## Globalization and local development. Does a peasant farmer in Marera in Mozambique benefit from trade liberalization?

by

#### PIOTR ANTONI GEBALA

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## **DEDICATION**

I dedicate this dissertation to my family, my wife Eve and my lovely children: Daniel, Paloma and baby Mirley.

Thank you for your support and your understanding during the time of writing this dissertation.

#### LIST OF ACRONYMS

AGOA - African Growth and Opportunity Act

APRLP - Andhra Pradesh Rural Development Project

BWIs - Bretton Woods Institutions

CTA - Confederação das Associações Económicas de Moçambique

DFID - UK's Department for International Development

EBA - Everything But Arms

FAO - Food and Agriculture Organization of the United Nations

FRELIMO - Frente de Libertação de Moçambique GATT - General Agreement on Trade and Tariffs

GDP - Gross Domestic Product

GSP - Generalised System of Preferences

GM - Genetically Modified

IBRD - International Bank for Reconstruction and Development

IFAD - International Fund for Agricultural DevelopmentIFPRI - International Food Policy Research Institute

IMF - International Monetary FundINE - Instituto Nacional de Estatística

IOF - Relatório Final do Inquérito ao Orçamento Familiar

LDCs - Least Developed Countries

MPD - Ministry of Planning and Development

MZM - Mozambican Metical (currency)
NGO - Non Governmental Organization

OECD - Organization for Economic Co-operation and Development

OI - The Oakland Institute

OPM - Oxford Policy Management

PAEI - Política Agrária e Respectivas Estratégias de Implementação

PEDSA - Plano Estratégico de Desenvolvimento Agrário

RENAMO - Resistência Nacional Moçambicana

SADC - Southern African Development Community

SAP - Structural Adjustment Programme

TIFA - Trade and Investment Framework Agreement

TNCs - Trans National Corporations

UNDP - United Nations Development Programme

UNESCO - United Nations Educational, Scientific and Cultural Organization

UNFCCC - United Nations Framework Convention on Climate Change
 UNRISD - United Nations Research Institute for Social Development

UNCDF - United Nations Capital Development Fund

UNCTAD - United Nations Conference on Trade and Development

USAID - US Aid Assistance Organization

USA - United States of America

WB - World Bank

WTO - World Trade Organizations

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**ABSTRACT** 

Mozambique is one of the poorest countries in the world, with most of its

population living in rural areas.

The study analysed the impact of trade liberalization on peasant farmers

involved in fruit production in Marera in Central Mozambique and measured

their benefits and life improvements as compared with the decade of the 1990s.

It found that 73.3% of peasant farmers assess their life as little better than 10-

15 years ago and only 5.6% have experienced substantial improvements. It

was discovered that better knowledge and access to productive resources play

a role in improving benefits from fruit production and trade.

Therefore, the study concluded that although trade liberalization can bring

benefits, when appropriate conditions are met, peasant farmers in Marera are

not different from their counterparts around the world and benefit little from

trade liberalization.

Key words: Mozambique, Trade liberalization, Peasant farmers, Fruit production,

Agriculture, Globalization, Benefits from trade, Marera, Financial assets, Development.

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#### **ACKNOWLEDGEMENT**

This study was inspired by my previous involvement as a missionary in work with rural communities in the Centre of Mozambique and especially in Marera. I observed rural households experiencing life's hardships, working hard on land and apparently not benefiting much from agricultural activities. I was moved by the situation and I decided to study the benefits of peasant farmers in Marera from fruit production.

My interest in the area was further enriched by my work at the Catholic University of Mozambique which encouraged me to pursue this line of research and help me accessing academic resources.

In the course of undertaking this study I have received intellectual, material and moral support from various individuals, institutions and organizations to whom/which I wish to register my deep gratitude.

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#### **CHAPTER 1: INTRODUCTION**

#### 1.1 INTRODUCTION

The research analysed the impact of trade liberalization on the livelihoods and the mainly financial assets of peasant farmers and their households in Marera in Central Mozambique (20 km from Chimoio). In particular, it attempted to answer the following question: if a peasant farmer takes advantage of trade liberalization and market openness and if this, in turn, impacts positively on his/her financial assets, creating more opportunities to engage in commercial activities and thus improving quality of livelihoods.

In this dissertation trade liberalization was discussed in the context of the process of globalization, and the peasant farmer's financial assets in the context of their livelihoods.

There is a lot written about globalization. The Bretton Woods Institutions, the World Bank, the International Monetary Fund and the World Trade Organization, (BWIs) play a key role in promoting globalization throughout the world. In fact many consider globalization as a solution to eradicate poverty.

Globalization affects our entire life, not only economic but also, social and political. We may, for instance, think about the instability of the financial markets and the last economic crisis which caused the increase of prices of basic commodities and negatively affected food security of millions of people especially in the developing countries. We may think how free flow of information and especially the impact of media affect traditional value systems, especially that of a younger generation. Or, even on the political level, we may analyse how the decisions, which the government takes in Maputo, often under pressure from international organizations, e.g. to liberalize or decentralize the market, impact on the lives of the people. But,

undoubtedly, trade liberalization is one of the most important aspects of globalization (Arribas, Pérez, Tortosa-Ausina 2009:129;142, IMF 2011:2, Deardorff and Stern 2006:19-21). As such it is the subject of this research project.

One of the United Nations Development Programme documents reads: "Globalization offers opportunities for growth and development in all parts of the world, however the hopes and promises attached to rapid liberalization of trade and finance have not so far been fulfilled in many developing countries, and particularly so in the Least Developed Countries (LDCs). In fact, the latter are increasingly becoming marginalized, especially in agriculture" (UNDP2007:2).

The above cited document sees development through the prism of increased productivity and trade liberalization. It states that among the least developed countries, especially in the sector of agriculture, there isn't much improvement. The productivity tends to remain at the same level or it even declines. In fact, the decrease of agricultural productivity might be precisely due to trade liberalization, which allows cheap subsidized agricultural products to enter developing markets, or it may also be due to an inefficient pricing strategy (Mosca 2011:145-148, Todaro 2000:393).

