices for Agriculture Sector***

One of the hindrances to the development of the agricultural sector has been the tendency by government to intervene in the market by paying or announcing prices that are too low for agricultural commodities. Often, the government has been interested in subsidising urban food supplies and controlling food inflation. The unfair producer prices have

encouraged the exit of some farmers from some potentially exportable crops such as maize, to others crops such as jatropha for bio-fuels in the recent years.

***Impact of HIV/AIDS and Malaria***

The high prevalence of HIV/AIDS has affected the farming industry in Zambia in many ways. The prevalence rate for the 15–49 year age group is 14 percent according to the Demographic and Household Survey (2007). In addition, malaria has continued to be the main cause of morbidity and mortality in Zambia. This has affected the quality and quantity of human labour available for efficient agricultural production. Increased medical expenses have diverted resources from agricultural investment.

***Institutional Capacity for Stakeholder Consultations and Collaboration***

The quality, depth and breadth of institutional support to agriculture that is provided by public institutions is inadequate on its own to address the dynamic needs of the different categories of farmers and stakeholders. In recent years, the sector has benefited from more structured institutional support frameworks that have inbuilt consultative mechanisms between public and private sector players in policy development and project design. These include Zambia Agriculture Research Institute (ZARI), ACF, District Agricultural Coordinators (DACO) and Golden Valley Agricultural Research Trust (GART), Cotton Development Trust (CDT), Livestock Development Trust (LDT) in research, In-service Training Trust (ISTT) in training, and ZEGA in exports of flowers and vegetables. However, most of these structures are mainly accessible to commercial farmers and do not have direct linkages with the small-scale farmers. There is a need to provide adequate institutional arrangements that are accessible to small-scale farmers.

### 6.3.4 Constraints on Livestock Productivity

The productivity of livestock, particularly in the traditional sector, is constrained by several factors including the prevalence of animal diseases; non-availability of veterinary drugs; high cost of veterinary drugs; inadequate livestock nutrition and water; poor animal husbandry practices/management; inadequate marketing infrastructure; lack of appropriate livestock research; inadequate livestock extension and health services; lack of linkages between livestock research and livestock extension.

***Lack of a Business Mindset***

Lack of a business mindset among farmers regarding their cattle has limited the commercial value of the industry. Farmers keep cattle as status symbols, when according to market prices or other opportunities, the cattle should be sold. Moreover, most farmers, commercial and traditional, have little or no record-keeping for cattle breeding activity, cattle prices, feed costs, weight gains, veterinary service or overall farm management.

***Poor Animal Husbandry***

Poor animal housing, feeding and disease control represent specific constraints with respect to livestock production. Animals in these situations have low calve rates and high calf mortality. The number of bulls decline as a result of their slaughter to generate immediate income and their use as draught oxen. In addition, an undefined calving season practiced by many traditional farmers creates unnecessarily long time periods between calving, and therefore slower herd growth and lower income.

| Table 6.16: Key Constraints to Animal Production in Zambia | | | |
|---|---|---|---|
| **Farmer Constraints** | **Traditional Leadership Constraints** | **Extension Staff Constraints** | **Ministry of Agriculture & Cooperatives Constraints** |
| • Lack of incentives to turn cattle into an economic asset<br>• Lack of relevant extension messages and technical know-how in managing their livestock<br>• Employment of boys and mentally disturbed persons as herdsmen, causing inefficient use of natural pastures<br>• Customary land and multiple livestock ownership system does not encourage development of improved pastures and management<br>• Lack of breeding stock of various livestock species<br>• Animal feed shortages due to uncontrolled bush fires<br>• Lack of access to efficient and attractive market systems<br>• Low adoption of new technologies | • Lack of funds and logistics to mobilise their respective communities<br>• Limited capacity to organise community-based management and utilisation of natural grazing resources and livestock production | • Poor staff morale associated with low pay and poor working conditions<br>• Inadequate operational funds<br>• Weak and wrong extension messages targeted to livestock farmers<br>• Limited knowledge and skill on the management of livestock and pasture development<br>• Weak linkages with research and other line institutions involved in livestock keeping | • Priority setting, more attention is given to crops than livestock<br>• Inadequate operational funds<br>• Lack of clarity in longer term goals and shorter term outputs required for extension delivery<br>• Political distortions to extension decision-making |
| *Source: Chileshe, 1999* | | | |

The above problems are further compounded by the structure of livestock ownership especially among the emergent farmers. Most of these farmers are often absentee owners working in urban areas. With little decision powers, herders often find it difficult to secure emergency services for these animals, as decisions have to be made by the absentee owners.

## 6.4 Poverty and Agriculture

The Living Conditions Monitoring Survey reports have consistently shown that more than two thirds of the Zambian population lives in absolute poverty (i.e. on less than US$1 a day). The surveys have also shown that national poverty has reduced from a peak of 73.8 percent of the population in 1993 to 64 percent in 2006. A closer examination of data reveals that while urban poverty has been declining, rural poverty had been increasing. Over 80 percent of the rural dwellers live on less than US$1 a day.

| Table 6.17: Trends in Poverty, 1991- 2006 | | | | | | |
|---|---|---|---|---|---|---|
| **Provinces** | **1991** | **1993** | **1996** | **1998** | **2004** | **2006** |
| National Poverty | 69.7 | 73.8 | 69.2 | 72.9 | 68 | 64 |
| • Rural Poverty | 88 | 92.2 | 82.2 | 83.1 | 78 | 80 |
| • Urban Poverty | 48 | 49 | 66 | 56 | 53 | 34 |
| Central | 70 | 81 | 74 | 77 | 76 | 72 |
| Copperbelt | 61 | 49 | 56 | 65 | 56 | 42 |
| Eastern | 85 | 91 | 82 | 79 | 70 | 79 |
| Luapula | 84 | 88 | 78 | 82 | 79 | 73 |
| Lusaka | 31 | 39 | 38 | 53 | 48 | 29 |
| Northern | 84 | 86 | 84 | 81 | 74 | 78 |
| North Western | 75 | 88 | 80 | 77 | 76 | 72 |
| Southern | 79 | 87 | 76 | 75 | 69 | 73 |
| Western | 84 | 91 | 84 | 89 | 83 | 84 |
| *Source: CSO (Various LCMS reports)* | | | | | | |

Although the country is on track to meet two of the eight Millennium Development Goals, extreme hunger and poverty reduction are not among them. Therefore, the promotion of agricultural productivity and trade could accelerate poverty reduction in the country. As mentioned earlier, agriculture accounts for more than 70 percent of employment in the country, out of which over 65 percent are women (CSO, 2007).