In this way trade liberalization may affect a peasant farmer's livelihood and especially his/her financial assets in either a positive or a negative way. According to the UK's Department for International Development (DFID) framework, livelihoods consist of five assets: human, social, natural, financial and physical (Eldis 2012). The positive interrelationship and development of these assets determines whether the quality of life of the determined community is improving or deteriorating. In order to achieve visible results and improve life quality it is necessary to invest in all five assets. A farmer needs to be educated and healthy. He needs access to a

reliable transport system and trading infrastructure. He needs government support to adapt to the rapidly changing natural habitat and weather patterns. However, financial assets are crucial when it comes to general progress and well-being (De Satge, Holloway, Mullins, Nchabeleng, Ward 2002:97, Scoones 2005:7-8).

The relevance of this study is based on the following premises. First, it is believed that: "Agriculture accounts for between 30 to 60% of the gross domestic product (GDP) among the LDCs, employs more people than any other sector (as much as 70-80%, in most cases), represents a major source of foreign exchange, supplies the bulk of basic food and provides subsistence and other income to more than half of the LDCs' population" (UNDP 2007:2). A peasant farmer needs access to banking services, loans and markets in order to develop and increase agricultural production, trade and overall farming efficiency.

Second, according to Ellis (1998:8) the composition of rural household incomes is poorly researched and national income and expenditure surveys have been infrequent in most sub-Saharan African countries.

Third, there are not many studies in Mozambique of this nature and of this scope focusing just on one rural community. The outcome should contribute to better understanding if and how trade liberalization impacts on peasant farmers' financial assets in Marera and what constitutes their main difficulties in either improving or getting access to markets. The findings of the study should also be relevant to other rural communities with characteristics similar to Marera across Mozambique.

#### 1.2 PROBLEM STATEMENT

It is remarkable that Mozambique is considered by the international agencies as a story of economic success (Castel-Branco e Ossemane 2009:141) and yet, according to the National Institute of Statistics, poverty is a serious problem. 11.8 million people live below the poverty line, which is around 54.7% and for the last 10 years there was only some improvement (Mozambique 2010a:27).

Economic neo-liberalism promises rapid economic growth and it is considered by the Bretton Woods Institutions to be the correct and efficient strategy promoting development and leading millions of people throughout the world out of poverty. Dollar and Kraay (2001:1) in one of the World Bank Policy Research Papers claim that due to neo-liberal policies the incomes of the poor rise proportionately with average incomes and growth-enhancing policies benefit the poor. Some of the assumptions and promises of economic neo-liberalism and trade liberalization in particular underline just competition, more employment opportunities, higher productivity, raising standards of living and better conditions of labour (IMF 2011:2, WB 2012:1, WTO 2012a:1).

In Mozambique most of the people, around 80%, live on farms with the average farm size between 1-2 hectares (Mozambique 2010a:46). Consequently, in order to achieve a tangible and inclusive economic growth, rural communities must be made a part of the development process and investment must also be directed there.

However, so far, one can only see the striking divergence between macroeconomic indicators pointing to economic growth due, especially to the dynamically developing mining sector and a very precarious situation of peasant farmers and their households. It would, therefore, seem that while neo- liberalism works for some, the socio-economic situation of rural communities does not seem to improve significantly. In fact according to the Third National Poverty Assessment (Mozambique 2010a:25-26) in most recent years the rural poverty in Mozambique has slightly increased from 55.3% in 2002 and 2003 to 56.9% in 2008 and 2009.

The Government institutions and the local and foreign non-governmental organizations (NGOs) try to stimulate agricultural production and trade but do they do enough?

In 1998 the Mozambican Government published "Trade Strategy and Policy" (Mozambique 1998), which regulates national trade activity. The objective of the Government's trade programme is twofold: elimination of poverty and promotion of economic and social development. The Government especially intends to stimulate domestic and external trade. In paragraph 5 of the above mentioned document, there are some crucial trade policy priorities which are in line with World Trade Organization (WTO) recommendations and are meant to improve both trade outreach and fulfil the objectives of the Government. We read:

- a) Expansion of the rural trade network
- b) Improving marketing of agricultural products
- c) Support to exporters in the area of marketing, capacity development and quality (Mozambique 1998:5-6).

Mozambique has possibilities to export its agricultural products quota and duty free. For instance, under Articles 1 and 3 of the Trade and Investment Framework Agreement (USA 2005), they can export to the United States. There is also a possibility to further extend exports to the European Union (EU), the Southern African Development Community (SADC) and Asian markets. It seems that as far as general policies are concerned there isn't

much to be added. One would therefore think that due to the relatively conducive policy environment, the Mozambican agriculture should be developing fast, offering more and more marketing and export possibilities to all peasants and by extension aiding their financial assets and livelihood.

However, this is not the case in Marera. The expansion of the trade network is very slow. Additionally, since about 2008 local fruits are being banned from sale in Maputo (which is the biggest national market) due to a fruit fly pest and this has negatively affected the financial assets of peasant farmers (Tostão, Santos, Popat, José, Massinga, 2014:15, 24). Consequently, fruits are mainly being commercialized on the local, less profitable market but some peasant farmers do not even have the chance to do as little as that due to difficult access routes and transport cost to Chimoio - the nearest town.

Summarizing, one may conclude that in Marera the neo-liberal economic strategy of development based on trade expansion and liberalization promoted by the Bretton Woods Institutions does not seem to fulfil its promises, which I have mentioned in the beginning of this section. Peasant farmers face problems marketing their products and they remain poor and marginalized.

#### 1.3 RESEARCH AIM

This study evaluates the impact of liberalized trade on the livelihoods, particularly the financial assets, of peasant farmers in Marera, Central Mozambique.

#### 1.4 RESEARCH OBJECTIVES

The objectives of the study are as follows;

- To critically analyse the failings and the successes of liberalization of trade in connection with peasant farmers and their households in Marera in Mozambique.
- To discuss the role of global and local institutions in either promoting or hindering the development of peasant farmers' agriculture and agricultural trade in general.
- To explore how trade liberalization impacts on the financial assets of the peasant farmers and their households in Marera.
- To identify possible challenges and constraints of peasant farmers especially in terms of engaging in free trade.
- To explore ways in which to improve financial assets of peasant farmers.

#### 1.5 SCOPE OF THE STUDY

This study was of a limited scope. It was narrowed to: one rural area, Marera, situated in Manica Province in Central Mozambique.

Marera was chosen for three reasons:

Firstly, it is a rural area which is situated only 20 km from Chimoio and thus it is exposed to the impacts of globalization, increased volumes of trade and new markets.

Secondly, people who live in Marera regularly visit Chimoio. They are involved in trade. Many family members live in town and many youth study there too. Marera is also traditionally a vibrant fruit producing centre. Peasant farmers grow bananas, oranges, tangerines and pineapples as their main cash-crop.

Thirdly, this study focused only on one social group of people, peasant farmers and their households. The reason for this is that in Mozambique, most of agriculture is based on peasant farming and it is a predominant social group accounting for up to 80% of the population as mentioned earlier in the problem statement.

Additionally Marera's geographical vicinity to the urban centre helped the researcher to deal more effectively with time constraints and financial limitations in the course of the field work.

#### 1.6 LIMITATIONS OF THE STUDY

This study is of a limited scope, therefore the findings cannot be extrapolated widely. Trade liberalization in Mozambique affects communities in different ways. While some rural communities across Mozambique are developing due to either foreign investment or programs which incentive production and marketing of strategic crops, such as cashew nuts, cotton or tobacco, other communities are experiencing stagnation (Mozambique 1996:12). In this way, the study only analysed the effects of trade liberalization on Marera fruit farmers especially as regards potential new marketing opportunities and not so much the effects of competition between local and cheaper imported fruits, as it is not the local reality as yet.

The study took place in the rural area with little access to the statistical data. There was no list of inhabitants available and it was difficult to determine a probabilistic sample of the Marera universe. The researcher used instead, one of the convenience sampling methods - snowball sampling. It helped to focus on the target peasant farmers, those who are particularly involved in trade. The research used a mixed method approach to analyse the data, and the research had the character of a case study rather than a study from which to draw general conclusions for Mozambican agriculture.

Some additional limitations arose from the fact that the inhabitants of Marera are spread around a relatively large area. They do not live in a village in the strict sense. Each household is separated from the other by portions of cultivated land, hills and fruit orchards. Thus, during the course of the field work the researcher had to deal with distances between the households. There was also a question of the very limited literacy level among peasant farmers which inhibited flawless communication.

#### 1.7 CONCEPTUALIZATION FRAMEWORK

The conceptualization framework defines some key terms used in this dissertation. The definitions, although not comprehensive, set the context in which the terms are used.

a) Globalization - In this study globalization is a key organizing principle of trade liberalization. It is presented as a mechanism, which creates favourable conditions for liberalized trade. According to Olaniyi, Adesina and Adebayo (2010:4), globalization refers to invisible political and economic forces that affect and impact on our everyday lives. Similarly, for Farrington and Mitchell (2006:2) "globalization is characterized by an accelerated mobility of capital, labour, goods and services". In this way its

most visible manifestation is ever growing integration of national economies and states into one global market (Stiglitz 2006:4, Todaro 2000:713).

- b) Trade liberalization a principal economic element in the process of globalization and a necessary element to promote economic growth. According to Todaro (2000:767) trade liberalization implies removal of obstacles to free trade, such as quotas, tariffs, and exchange controls.
- c) Livelihoods Ellis (1998:4) gives a very broad description of livelihoods as income both in cash and kind, social institutions which support or sustain a given standard of living and access to and benefits from using social and private services. USAID presents a concise definition of livelihoods: "The means by which households obtain and maintain access to essential resources to ensure their immediate and long-term survival." According to this definition peoples' livelihoods depend on three element: geographical location, ownership of productive assets and interhouse relationships (USAID 2012). Therefore livelihoods define a strategy of how individuals, families or communities understand life and make their living using various means of support or subsistence.
- d) Peasant farmers a group of people who for their subsistence depend on land. They are generally smallholder farmers whose farms are between 1-2 hectares (Mozambique2010a:46). They produce food both for their own consumption and for commercialization. They may also divert to other activities as a supplementary source of income e.g. off-farm activities (commerce, labour for hire, etc).
- e) Livelihood assets according to Ashley and Carney (1999:6-9) it is a generic term. Livelihood assets comprise both properties and resources which a peasant farmer has for his or her disposal. These assets may be

used and transformed by a peasant farmer according to his or her abilities and knowledge. However, the use of the assets is determined by the enabling environment and vulnerability context.

- f) Financial assets According to Scoones (2005:8) financial assets is a broad term referring to savings, credit, remittances and income. According to Ellis (1998:5) income can be understood as either farm income (livestock or crop) or non-farm income (wage labour, property rents, remittances).
- g) Enabling environment According to Farrington and Mitchell (2006:3) an enabling environment "comprises institutions and policies which facilitate or promote economic growth". This may also include available economic infrastructure, secure property rights, dissemination of new technologies or promoting education and gender equality. The enabling environment is an umbrella term that generally includes: access to factor inputs, regulatory and institutional issues, access to markets and the role of state support.
- h) Vulnerability context refers to different economic trends and shocks caused by natural disasters or seasonal fluctuation of production (Eldis). Vulnerability of context may impact negatively on local agricultural production.
- i) Commercialization Leavy and Poulton (2007:6) define commercialization as production for market. However, in order to be successful it is necessary to use a profit maximization strategy, e.g. necessary inputs, and likewise it is necessary to work in a supportive environment with reliable markets, e.g. it is difficult to commercialize in conflict areas.