Despite farming being the main occupation, an analysis of the sources of income in rural households by the World Bank (2007) revealed that farmers only get 10 percent of their income from farm sales, and the majority of their farm output is for subsistence purposes. In addition, a few rural households had sufficient resources to hire poorer neighbours or provide them with loans. Rich rural households tend to rely more on wage employment and less on subsistence farming than poor rural households. However, there are no wide differences in rural households' wealth and education levels. This implies that rural inequality remains very low and better-off households are also viewed as vulnerable and their future well-being less than certain.

According to the Zambia Diagnostic Trade Integration Study (DTIS) of 2005, the emergence of agro-processing sector is very important to Zambia, both as a domestic supplier and as an exporter. The agro-processing sector employed over 41,415 workers in 2005. Their incomes contribute to the household incomes of around a quarter of a million people[8]. Workers have on an average 8 years of education, 49 percent of the workers are females, and the average age of all workers is about 32 years. The poverty profile of the workers suggests that the biggest beneficiaries in the industry are the extreme poor and the non-poor. Of those employed in the sector, around 43 percent are extremely poor, 13 percent are moderately poor and 44 percent belong to non-poor households.

**Box 6.2: Poverty and Agriculture (Adapted from the Zambia DTIS 2005)**

In rural areas, there are two main channels through which new trade opportunities can affect household income: (a) households can switch from subsistence farming to cash crop farming; and (b) household members may earn a wage at other farms. To provide some quantification of the gains that can be expected from these two new opportunities generated by international trade, we work with two models: the unconstrained household model (where the household can plant an additional hectare cash crop without giving up subsistence farming) and the constrained household model (where the household switches to a cash crop by giving up subsistence farming). In the case of the unconstrained household model there would be no foregone income by expanding household activities to a cash crop.

In the constrained model, growing cotton (instead of subsistence farming) leads to increases in income of around 20 to 24 percent in the case of (a) and (b) above. In the unconstrained model, instead, the gains are equivalent to around 56 and 68 percent. If the household switches to tobacco, the gains would be 71 and 104 percent in the constrained model and 88 and 130 percent in the unconstrained model. Therefore, growing tobacco seems to be an important vehicle for poverty alleviation. In the cases of vegetables and groundnuts, two activities often mentioned as good prospects for non-traditional exports, there are no gains in income in the constrained model, but gains of 37 and 20 percent, respectively, in the unconstrained model.

If larger market access is achieved, rural labour markets may expand and workers may become employed and earn wages. By comparing the average income in subsistence and in rural wage employment in agriculture, we estimate gains associated with rural employment ranging from 104.2 to 128.3 percent of the total expenditure of the average poor household in rural areas. Rural employment in commercial farms could be good instruments for poverty alleviation.

In urban areas, key vehicles for poverty alleviation through trade involve employment opportunities and higher wages. Zambia's main opportunities for export diversification and employment creation are in the areas of light manufacturing. These include textiles (cotton yarn, loom state fabric, acrylic yarn, and towelling), processed foods (sugar, molasses, honey and bees wax) and engineering products (copper rods, cables, wire, billets and brass ingots). The light-manufacturing sector is the key to poverty reduction because it is low and unskilled labour intensive. Households benefit from the wage incomes, which are generally higher than incomes coming from their next best alternative such as farming their own plots. In addition, incomes from employment in factories are generally less variable than farm incomes, which are very dependent on rain and other exogenous factors.

A healthy and growing manufacturing sector can decrease poverty partly because of its ability to create jobs through direct employment generation and equally importantly, because of the backward linkages it fosters through the sourcing of raw materials (agricultural goods) and intermediate goods (button and thread producers, packers, etc.), capital goods, and through forward linkages (advertising, marketing, distribution, etc.). In Zambia, a healthy manufacturing sector also contributes to a more profitable agricultural and primary commodity sector. The employment opportunities generated decrease the households' dependence on farm incomes, and increase formal sector employment. Employment and hence, wages are not the only benefits that accrue to these workers and to the economy as a whole. In addition, workers in these factories are also likely to be exposed to good production practices, management techniques, quality control practices etc. In other words, there is significant potential for total factor productivity (TFP) growth, which in turn tends to have a lasting impact on productivity and hence economic growth.

## 6.5 International Trade, Regional Integration, Landlocked Status and Trade Facilitation

Zambia's main policy document, the FNDP observes that the domestic market is too small to generate incomes for most of the producers. Thus it seeks to take advantage of external market opportunities and promote economic diversification through active participation in multilateral and regional trade. As a result, the country has maintained its regional and international trade arrangements. Currently Zambia is participating in two key regional integration arrangements. These are SADC and COMESA. In addition, the country is a member of the WTO and is party to the Cotonou Agreement between the EU and the ACP countries. Moreover, Zambia benefits from a number of preferential market access schemes, e.g. Everything But Arms (EBA) initiative of the EU and the African Growth and Opportunity Act (AGOA) of the US. The potential impact of these arrangements on agriculture is discussed below:

### 6.5.1 International Trade and Regional Integration

***World Trade Organisation***

The relevant agreements under the WTO that impact on trade in agriculture, consist among others of GATT 1994, the Agreement on Agriculture, and the Agreements on Sanitary and Phytosanitary Measures, Technical Barriers to Trade, Trade-Related Investment Measures, Safeguards, and Subsidies and Countervailing Measures. The challenges and opportunities of implementing these agreements have a great bearing on Zambia's participation in the multilateral trading system and growth process. The implementation of the Agreements on Agriculture and Sanitary and Phytosanitary Measures in particular has a greater bearing on Zambian agricultural production, imports and exports.

***Cotonou Agreement and Everything But Arms (EBA)***

Zambia is a signatory to the Cotonou Agreement with the EU. This agreement, which is in the process of being reviewed under the EPA, provides Zambia with a duty and quota free market access to the EU for a large number of its products. In addition, Zambia benefits from the EBA initiative. The initiative provides for duty and quota elimination for essentially all products exported to the European market from least developed countries (LDCs), with the exception of arms and munitions. This includes exports of agricultural products such as beef and other meat, dairy products, fresh fruit and vegetables as well as processed fruit and vegetables, maize and other cereals, starch, oils, processed sugar products, cocoa products, pasta, and alcoholic beverages. On the other hand, potential conclusion of the EPAs with the EU that will allow for reciprocal trade between ACP countries and the EU could be detrimental to the commercialisation of small-scale farmers in Zambia, as they will not be able to effectively compete for both regional and domestic markets in agricultural commodities, as their EU partners are highly subsidised.

***African Growth and Opportunity Act (AGOA)***

AGOA is the cornerstone of trade and investment policy relationship between the US and sub-Saharan African countries. The American Congress has amended AGOA to improve and expand preferential access for beneficiary countries. AGOA rewards reforming countries with preferences that have been proven to help reduce barriers to

trade, increase exports, create jobs, and expand business opportunities for African and US entrepreneurs. However, Zambian exports are at a disadvantage on the US market because of factors like quantity and quality, the cost of transportation, pricing and the category of the products, making it difficult for the country to substantially benefit from the AGOA initiative.

***Southern African Development Community (SADC)***

The SADC Protocol on Trade, which came into effect on 25 January 2000, commenced implementation on 1 September 2000, leading to the coming into effect of a SADC FTA in 2008. However, as a result of the asymmetrical approach to liberalisation, most countries in the SADC FTA Protocol have placed most of the agricultural products such as maize, cotton and sugar in the sensitive products categories making them subject to quota restrictions and in some cases duty charges. Cereals are protected for food security purposes while cotton is regarded as a developmental crop by some countries. Crops that are not restricted, such as floricultural products, tend to only have marginal markets as the majority of the population may not be able to afford them.

Despite the complexities, the SADC Indicative Development Plan has a common agricultural programme aimed at promoting productivity and increased value addition to ensure food security in the region. Through the Agricultural Information Management Systems (AIMS) programme, the SADC has developed a network for timely collection of information for early warning of disasters, vulnerability assessments, food security and monitoring of weather patterns in the region. The main components of AIMS include the Regional Early Warning System (REWS), Drought Monitoring Centre, Regional Remote Sensing Project, Vulnerability Analysis and the Regional Food Reserve Facility.

The bloc encourages improving the production capacity and productivity, facilitating cross-border and internal food flows based on improved infrastructure and distribution networks. Zambia could benefit from increased market access in the region if only its productivity is improved to match that of South Africa. This is because some regional members such as Namibia and Botswana are semi-arid deserts and DRC and Angola experience food deficits and depend on imported food stuffs.

Animal diseases are the main obstacle to trade in livestock and livestock products as the country is unable to fulfil the international standards as in the WTO SPS Agreement (this applies to trade with both SADC and the EU partners) and relevant World Organisation for Animal Health (OIE) regulations, which at present requires proof that an animal originates from an area free of a specific disease, if it is to be traded. Zambia has been susceptible to animal diseases such as foot and mouth disease (FMD), contagious bovine pleuro-pneumonia (CBPP), African swine fever (ASF) and East Coast fever (ECF).

***Common Market for Eastern and Southern Africa (COMESA)***

Zambia is a founder member of COMESA and hosts it secretariat. Economic integration through trade is at the centre of the organisation. The bloc launched the free trade area in 2000, a customs union in 2010, and envisages forming a common market by 2014. Currently, Zambia is implementing the free trade arrangement in this region and also

exports its goods duty and quota free to implementing member countries. Despite Zambia's low trade with this region compared to the SADC region, it offers a huge potential market for agricultural products such as maize, maize meal, sugar, cereal and processed food stuffs.

The majority of the countries in the bloc are not sustainably food secure. Meanwhile trade in agricultural products has been concentrated around informal cross-border trade with bordering countries. Despite the FTA, most countries have implemented protectionist policies in the agricultural sector. Formal trade has been low mainly because of poor market information and lack of coordination. In response to these difficulties, COMESA in 2009 embarked on a programme through its agency known as the Alliance for Commodity Trade in Eastern and Southern Africa (ACTESA) to foster investment, development policies, and promote regional trade and marketing of staple agricultural commodities. The Alliance promotes increased integration and improved regional competitiveness of staple food markets across the COMESA region to ensure broad-based growth and decreased food insecurity. The alliance has three specific objectives which are to:

- improve competitiveness and integration of staple foods markets through improved micro and macroeconomic policies as the drivers of staple food markets;
- improve and expand market facilities and services for key agricultural commodities; and
- increase commercial integration of small-scale farmers into national and regional markets.

It is envisaged that opening up of regional agricultural markets could support and increase productivity among small-scale farmers that are a priority of the institution. These efforts by COMESA could improve agricultural productivity and increase Zambia's export performance.

### 6.5.2 The Landlocked Status and Trade Facilitation

Zambia's landlocked status makes it potentially difficult to reach export markets and realise economies of scale, as well as access cheap imports. One of the main concerns posed by this status is Zambia's limited ability to export bulky low-value products, especially certain agricultural products. The extra cost of getting such products to the coast needs to be compensated by more efficient production compared to that of coastal countries. Increasingly more of Zambia's agricultural products are exported by air - a shift that required a focus on high value and low weight and volume products, but also an improved access to air transport. However, Zambia's access to air transport is still well below the access level expected given its GDP per capita level. Some companies suspended horticultural exports to Europe on account of high transportation costs (World Bank, 2008).

Given this status, facilitating trade is a major challenge for the country. Zambia's technical assistance needs in this area range from alleviating high transportation costs to improving customs administrations. Priority needs include: risk assessment methods; improvements in transparency; better use of information technology; improving efficiency in customs administration through upgrading the customs infrastructure; reducing border clearance

procedures; upgrading road and rail networks and reducing transport costs; integrating border agencies and developing a single processing and payment window; and training of officials.

However, landlockedness is also advantageous in some ways. As mentioned earlier, the country borders eight other countries and is the origin, destination or transit country for five of the eighteen major transit corridors in sub-Saharan Africa. Regional and international transit infrastructure costs are relatively low in Zambia. All five transit routes have unit road transport costs that are below the regional average (World Bank, 2009). Low transport costs on the main transit corridors have facilitated regional trade and shifted Zambia's exports to SADC and COMESA countries and away from the EU.

In addition, Zambia could use its position to exploit the existing agricultural market opportunities through exports and imports of various crops. For instance, Zambia could use its position to exploit the opportunities in its neighbouring countries by realigning its restrictive domestic policies in export and imports of maize, wheat and other cereals. As already observed, Zambia could actually exploit the high food prices in neighbouring countries such as DRC and Angola by allowing private (or organised marketing arrangements) to export cereals to these countries and import from low cost countries like South Africa.