#### 1.8 ETHICS

The study did not carry any risks to the participants; nevertheless, their confidentiality and anonymity were guaranteed and preserved throughout and after the completion of the research.

The study was of academic nature and did not have any lucrative character. The participants were invited to take part in it and they consented voluntarily. The sole benefit was a fuller understanding of the impact of trade liberalization on the livelihoods of the population of Marera. The findings were not manipulated to the detriment of neither participants nor the research as a whole.

#### 1.9 CHAPTER OUTLINE

Chapter 1: Introduction

Chapter one described the general context of the study, which included information about Mozambican agriculture in the context of globalizing forces, especially free trade and trade liberalization. The problem statement explained the reason for the study, namely the apparent failure of trade liberalization to deliver on its promises. The aim and the objectives set the general guidelines for the study. The chapter also presented the limitations which arose from the problems encountered during the course of research. Lastly, the researcher explained some of the ethical issues related especially to the field work and he also presented a conceptualization context which explained some of the key terms used in the study.

Chapter 2: Trade liberalization – a broader perspective

Chapter two presented trade liberalization and the agriculture nexus. Firstly, the opinions of both advocates and opponents of trade liberalization set the general context. The literature review presented trade liberalization

and the agriculture nexus, focusing on agriculture and trade on the global scale. At the end of this chapter a section included case studies which showed that peasant farmers find it difficult to benefit from trade liberalization.

#### Chapter 3: Trade liberalization and agriculture in Mozambique

Here the literature review presented trade liberalization in the Mozambican context, including issues related to the historical background and legal framework. Case studies showed difficulties of the peasant farmers in selling or commercializing their products.

### Chapter 4: Presentation of the methodology of the fieldwork

This chapter presented the methodology of the research. It focused on: data collection, sampling and a discussion on validity (internal and external). It explained the analytical procedures, namely, the quantitative and qualitative approach, also called a mixed methods approach, together with its justification.

#### Chapter 5: Field work and analysis of the data

Chapter five was devoted to the field work. It explained the field work procedures (the use of a survey and the interviews). The chapter presented and analysed data using descriptive and later inferential statistics using tables and graphs. That section was followed by a literary analysis of qualitative data which helped to distinguish most significant themes and in this way offered a deeper meaning.

#### Chapter 6: Conclusion

In this part the conclusions were drawn. The contribution of the research to the field of Development Studies was outlined and a proposal was made for further research in related areas, especially concerning the issues the researcher did not have time to deal with.

# CHAPTER 2: LITERATURE REVIEW TRADE LIBERALIZATION - A BROADER PERSPECTIVE

#### 2.1 INTRODUCTION

Trade liberalization is one of the most important elements globalizing our lives. It affects in a variety of ways different levels of our human existence: economic, cultural and political. Thus, if we want to fully understand liberalization and all its aspects, we have to see it in the larger context of globalization from which it, in fact, derives and by which it is fuelled across the world (Guttal 2007:523-525).

The key items discussed in this chapter are of upmost importance and they will help to understand the broader objective of the entire thesis, that is, the impact of trade liberalization on the financial assets and livelihood of the peasant farmers in Marera.

The literature review in this chapter will first present the trade – globalization nexus. This will assist provide conceptual clarity and understanding of the context in which the concepts are used. Then, the chapter will reflect on trade liberalization through the eyes of its advocates and critics, within certain school of thoughts. This discussion will show how trade liberalization features in international global systems and, being a product of globalization, how it affects peasant farmers. This part of the chapter will be substantiated by different case studies from around the world.

#### 2.2 GLOBALIZATION, LIBERALISM AND TRADE LIBERALIZATION

We are going to begin our discussion by looking at the above mentioned terms, and especially at the implicit interlinking which exists among them.

Globalization is an old process which neither started today nor in the last century. Globalization is deeply rooted in the adventurous spirit of human beings who always wanted to discover and conquer the world. Guttal (2007:524) states that some see the roots of globalization in the fifteenth century geographical discoveries and the colonial expansion thereafter. At that time at its basis was expansion and conquest. Today, in Guttal's view (2007:524), globalization, although still being driven by the capitalist desire for expansion, promotes the liberal model of development around the world. The result of globalization, therefore, is no longer the conquest of new territories, as it used to be some time ago, but economic growth of various interlinked economies.

According to Guttal, its proponents, especially BWIs, claim that it will create convergences of income, access to knowledge and technology, consumption power, living standards, and political ideals. By integrating local and national economies into a global economy, unfettered by protectionism, economic growth will increase, wealth will be created, and more people in the world will be able to enjoy the advantages and fruits of modernization, technological progress, and civilization (2007:524, 526).

In Guttal's view, therefore, there are three implicit principles underlying globalization: expansionism, liberalism, and desire for economic growth.

In much a similar way as globalization, liberalism is not an entirely new concept. Durozoi and Roussel (2000:236) explain that liberalism springs

from the early ideas and philosophies of John Locke, Charles Montesquieu and Jean-Jacques Rousseau. They glorified the goodness of natural order, postulated tolerance and the importance of individual liberties. In their view the state's principle role was to guarantee security and protection to citizens. However, the foundations of modern economic liberalism lay with Adam Smith, an eighteen century thinker and economist who believed that the economic laws are embedded in our human nature (Smith and Bullock 1909:19). He created a famous theory of "the invisible hand", a principle guiding the economic destiny of humankind. According to it, the economic processes unveil in a natural, unobstructed way and lead to the world economic equilibrium. Smith advocated that the governments must not interfere with the economy which should be solely controlled and guided by the market forces. In his view, well-being will be created by private enterprises specializing in production of goods which trade in a free, unhindered way (Martinez 2010:194-199). The theory of "the invisible hand" forms the basis of the Capitalist Liberal Economic world order.

The liberal model of development is further explicated in Rostow's well acclaimed book "The stages of economic growth: A non-comunist manifesto" (Rostow 1991). The author presents the history of humankind through the perspective of economic development, starting from the traditional society right to the age of liberal mass consumption (which, in his view, is the final product of capitalism). Rostow's model of economic development is rooted in liberal ideas, one of which is the development of free trade. In his view free trade is essential for a modern national economy as it helps to increase surplus capital which then fuels domestic and foreign investment, allowing the whole economy, as he puts it, to "take off" (Rostow 1991:36-58). The "take off" stage can be characterized by the following processes: intensification of industrialization and mechanization of agriculture followed by its commercialization. In this way agriculture contributes a substantial part of its surplus to the overall economy (Rostow

1991:23-24). Thus development depends on the technological upgrade of all the sectors of the economy. That means that the transition from traditional to modern agriculture is essential for the economic "take off" and it takes place when agricultural output is visibly contributing to other sectors of the economy, as he puts it "supplying expanded foods, expanded markets and an expanded supply of loanable funds to the modern sector" (Rostow 1991:24). In other words, agriculture must not only be sustainable but its output must be commercialized and traded so that it generates profit.

So gradually liberalism, founded on individual liberty as its guiding value, was becoming a political and economic doctrine of the twentieth century (Head 2008:17-21). It postulated that the rights and freedoms of individuals should be safeguarded and the powers of governments, as they may hinder development, should be limited. In this way liberalism contributed to creating our modern states as they are today, guided by the rule of law, freedom of speech, market economy and transparent democratic systems of governance (idem. 19).

In the 1980s the economic discourse was marked by neo-classical and neo-liberal views based on the earlier ideas of Smith and Rostow (Head 2008: 17-23). It called for greater liberalization and further limiting of the role of states in matters of the economy. This gave rise in 1989 to the "Washington Consensus" - the agenda of the main economic and financial institutions to reform the global economy along the lines of liberalism. The liberal manifesto was organized in ten concise points by John Williamson (Williamson 2004:3-4):

- 1. Fiscal discipline
- 2. Reordering public expenditure
- 3. Tax reform
- 4. Liberalizing interest rates

- 5. A competitive exchange rate
- 6. Trade liberalization
- 7. Liberalization of inward foreign direct investment
- 8. Privatization
- 9. Deregulation
- 10. Property rights

The above liberal Manifesto became the general economic policy instrument which, in principle, was to support developing economies (Symoniak 2010: 2-3). For instance, number two called for prioritizing progrowth and pro-poor government spending through expenditure cuts and redirecting funds like "non-merit subsidies to basic health, education and infrastructure" (Williamson 2004:3). The mandate to reduce the role of the state was at the core of the classical liberal thinking (Head 2008:19). In number six, trade liberalism called for a reduction of tariffs, the removal of protectionist measures and for developing countries to have an "outward orientation" (Symoniak 2010:10-12). Trade liberalism was considered to be the essential mechanism for economic growth and poverty reduction. Nevertheless "the developing countries wishing to join the WTO could do so at their own pace, respecting the wishes of its own people" (Symoniak 2010:12).

Guttal (2007: 524) states that trade liberalization is the practical expression of globalization as it allows free and unhindered movement of goods around the world which benefits producers and consumers alike. Furthermore, it derives its logical framework from the spirit of liberalism and the "Washington Consensus". Its practical manifestations are free markets, low tariffs, no impediments in the form of bureaucracy or corruption and ever increasing volumes of trade between countries (Head 2008:22). It has two principal aims: provide consumers with a variety of goods to increase their choices and stimulate internal markets in order to

become more productive and competitive (Head 2008: 22-23, IMF 2008:3, Deardorff and Stern 2006:1). Thus, trade liberalization is the natural fruit of the liberal market economy. According to its demagogues, for instance Heckscher and Ohlin and their factor endowment trade theory, trade benefits both rich and developing countries (Todaro 2000:469-474). In their view the technologically advanced nations use their comparative advantage and production factors, which is capital and know-how, and specialize in producing high quality goods whereas the developing nations are labour abundant, therefore they specialize in labour intensive products (idem.473).

#### 2.3 ADVOCATES OF TRADE LIBERALIZATION

The main organization which regulates and promotes trade around the world is the World Trade Organization (WTO) which was established in 1995. It replaced the General Agreement on Trade and Tariffs (GATT), founded in 1947 after the World War II. In the WTO series "Agreement establishing WTO" (WTO 1998:1) we read that the principal objectives of the WTO are: "raising standards of living, ensuring full employment, expanding production and trade, and allowing optimal use of the world's resources. The WTO should also secure greater integration of the developing nations in international trade" (idem.).

However, not only WTO but all Bretton Woods Institutions (BWIs) such as IMF and WB promote trade liberalization among countries because "they all rest on the assumption that increased trade brings economic gain (Head 2008:168). The International Monetary Fund (IMF), for instance, in article one of its charter states that one of its aims is: "to facilitate the expansion and balanced growth of international trade, and to contribute thereby to the promotion and maintenance of high levels of employment and real income, and to the development of the productive resources of all members as

primary objectives of economic policy" (IMF 2011:2). Similarly, promotion of trade is one of the objectives, though not directly, of the World Bank (WB). In its charter we read that its aim is.

To promote the long-range balanced growth of international trade and the maintenance of equilibrium in balances of payments by encouraging international investment for the development of the productive resources of members, thereby assisting in raising productivity, the standard of living and conditions of labour in their territories (WB 2012:1).

Thus the BWIs - the IMF, the WB and WTO - are the principal actors in today's development arena which promote trade liberalization, a strategy which, in their view, leads to economic growth and a subsequent eradication of poverty. According to the IMF (2008) trade liberalism has helped to deliver extraordinary progress for people living in developing nations and Dollar and Kraay in the WB Policy Research Paper (2001:1) claim that the incomes of the poor rise proportionately with average incomes and growth enhancing policies benefit the poor.