***Trade Facilitation Efforts***

As part of the WTO Trade Facilitation negotiations, developing and least developed countries are encouraged to assess their trade facilitation needs and priorities. In this regard, in February 2007, Zambia was the first country to undertake a needs assessment. The needs assessment noted that Zambia was already consistent with 26 of the 71 proposals under consideration in the Trade Facilitation negotiations, partially consistent with 27, not consistent with 9, and that 9 were not yet applicable. The non-compliant areas include an automated payment system; expedited shipments; single window submission; and pre-shipment inspection. Some of these areas are currently being implemented.

In addition, Zambia is a beneficiary of a number of technical assistance activities in the area of trade facilitation. These include regional initiatives such as the creation of one-border post at Zambia's busiest borders such as Chirundu (Zimbabwean Border) and Nakonde (Tanzanian Border) and the replacement of risky pontoons by bridges under COMESA and SADC.

Zambia has benefited from activities organised by the WTO, the World Customs Organisation, the World Bank, and UNCTAD through the aid for trade initiatives and the Enhanced Integrated Framework (EIF). Zambia also benefits from the USAID funded trade facilitation and capacity building project managed by the Southern African Global Competitiveness Hub. The project provides support and technical assistance on a range of issues including customs modernisation, transport facilitation, and trade capacity building.

Furthermore DFID is funding a Regional Trade Facilitation Programme for Southern Africa, which includes streamlining transport, customs and border procedures, as well as developing a common regional transit system. A major pilot aid-for-trade programme is the North-South Corridor from the southern part of the DRC and northern Zambia to the port of Dar-Es-Salaam, Tanzania in the north-east and the southern ports in South Africa. The EU has an ongoing SADC programme, the Customs Modernisation and Trade Facilitation project, which supports harmonisation of customs legislation and procedures, including transit flows, and assists in preparing for the SADC Customs Union in 2010.[9]

Zambia also has a huge challenge related to compliance with standards required by its trading partners, due to limited technical, human and financial resources. As a result, the effective implementation of the WTO SPS and TBT agreements is still not completed. In response to this challenge, numerous agencies, countries and donors have volunteered to support SPS capacity building in Zambia. These include, among others, the World Bank and the USAID, FAO, United National Industrial Development Organisation (UNIDO), and the Netherlands. In addition to national projects, Zambia benefits from various larger regional programmes funded by the EC. At SADC level, these include the Standards, Quality, Assurance, Accreditation and Metrology Programme (SQAM), Foot and Mouth Disease (FMD), capacity building on Minimum Residual Level (MRLs), and the Promotion of Regional Integration in the Livestock Sector (PRINT). Zambia is also eligible under the Regional Standards Programme funded by DFID (MCTI/WTO, 2009).

***COMESA and SADC Trade Facilitation Programmes***

Overall, SADC and COMESA have been committed to reduce the cumbersome, time-consuming and costly procedures that the business community faces in the conduct of international trade. A number of measures have been adopted by both COMESA and SADC in their joint programmes to facilitate trade in general. On the transport side, the SADC Protocol on Transport, Communications and Meteorology and the COMESA Treaty contain a road transport facilitation programme, which Zambia has already implemented. The programmes as highlighted by COMESA[10] include:

*Single Border Posts:* Cross regional establishment of one-stop border posts such as the Chirundu border (Zambia-Zimbabwe) aimed at cutting the time spent at borders, are being established on borders of member countries.

*The Harmonised Commodity Description Coding System:* The regions have adopted the HS coding system to facilitate the integration of tariff and trade statistics nomenclatures.

*Common Valuation System:* COMESA countries have acceded to the WTO Customs Valuation Agreement. This has helped to establish a standardised system of valuation of goods based on the principles of equity, uniformity and simplicity of application, in accordance with internationally accepted standards and practices.

*COMESA Customs Declaration Document (COMESA-CD):* The adoption of the Customs Declaration Document is an integral part of the COMESA Trade and Transit

Transport Facilitation Programme. The introduction of the CD eliminated the multiplicity of customs bills of entry and related documentation that delayed the clearing of goods through customs. This streamlined the import and export procedures making the movement of goods in the region much easier and faster.

*COMESA Carrier's License:* The COMESA Carrier's License was also introduced in 1991. It allows commercial goods vehicles to operate in all member States with a single license valid throughout the region. This means that vehicles can pick up back-loads in other countries, making for more efficient use of the region's transport fleet, thereby reducing the cost of trade.

*Harmonised Axle Loading, Maximum Vehicle Dimensions and Road Transit Charges:* The programme requires COMESA member countries to harmonise their maximum allowable load for trucks in order to safeguard the region's infrastructure. Prior to this scheme, countries charged different maximum axle loads that created unnecessary problems for transporters as they could be found in breach of the requirement in specific countries. Further, the transit charges have also been harmonised for each vehicle type.

*Yellow Card Scheme:* COMESA member countries have a motor vehicle insurance scheme arrangement that allows for covering third-party liability and medical expenses. A Yellow Card issued in one Member State is valid in all other countries participating in the scheme.

*Advance Cargo Information System (ACIS):* This tool is sponsored by the UNCTAD. As an integrated transport logistics management tool, it is useful in tracking transport equipment and cargo on railways, through ports (Port Tracker), on roads (Road Tracker) and on lakes (Lake Tracker). This helps the business community and transport operators to track movements of transport equipment and cargo throughout the region and enables planners to generate information on the movement of freight on a regional basis.

*Harmonisation of Sanitary and Phytosanitary Measures and Technical Standards:* Both SADC and COMESA have programmes which require member States to harmonise their Sanitary and Phytosanitary Measures and Technical Standards. This seeks to create certainty of entry requirements to markets of member states.

### 6.5.3 Barriers to Agricultural Exports in External Markets

Despite several preferential agreements at the multilateral and regional levels, Zambia's non-copper exports face a rest of the world weighted average tariff rate of 1.3 percent. However, its agricultural goods face a high 10.1 percent average tariff rate. Most Favoured Nation (MFN) duty free exports constituted about 30.9 percent of Zambia's exports in 2005, as opposed to its competitors' averages of around 45 percent. Among the constraints that are faced by Zambian exports in industrialised countries' markets as identified by Mudenda (2005) include:

***Sanitary and Phytosanitary Measures (SPS)***

One fundamental requirement is that imported agricultural products are safe and do not pose risks to human, plant and animal health. To avoid introduction of disease and pests through trade, countries impose regulations to protect human and animal health (sanitary) and plant health (phytosanitary). Generally each country sets its own food safety, and animal and plant standards. By their very nature SPS may result in restrictions on trade. It is alleged that the EU goes beyond what is perceived as necessary for health protection and uses SPS measure to shield domestic producers from economic competition.