There are various examples of cases presented by the proponents of this line of thinking, which demonstrate the success of the Washington Consensus policies in terms of promoting economic growth, and improving living standards.

Lin and Monga (2010:3;12-13) in the WB Policy Research Paper argue that the remarkable economic performance not only is taking place in the four most populous countries in the world - China, India, Brazil and Indonesia - but also in traditionally poor countries like Chile, Colombia, Botswana, Ghana and Mauritius. This research paper underlines strategies which have helped to achieve sustainable growth, like openness to the

global economy (free trade), macroeconomic stability, high saving and investment rates and market allocation, among other.

Porto (2006:140-160) presents an interesting study where he develops a methodology to explore the effects of trade policies on the distribution of income in Argentina. For this purpose he uses available household survey data (expenditure and income). First, he connected trade policies to prices and then prices to household welfare. His methodology was based on the assumption that each family expenditure on consumption goods is equal to income. He found out that trade liberalization within Mercosur (Mercado Común del Sur - the local commercial partnership which promotes free trade and economic integration between six South American Countries: Argentina, Paraguay, Brazil, Uruguay, Venezuela and Bolivia) benefited the average household and was characterized by pro-poor bias (idem.141-142).

Castilho, Menéndez and Sztulman (2012:821) studied the impact of trade liberalization on household income inequality and poverty in Brazil between 1987 and 2005. Their study first describes stages of trade liberalization, bringing tariffs down from 40% to about 12%, integration in international trade, greater export participation and import penetration. The income in their study is referred to as gross monthly household income per capita. Therefore, they are interested in household members. The result of their statistical analysis is positive for rural areas with the greater impact of trade liberalization policies on poverty reduction and thus on financial assets. One of the main findings is that greater exposure to exports reduces poverty significantly while import penetration growth has the opposite effect (Castilho et al 2013:833). It would, therefore, appear that Brazilian agriculture started to be significantly present in international markets and this, in turn, is translated into greater benefits for the rural population through participation in exports.

The study from Kenya analyses the trade liberalization effect in the maize grain market (Jayne, Mukumbu, Chisvo, Tschirley, Zulu, Weber, Johansson, Santos and Soroko 1999:13-22). In Kenya, all the maize grain imports are controlled by the private sector, which means that the trade was fully liberalized. The survey was conducted in 1997 on the impact of the market reform on rural households. 1525 households in 24 districts took part in this study. It was reported that 61% of rural households were net buyers of maize. They showed preference for low maize prices and 60% of the households felt that the availability of maize grain for purchase has improved since the transition to a liberalized marketing system. In this account two things appear important. First, there was the positive effect of private sector involvement in handling both domestic trade and importation due to a conducive policy environment. Second, market oriented reform had a beneficial effect on peasant households, allowing them to purchase maize at a low price and making it available throughout the year. Unfortunately, the study does not report if the market oriented policy helped increase local production and improve peasants' financial assets by active trading.

In summary, the BWIs defend growth oriented policies as the solution to eradicate poverty. The proponents of trade liberalization believe that it brings long lasting benefits. Todaro (2000:519) and De Matteis (2004:576-578) enumerate these benefits as: promotion of rapid exports, economic growth and rise in profits. At the same time trade liberalization attracts foreign capital and expertise and generates foreign exchange. Head (2008:168) even says that behind trade liberalization there is a hidden ideology with the central idea of "world peace through world trade". Therefore, there is an assumption that increased trade brings not only economic gains, but also political and social benefits – lasting peace.

#### 2.4 OPPONENTS OF TRADE LIBERALIZATION

The critical theory of trade liberalization is located within various schools of thought such as Marxism, the moderates, the dependency and the postmodernist schools of thought.

#### 2.4.1 Marxist school of thought

Marxist critique is predicated on the exploitive conditions of capitalism or neo-liberalism on which the logic of trade liberalism is founded. This school of thought argues that free trade and especially expansionist tendencies lead to unequal distribution of wealth and destruction of small scale firms and producers who are unable to compete (Martinez 2010:194-199). The Marxist school of thought vehemently criticized the alleged advantages of free trade as presented in capitalism (Engels 1847:282). For Engels free trade only enables the economic bourgeoisie to dominate the world and it does not provide cheap food and higher wages, as it is advocated. On the contrary, free trade contributes to greater exploitation of the workers (Engels 1847:282). Marx believed that through free trade capital will gain freedom of action and easy access to all corners of the world. However, in his view, this expansion will not only fail to abolish the antagonisms between industrial capitalists and wage workers, but they will stand out clearer, as capitalism by nature looks for comparative advantage both in access to recourses (cheaper recourses) and in access to easier profit (lower wages and added value). Furthermore, Marx criticized the idea that free trade will contribute to creating international division of labour that gives each country production ability, which is not in harmony with its natural characteristics. In his view this scenario will give rise only to unlimited competition and it will have detrimental effects on wages and increase of unemployment.

In fact, today, the critics of trade liberalism present strikingly similar points. In their view, the growing interdependence serves only the rich nations, which need access to cheap raw materials and energy supplies; they also need the developing world as a market for their exports (Todaro 2000:699).

Prabhakar (2003:308) says that global neo-liberalism and globalization understood as such refer to transformation of national capitalism to global capitalism and, in his view, this transformation contributes, on the one hand to ever-growing marginalization of the global south and, on the other, to guaranteeing Western hegemony in the world. Olaniyi et al (2010:3-5) also state that expansion of capital causes and perpetuates marginalization and crisis. Thus, it is a negative force in polarizing societies of the developing countries, creating the elite and the marginalized. In a similar way Head (2008:55) criticizes the global institutions (especially BWIs) by saying that they have a negative effect on the developing countries because they create distributional inequalities, impose conditionality and infringe on the state autonomy. As a result, developing countries lose control over their own economic affairs.