For instance, floricultural exporters are faced with huge compliance costs to meet the standards, including costs related to the European Retailers Protocol for Good Agricultural Practice (EUREP-GAP) certification. These products are subject to stringent inspections at the port of entry. This tends to restrict the volumes of exports and is perceived as a latent non-trade barrier designed to protect the EU producers. Even the cut flowers that previously entered the EU markets without being inspected are now subjected to phytosanitary inspections. The need for SPS inspections poses extra costs and delay in getting the products to the intended markets, adversely affecting the quality. Moreover, the required standards are usually evolving over time and the changes are usually not communicated to producers in time, who end up shipping merchandise that is returned at the port of entry.

Some specific instances of EU SPS measures affecting Zambian exports are given below.

*Minimum Residual Level (MRL)*: There is a very high standard set on MRL regarding most crops. This requires less/non-utilisation of certain chemical/pesticides, especially those known to contribute to the depletion of the ozone layer. The EU Directive Number 2000/42/EC came into force in 2001. It includes 33 active ingredients of pesticides, most of which are used in Zambia, and hence farmers cannot avoid using them. But this disqualifies the products from entering the EU markets.

*Market Standards:* These are set by the EU regarding the specifications of each product, for example, how it should be grown, size, shape, smell and packaging, especially for perishable products. The standards are set by the importing countries based on their climatic conditions thus making it difficult for some products to penetrate those markets.

*Pests Risk Assessment (PRA)*: Some pests (like leaf mining Lirimyza, tobacco whitefly, caterpillars) are not allowed in the EU. With zero tolerance on pests, most Zambian floricultural/horticultural exports containing such pests are not permitted for export. The mandatory nature of the PRA implies additional costs on exporters. In addition, Zambia does not have sufficient capacity for pest control at production stage.

***Other Barriers***

*Complex Tariff Structures and Import Arrangements:* The EU currently uses complex tariffs and import arrangements such as prices and regimes that are not only restrictive but also not transparent. They are not easy to compare across the EU members, hence acting as barriers to trade. It has been argued that the complexity of the tariff structure is possibly the main constraint to vertical diversification of agricultural products.

*Restrictive Rules of Origin:* The rules of origin that govern the use of the Cotonou Agreement and the EBA are over-onerous. They are less cumulative, making it difficult for potential exporters to source imports from a cheaper source that does not qualify under the scheme. These tend to be hurdles to increased exports.

*Child Labour:* As a result of consumer concerns about production methods and their impact on poverty and the environment, the main EU countries are setting up codes of practice that most African exporters are requested to follow. For instance, the use of children in farms or industry is perceived as child labour. In Zambia, most exports like cotton and vegetables are grown by small-scale farmers who rely on family labour which includes children. There is a need for the EU to realise that children doing light and safe work off school times supplement family incomes without compromising their future.

***Major Strategies of Cooperating Partners***

A number of donor driven initiatives are being implemented to improve agricultural productivity for both food security and export promotion. The main donors include the International Fund for Agricultural Development (IFAD) and the African Development Bank (AfDB). Others are the EU, USAID, the U.K's DFID, Swedish International Development Agency (SIDA), Norwegian Development Agency (NORAD) and the Netherlands. Most of these donor efforts are fragmented with each donor focussing on their areas of interest within agriculture. The preservation of natural resources and promotion of sustainable agriculture; economic and social development; capacity and institution building; and gender focus are some of the areas of interest. In addition, some emphasis is being placed on creating an enabling environment for the private sector involvement in the agriculture sector. This is achieved through research and development of appropriate technology (GART), training (ZEGA), and enhancing market access (Mount Makulu Research Station).

## 6.6 Case Study: Mumbwa District Stakeholder Interviews

A small field survey was undertaken in the rural district of Mumbwa to solicit the views of the farming community and stakeholders on the opportunities and challenges in the sector and impact of trade on small-scale farmers. Mumbwa is largely an agricultural district. The poverty analysis of the area reveals that 69 percent lived on less than a dollar a day in 2002. The proportion increased to 70.2 percent in 2006. Among the stakeholders interviewed were the Zambia Farmers Union Mumbwa District Office, World Vision (mainly involved in food security), the Mumbwa District Cooperative and Marketing Union and the Ministry of Agriculture officials. Camp Agriculture Committee (CACs) members from two farm blocks were also interviewed as representatives of the peasant farmers. Attempts to interview agribusiness organisations involved in sponsoring schemes and or purchasing, processing and exporting cotton such as Dunavant (subsidiary of Dunavant International) and Cargill (a multinational company with headquarters in Asia) proved futile as managers were not available for interviews.

The district is demarcated into eight agricultural blocks that are further divided into 33 camps. Each camp area has a CAC comprising local people that assist the Ministry, and some NGOs mobilise local people for agricultural activities. The CAC members include

| Table 6.18: Selected Crop Output, 2009 | | | | |
|---|---|---|---|---|
| **Crop** | **No. of Growers** | **Total Area (HA)** | **Yield/HA Production** | **Total** |
| Maize | 24 665.0 | 60 362.8 | 3.01 | 181 692.0 |
| Beans | 2 129.0 | 4 740.0 | 0.54 | 2 560.0 |
| Paprika | 132.0 | 72.0 | 0.23 | 16.6 |
| Cotton | 10 121.0 | 13 091.2 | 0.69 | 9 032.9 |
| Cassava | 146.0 | 58.0 | 1.3 | 75.0 |
| Sunflower | 1 567.0 | 1 806.6 | 0.3 | 505.9 |
| Soya beans | 3 244.0 | 10 804.2 | 0.30 | 3 241.3 |
| *Source: DACO, Mumbwa* | | | | |

village headmen and other selected people that may also be local cooperatives committee members. In this study, two CAC representatives were interviewed from two different blocks[11]. In 2009, the Ministry of Agriculture estimated the number of farmers to be about 32, 672. Most of these farmers grow maize, cotton, ground nuts, sunflower, sweet potatoes, Irish potatoes, sorghum and paprika among others. Table 6.18 shows the selected crops grown in this area.