Case studies demonstrate dissatisfaction with trade liberalism. Sharma (1997:274) analyses the effect of growth policies on agriculture in the northern regions of India. She states that in 1988 during the drought peasant farmers were affected by high food prices to the point of falling below their marginal level of income and consumption security. The group of people who benefited from the crisis were traders. Similarly, Roy (2010:309) gives an account on the cotton producers' internal power struggle in Mali. He says that after the 2004 year record production many producers lost inclination to grow cotton due to climatic hazards, low purchase prices and increase in cost of agricultural inputs. He adds that the cotton sector in Africa was weakened by the US policy of subsidizing

their own cotton sector, which had an effect on global cotton prices and trade.

Topolova (2007:291-335) conducted a research studying the impact of trade liberalization on income distribution in Indian districts. Her main research question was: does trade liberalization affect everybody equally. The answer of the study is no. She argues that certain areas and segments of society benefit less, namely rural areas and rural population. For Topolova (2007:315) one of the elements which contributed to this uneven distribution of benefits was huge tariff reductions. She says that tariffs on agricultural products were removed rapidly. In this way the share of agricultural products which could be freely imported grew also rapidly from 7% in 1989 to 40% in 1998 and between 1998 and 1991 this number reached 80%. These tariff reductions affected disproportionately wages in rural industry causing poverty. She also adds another important factor which contributed to farmers' difficulty in competing in a free market economy, that is their vulnerability to shocks due to lack of insurance or safety nets. She even reported suicide cases in the same way as Shiva did in her case study from India (2000:1), where she discussed how peasants' incurred debts due to liberalization of agriculture.

Cooksey (2011:557) writes about a failed liberalization programme in Tanzania. According to his article the extent to which market liberalization has been successfully implemented is exaggerated and state failure in taxation and regulatory practices on national and local levels exacerbates this failure. He argues that the effect liberalization had on peasants in Tanzania is rather ambivalent. For instance, he reported that the maize growers' returns were minimal due to high input costs (Cooksey 2011:561) and the liberalization of tobacco led to a "debt crisis" where farmers couldn't repay their debts due to erosion in presumed profits caused by high taxation (Cooksey 2011:565). In the coffee trade there have been

improvements in the beginning which benefited the peasant farmer, for instance, selling coffee grains at auction price. However, the gains were short-lived because the collapse of coffee prices on the international market made coffee growing relatively unprofitable (Cooksey 2011:566). Thus, according to Cooksey (2011), the overall impact of trade liberalization on peasant farmers' households in Tanzania is rather negative.

Coffee industry is an excellent example of how liberalized markets work in practice. Coffee is a cash crop which is widely grown by peasant farmers in many developing countries. In fact many African countries depend on coffee export for their foreign currency inflow (Fitter and Kaplinsky 2001:72). The demand for coffee worldwide is very high and it is the second largest global commodity export after oil (idem.). However, looking at the coffee value chain we can readily say that although some of the profits, up to 40%, remain in the exporting country, there is still nearly 50% which is benefiting processing companies and a few powerful retailers, e.g. Nestle has 55% share in the coffee market (Fitter and Kaplinsky 2001:80). We may also say that whereas the price for raw coffee is kept at a very low level which does not really benefit peasant farmers, the price of the end product is going up due to ongoing differentiation (Fitter and Kaplinsky 2001:74-77). The coffee producers and the retail chains benefit the most.

The Oxfam 2013 report on wages in the tea industry gives a rather enlightening account. The tea packers get a minimum wage which in most of the tea growing countries is not possible to live on (Oxfam 2013:8). The retailers and producers together blame national governments for setting the minimum wage at such a low level. On the other hand the report says that the multinational companies make huge profits from the cheap labour but are reluctant to share them with those who are at the bottom of the value chain (Oxfam 2013:10).

# 2.4.2 Dependency school of thought

Todaro (2000:91) explains the concept of dependence. He says that from the economic point of view dependence is reflected by the fact that dependent economies- or, as they are sometimes called, peripheral economies - cannot sustain their growth pointing to the lack of an essential dynamic component inside the system such as technological know-how, productive capacity or accumulated capital. There are also institutional and political constraints attached to ensure control and subordination. In other words the development in the dependent countries is conditioned by the process of expansion of the already developed economies. Similarly, Cardoso and Faletto (1979:160-162), one of the representatives of the dependence school of thought, lists various causes which originate and fuel this dependence; they are: external financing of development, external control of capital flows and economic decisions, external capacity of a domestic market to absorb output production in the periphery, external availability of capital to be invested, external technological knowledge and a highly skilled managerial organization.

Dependence is also perpetuated in the peripheral economies by the benefiting governing elites and university academics who are trained by or within the Western economic framework to propagate the capitalist paradigm (Todaro 2000:93). Critics in the dependency school of thought argue that the unequal trading relations between the global south and the global north limit the gains from trade and undermine development.

Cardoso vehemently criticizes the inequality between the centre and peripheral countries. In his view the dependence "emphasizes that technical progress and financial control of the results of international expansion are concentrated in a few capitalist centres which will go on exploiting and preserving the dependence and underdevelopment of the

periphery" (Cardoso and Faletto 1979:185-186). In his view even when the peripheral economies develop productive capacity, the rules of domination are enforced which guarantee control by the owners of the capital. The Economist reports that the OECD countries spent up to \$265 billion on farm subsidies in 2008 (The Economist 2009:1). For instance the USA is an advocate for trade liberalism, but its own policy to subsidize the cotton sector weakened cotton producers in most African countries (Roy 2010:309). The Oxfam briefing paper on trade (Oxfam 2001:4-14) criticizes the double standards of the western countries in relation to liberalized trade and identifies eight "broken promises", one of them being a promise to cut agricultural protectionism. The paper states that during the Uruguay Round Agreement on Agriculture, industrialized countries agreed to cut subsidies to agriculture by 36%, but the agreement remained only on paper (Oxfam 2001:4). Oxfam states that the protectionism in the form of agricultural subsidies is a major block for the developing countries to break with their exports on those markets (Oxfam 2001:5).