Cotton and paprika are grown under contract arrangements with agribusinesses. In addition, they also keep livestock such as cattle, goats, pigs, chickens and sheep. The interviews revealed that the animal cattle population that stood 79,205 had drastically reduced in the area due to animal diseases. Cattle are mostly used for draught power, meat, hides, milk and sale when cash is needed.

| Table 6.19: Input and Marketing Plans of Main Products | | |
|---|---|---|
| **Product** | **Input Sources** | **Major Buyers** |
| **Maize** | Fertiliser Support Programme, Own purchases | Food Reserve Agency and local private traders |
| **Cotton** | Contracting agents: Dunavant, Alliance Ginners | Contracting agents: Dunavant, Alliance Ginners and Cargill |
| **Paprika** | Cooperative League of the United States of America (CLUSA)* | Cheeta (a private agribusiness firm) |
| **Livestock** | | Traders |
| *main promoter<br>*Source: Compiled from Field Work* | | |

While farmers support the growing of most crops on their own, cotton is grown under out-grower schemes. According to the farmers, the government provides subsidised fertilisers which are usually inadequate to meet the needs of the farmers. Table 6.19 shows the input sources and marketing plans for key products.

Most interviewees observed that Dunavant and Alliance ginners are the main cotton contracting firms, while Cargill has entered the market on side buying. Farmers sign pre-season contracts with sponsors through distributors. The farmers are given inputs as credit, have to repay with interest, and are obliged to sell the output to their sponsors.

The interviewees also observed that the contracts are designed by the contractors and the farmers have little or no bargaining power. The CACs complained that farmers do not know how sponsors determine the cost of producing and do not have a say in the determination of the farm-gate price which is only fixed at the end of the season. *"*We are always deceived that the selling price will be good at the harvest time, only to be given a raw deal at the end of it all" lamented one of the CAC members.

Moreover, the farmers are not sure of how the grading of cotton is arrived at. Farmers venture into production without information on the potential profitability of cotton. The contracts are said to be unclear and not transparent to the farmers, and any loss is transferred to them. The CACs observed that most farmers withdrew from cotton production in 2007 and have just recently rejoined the schemes. There were an estimated 17,279 cotton farmers in 2007 and only 10,121 in 2010 (MACO, DACO, 2010). The falling prices were compounded by the fact that the labour required to produce cotton is harder and more strenuous than that required to produce the preferred crop - maize.

Despite these shortcomings, CAC members observed that farmers in the cotton sector are getting better returns than those in cereals because they are given inputs which enable them to produce and earn a living, with a few farmers having succeeded to be self sustaining in terms of input sourcing. It was observed that good performing farmers are given loans or subsidised implements as incentives by Dunavant. Moreover, the market is readily available and an increase in the number of firms buying cotton in the area is heightening the competition, and therefore returns to the farmers. Interviews from both the CACs and ZNFU revealed that cotton farming has provided the communities with an alternative source of income. In good years, farmers are able to make good profits when compared to maize cropping. The unpredictability of government policies in terms of inputs and marketing of maize has fostered the adoption of cotton as a cash crop.

It should be noted that the domestic price of cotton is affected by the prevailing prices in international markets at the close of the season. Lucrative international prices result in relatively better domestic prices for cotton.

In the case of maize, CACs observed that the commercialisation of maize production is hindered by the poor input and marketing arrangements. Most stakeholders bemoaned the lack of access to credit for inputs and to lucrative markets to sell the produce. They observed that the government continue giving lip service to the production of maize and other cereals. On the input side, they observed that while the government had

promised to provide eight bags of fertiliser and some seeds to each farmer during the last planting season, they only provided up to four bags of fertiliser only to a few farmers, after the planting and fertiliser application period had almost ended, despite encouraging farmers to plant early. Most of the farmers were left out of this support. The private input supply tends to be exorbitantly expensive. For instance during the 2009-2010 farming season, the government subsidised fertiliser was sold at an average price of ZMK100,000 while private supplied fertiliser averaged ZMK200,000.

On the marketing side, the Food Reserve Agency announced the floor price of ZMK65, 000 per bag in May 2010, but had not bought a single bag from the area by July 2010. Moreover, the amounts required from the district by FRA can only be met by a few farmers leaving others without markets. Thus farmers are forced to sell their maize to private traders in some cases at less than half the government announced prices in order to get money to meet their immediate needs. For example, they explained that private traders were buying the maize at ZMK30,000 if they went to the rural places and at ZMK41,000 if the maize was taken to the Mumbwa township. The low price is blamed on the high transport costs due to the poor road network and bad terrain. One of the interviewees observed: "These private traders are farming on top of farmers. They offer such low prices to the already poor farmers that can't afford to take their produce to market centres, only to sell it more than double the price to their friends at FRA and other markets."

These concerns were also raised by the Zambia National Farmers Union. If the infrastructure and marketing problems are not resolved, farmers will continue selling at a loss, thereby supporting the poverty cycle and dependency on external assistance for inputs. Under the current arrangements, maize farmers do not make money which makes it difficult for them to plant maize in the following season. The farmers also bemoaned the poor access to roads and inadequate support from extension officers. Lack of credit markets for implements have subjected some of the small-scale farmers to farm using pre-dated/historic hand tools, such as hoes. All these factors have continued to impact negatively on the farmers' productivity.

## 6.7 Conclusions

Zambia's poverty reduction strategy programmes embedded in the Fifth National Development Plan and Vision 2030 view the agricultural sector as a potential engine for broad-based rural growth and attainment of the Millennium Development Goals. The agricultural sector employs the largest number of people in the country mainly as small-scale farmers. The sector is the second largest contributor to GDP. However, the sector exhibits almost three times less productivity compared to services and industrial sectors. The huge gap between farm and non-farm labour productivity implies that Zambia, which has 70 percent of its labour force employed in agriculture, uses its labour extremely inefficiently. A combination of poor crop and animal husbandry practices, low access to farm power and mechanisation, decreasing soil fertility especially in traditional farming areas, have led to low average yields and reduced incomes to especially smallholder farmers. Actual maize yield on the farm for smallholders has averaged less than 20 percent of potential yields. These levels of productivity among small-scale farmers are

too low and unsustainable mainly because of poor service delivery by government and crop management. Moreover over 80 percent of the arable land is not being utilised efficiently.

In addition, most of the rural producers do not have adequate access to the markets for both inputs and outputs. There is a dearth of complimentary services such as a reliable road network, telecommunication, irrigation and technical assistance such as extension services.

Despite being the least productive sector, the country has managed to diversify its exports through agriculture, generating over US$420mn in 2008. The main agricultural exports are sugar, processed foods, horticultural and floricultural products as well as beverages and tobacco. While beverages, floricultural and horticultural products are mainly grown by commercial farmers, small-scale farmers have also increasingly participated in export production through out-grower schemes in export subsectors such as cotton, sugar and paprika. The main destinations of Zambia's agricultural exports are those countries with which Zambia has preferential market access agreements, i.e. the SADC and COMESA regions, and the EU.

Considering the smallness of the Zambian markets, exports must be the focus for generating future growth in Zambia. However, increased exports of agricultural products are being constrained by both border-in and border-out factors. Border-in problems include supply side constraints and unclear policy implementation strategy, while border-out factors are technical barriers to exports such as SPS, MLR and Market Standards Requirements. There has been an increased donor funding in the sector. The main challenge however has been to coordinate the donor efforts to ensure that aid is effective.

Zambia's landlocked status makes it potentially harder to reach export markets and realise economies of scale, as well as access cheap imports. Given this status, facilitating trade is a major challenge for the country. Zambia's technical assistance needs in this area range from alleviating high transportation costs to improving customs administration. Priority needs include: risk assessment methods; improvements in transparency; better use of information technology; improving efficiency in customs administration through upgrading the customs infrastructure; reducing border clearance procedures; upgrading road and rail networks and reducing transport costs; integrating border agencies and developing a single processing and payment window; and training of officials.

Despite the above problems of Zambia owing to its landlocked nature, it is also advantageous for the country in many regards. The country borders eight other countries and is the origin, destination or transit country for five of the eighteen major transit corridors in sub-Saharan Africa. Regional and international transit infrastructure costs are relatively low in Zambia. All five transit routes have unit road transport costs that are below the regional average. Zambian efforts to transform the challenge of its landlocked status into an advantage can greatly benefit by concerted efforts through COMESA and SADC initiatives as well as assistance by donors.

## 6.8 Recommendations

The government has recognised the sector as not only a source of food security and foreign exchange but also as a potential vehicle for the alleviation of hunger and poverty. The sector presents a rare opportunity for the country to use trade policy measures to promote productivity, rural development and help the poorest and most marginalised small-scale farmers and workers to get incorporated into the global trading system under the auspices of the private sector driven out grower scheme.

For this to be realised, the current study and others such as World Bank (2007, 2008) and Govereh (2007) identify a number of measures to be put in place by both the government and non-state actors in the sector. These are as follows:

***Recommendations to Government***

Most of the problems that affect the competitiveness and productivity of the agricultural sector in Zambia arise mainly from market failures associated with supply side constraints that largely comprise public goods. Thus government must provide these public goods and services, which include among others:

a) Government has committed itself to achieving improved food security and poverty reduction through a private sector led strategy, while it focusses on complementary services such as infrastructure and support services. However, government pronouncements in this area have not been matched by actions. Availability of infrastructure is a prerequisite for effective private sector participation in rural areas. It, however, remains dilapidated while services are not provided. It is, therefore, recommended that the government increases its expenditure especially on feeder roads, extension services and key irrigation infrastructure for small-scale farmers.

b) Trade policy can stifle or foster productivity among small-scale farmers. Given the smallness of the Zambian market, it is recommended that the government continues to participate actively in global and regional trade negotiations and strategies such as the establishment of ACTESA to ensure that outcomes and programmes benefit the small-scale farmers. Furthermore, the government could review its food security policy through restricting trade. This depresses domestic prices and discourages investment and productivity of small-scale farmers that are potential beneficiaries from higher maize prices in the region.

c) The poor input and output markets are major constraints to the commercialisation of small-scale farmers, and hence agriculture-led poverty reduction. Here, cash crops and maize are affected differently. In case of cash crops such as cotton, paprika and tobacco, inputs credit and output markets are provided by the private sector through out-grower schemes. The crop is mainly for export. Farmers in this subsector feel that the pricing of both credit offered and output by the scheme sponsors is not done in a transparent manner. The maize and cereals sector generally is highly politicised with government intervention ranging from input to output price fixing. Farmers end up struggling to enter the market and are being exploited by private traders. Based on these observations, the following is recommended:

i. In order to ensure fairness in the cash crops sector, the government should play its role as a regulator and facilitate the development of a code of conduct or a Marketing Act that could encourage ethical and transparent trading between the farmers and the sponsors. Such an Act or code should be driven by all stakeholders in the sector and may be voluntary, promote innovation and creativity and be enforceable as well.
ii. Organised marketing arrangements are critical in linking small-scale farmers to the external markets. In the maize sector, government needs to encourage the emergence of strong organised private sector driven involvement or appropriate farmer organisations that could capture economies of scale even in rural areas. This arrangement should orient peasant farmers to be business minded and promote the exports of maize. This could make the subsector an attractive business in which the private sector through out-grower schemes could invest by providing credit, and marketing and extension services. Moreover, the government as a regulator should come up with an agricultural marketing policy to level the playing field for all the actors in the sector. This arrangement should eliminate the current informal traders that are exploiting farmers.
iii. Overall, the government could facilitate the commercialisation of viable small-scale farmers by developing their expertise, knowledge and infrastructure to support the private sector investment in the sector.

d) If the government provides inputs and announces prices, then all deliveries must be timely. It should also promptly enter the markets to encourage all traders to pay farmers promptly. Most smallholder farmers do not have storage facilities, and delayed government entry into the market exposes them to traders that exploit them.

e) Small scale farmers cannot access loans due to lack of formal security. To resolve this problem, the government could accelerate the establishment of non-traditional forms of security, such as warehouse receipts, accounts receivable and forward contracts. Warehouse receipt financing is a relatively low risk endeavour with crop-in-store being a more liquid and accessible security than land or fixed assets, but passage of enabling legislation is required to stimulate the warehouse receipting market.

f) Government as a custodian of land must ensure grant and enforcement of land rights and title deeds must be given where appropriate to ensure security.

g) A number of donors are involved in promoting agriculture in Zambia. The government should properly coordinate the activities of these donors to ensure effective and efficient use of funds.

h) The agriculture sector in Zambia is dependent on rainfall. This drastically affects the productivity of small but viable farmers. This could however be easily overcome by investment in irrigation facilities. The government could learn from successful countries such as Egypt and Israel in this regard.

i) With respect to the livestock sector, animal nutrition should be improved through investment in feeding stocks by linking the sector to the crops sector. Excess cereals could be sold to the sector to improve animal health and as a way of improving the value chain in the sector.

j) Government should implement a comprehensive and coordinated policy related to trade facilitation,including improvement of regional transport corridors.

***Recommendations to Out-grower Scheme Sponsors***

a) Out-Grower Schemes sponsors should provide a transparent production and marketing chain. The linkage between the prices and quality of the crops should be well understood by the farmers. Further, farmers should be educated and be able to appreciate the grading procedures.
b) Farmers feel that the contracts (which they sign without understanding) do not protect them from eventual risks. It is recommended that scheme sponsors in collaboration with the farmers design contracts that are balanced in terms of risks, incentives and fairly applied enforcement modalities.
c) The input and loan recovery arrangements must be well explained. Scheme sponsors must also ensure that inputs and other services are delivered timely and handled properly.

***Recommendations to Civil Society Organisations***

Over the years CSOs have proved to be effective in lobbying for fair policies on behalf of the poor and weak. Given their strengths, the following recommendations are made:

a) CSOs should continue strengthening the research and information dissemination to all stakeholders. Based on the informed output, the CSO must lobby for domestic policies that promote the welfare of small-scale farmers.
b) Zambian CSOs could network with CSOs in countries where scheme sponsors originate and encourage these scheme sponsors to offer fair prices to the poor peasant farmers in Zambia.
c) CSOs must work closely with the government and lobby for the creation of bodies that could act as fair arbiters between the farmers and agribusiness organisations.
d) They should lobby for the increased government spending on poverty reducing oriented agricultural projects such as improvement of feeder roads, research, export promoting activities and extension services. The government must be challenged to provide its committed 10 percent budget to the agriculture sector.
e) A number of studies have revealed that peasant farmers regard agriculture as a way of life and not as a business to improve their way of life. It is recommended that CSOs design programmes targeted at sensitising the farmers on the commercial side of agriculture. This could go a long way to improving productivity.

***Recommendations to Donors***

Developed countries have committed themselves to assist developing countries to attain the MDGs by 2015. In the case of Zambia, the attainment of the first objective which is the eradication of extreme poverty and hunger largely depends on the performance of the agricultural sector. In this regard, the donors should take a keen interest in the sector by:

a) Providing assistance to small-scale agriculture productivity by promoting investments such as sponsoring of producers associations and storage facilities where possible.
b) Lobbying their governments to reduce market access and entry barriers for the commodities from countries such as Zambia.
c) Purchasing food aid from the region to encourage regional productivity.
d) Encouraging the multinational corporations that originate from their own countries to take on social corporate responsibility by offering appropriate prices for the produce of small-scale farmers.
e) Assisting in the development and smooth functioning of various corridors to reduce the costs of imports and exports.

***Recommendations to Regional Organisations***

Regional Organisations (i.e. SADC and COMESA) can play a very important role in facilitating trade to achieve the objectives of regional food security and economic development.

a) They should bolster the already vibrant informal cross-border trade by making it easier to export and import.
b) These organisations must make trade in agricultural products more transparent and reduce technical barriers to regional trade.
c) COMESA and SADC should also coordinate their initiatives related to trade facilitation with a view to substantially reducing the costs of trading among and by their member countries.

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## Endnotes

1 Zambia is surrounded by eight neighbours which are Democratic Republic of Congo (DRC), Angola, Namibia, Tanzania, Zimbabwe, Botswana, Mozambique and Malawi.

2 Copper and cobalt are Zambia's traditional exports

3 Government does not often give prior notification of the bans as per WTO requirements

4 After having dismantled the marketing board parastatal in 1991, the government established a new food strategic reserve – the FRA - in 1995 to maintain security stocks. FRA purchases remained nominal until the early 2000s when they ranged between 50,000 and 75,000 tonnes per year. In 2006 (a presidential election year), the FRA purchased roughly 400,000 tonnes of maize, controlling the majority of traded maize and becoming overwhelmingly the largest trader in the market

5 Singyangwe & Clinch

6 The country's market extends to West Africa as one of the largest retailing shops in Africa – Shoprite has given ZAMBEEF Zambia the right to supply beef in its shops in that region.

7 This correlation basically showed that a higher rank in productivity was quite largely related to a higher rank in the availability of certain services, e.g. number of telephone lines etc.

8 The typical agriculture processing worker belongs to a household with 5.4 members.

9 Viewed at: http://www.delbwa.ec.europa.eu/en/eu_and_sadc/examples.htm.

10 See www.comesa.int

11 The two camps are Mupona Camp in Mumbwa Central and Chimwena Camp in Nangoma Farm blocks. The terrain is mostly rough with the "rehabilitated" roads being almost impassable in most places.

## Fostering Equity and Accountability in the Trading System (FEATS)
### *Another African Initiative of CUTS*

CUTS Geneva Resource Centre (CUTS GRC) in collaboration with CUTS Africa Resource Centres: Nairobi and Lusaka is implementing the FEATS project. This three-year project envisages multi-stakeholder capacity building on trade and agriculture-related issues in Kenya, Malawi, Tanzania, Uganda, and Zambia through organically linked research, advocacy and networking activities.

CUTS has been actively working on trade and related issues in a number of sub-Saharan African countries since 2000. Working with local partners on issues such as competition, investment and regulation, and trade, development and poverty linkages, it has established itself as a research based advocacy organisation assisting in achievement of the development aims of countries in the continent through South-South partnerships and raising their voices across the globe wherever international trade and development policies are being forged.

To sustain and expand these efforts with national and regional linkages, CUTS established its centres in Lusaka, Zambia in 2000; and in Nairobi, Kenya in 2003. Both the centres are active civil society participants in their respective regions as well as in pan-African events.

The international trade and development policy making community is active in Geneva, and the African voice needs to be heard better there. Accordingly, with funding support from the William and Flora Hewlett Foundation of the US, CUTS GRC was established in July 2008.

FEATS project implementation is in two phases. Focus of first phase (April 2008-September 2009) was on political economy of trade with particular focus on trade policy making processes and role of stakeholders in project countries. The second phase (October 2009-March 2011) while building on the foundations laid by the first phase focuses on agriculture development and trade issue in project countries with particular focus on livelihoods, agricultural productivity, regional trade and food security.

*http://www.cuts-grc.org/FEATS-Projects.htm*

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