The new dependency is also imposed by Trans National Corporations (TNCs) which promote Genetically Modified (GM) crops on poor countries without giving much attention to improving traditional ways of farming. Fukuda-Parr and Orr (2012:1) report that GM crops may solve the problem of low productivity and thus an insufficient food supply on local markets. However, by promoting GM crops rather than investing in local research and drought resistant cultures, developed countries have perpetuated peasant farmers' dependence on new technology and increase their own control over the means of agricultural production and trade. For instance, Stone and Glover (2011:512) present an account on how GM food producers used the food crisis in 2008 to promote their products. Their study suggests that the companies and academics involved in biotechnology used the crises to promote GM products to much of the world.

# 2.4.3 Moderate school of thought

The moderate school of thought comprises academics who accept the current economic model of development but they essentially postulate for more inclusiveness and justice in the governance of BWIs.

Todaro (2000:715) is rather sceptical whether the least developed countries (LDCs) will benefit from economic liberalism due to low level of preparedness. However, he does not exclude that the benefits of trade liberalization are possible. He states that certain preconditions should be met first, such as: increase in production capacity, sound financial policies and the reform of the WB and the IMF so that they become inclusive.

The need, as expressed by some academics, e.g. Stiglitz, to reform the WB and the IMF is fundamental. It is based on the analysis of their governance structure. The WB, for instance, comprises 188 nations. Its five largest shareholders - USA, UK, France, Japan and Germany - appoint their five executive directors; China, Russia and Saudi Arabia elect theirs, and the 20 remaining directors are elected by the rest of the 180 member states (WB 2013:1-2).

In the IMF the voting power is distributed according to the strength of the economy and paid to the IMF quotas by its member country. For instance, Mozambique has only 0.07% voting power. All SADC countries (excluding South Africa) have 1.42% voting power as compared to the 12 leading world economies holding 53.5% voting power (IMF 2013). It is quite striking that, for instance, Belgium and Brazil have nearly equal voting power!

Stiglitz (2007:61-63), the Nobel Prize winner, likewise acknowledges that the rates of poverty in some parts of the world are falling, but the overall effect of free trade among the developing nations is not so positive due to

a variety of factors. He claims that free trade is not fair, as the developing countries open up their markets to cheap foreign subsidized agricultural products without reciprocation from the advanced industrial countries. Furthermore, he adds that trade liberalization exposes workers in the developing countries to greater risks of losing jobs without safety nets and points out that the developing countries are not prepared to seize opportunities due to internal problems such as lack of competitive infrastructure or poor product quality. Therefore, the main problem isn't so much with the growth oriented policies (as regards trade and financial liberalization) but how they are implemented.

On the other hand, for Head (2007:193-200) in the WTO, the problem is not so much with the governing structure but with the model of trade it promotes. He states that there are winners and losers from the WTO-led liberalized trade. The main concern is, therefore, not free trade *per se* but rather unequal distribution of the benefits which it generates and the loss of jobs in less competitive areas. Thus the criticism points to lack of social justice. The social justice concern is indeed present at the domestic or global level alike as the income gap increases between the rich and the poor both at a national level within a country and at the international level.

# 2.4.4 The post-modernist school of thought

There is a group of scholars who, due to their negative assessment of development (in which, as we have seen, trade liberalization plays a very important role, stipulating production and economic growth), reject it, seeing it basically as an imperialist mechanism to impose a new wave of economic colonialism or total control of markets and agricultural production (Escobar 1995, 2004, Pieterse 2000, Sachs 1992, Ziai 2007, Ziai 2013).

That group of scholars belongs to the post-modernist school of thought. According to Pieterse (2000:175-176) much of the origin of post-development theory is born out of dissatisfaction and disillusionment with development. This disillusionment is clearly expressed in the belief that, a middle-class lifestyle is unattainable for the majority of the world's population (idem.175). This would directly go against the very core and the objective of development, as expressed by Todaro, namely: "to increase the availability and widen the distribution of basic life-sustaining goods, to raise levels of living...to higher incomes and to expand the range of economic and social choices..."(Todaro 2000:18). In this way, it would seem that development is not reaching over a billion of poor (UNDP 2014:4) and especially rural poor in the South (Farrington and Mitchell 2006:2).

According to Ziai (2007:520) post-development offers a valid critique of euro-centrism and implicit subordination in development discourse. Escobar (2004: 208-210) goes further by identifying the new global imperial force as the United States, which advocates an economic and military ideological order that subordinates regions, peoples, and economies worldwide. The new form of colonialism is not spreading through conquest but through the universal imposition of norms such as liberalization of markets and trade, US-style of democracy and promotion of the Western model of consumptionism). Escobar calls these expansionist tendencies, "free-market slavery and global organization of violence" (idem.). According to him free-market ideology is based on freeing entire regions for the transnational capital and in this way colonialism does not end but it is only rearticulated (Escobar 2004: 219).

In conclusion one may say that trade liberalism as a development strategy is a very contentious issue. It brings benefits but especially to the developed western economies and the governing elites in the developing

countries, particularly those which comply with the rules as set out by liberalized economies. The global south is able to benefit in as much it is ready and prepared to compete on the global scale, introducing innovative solutions and products.

The fact, however, is that most of the people in the developing countries are not able to benefit from the new opportunities as they lag behind the West and do not have sufficient education, infrastructure, technological know-how and marketing possibilities. According to Sachs (1992:1-4) the last 40 years of developmental ideology have failed them and instead of pulling them out of poverty have left them only more underdeveloped, dependent and exploited.

#### 2.5 AGRICULTURAL PRODUCTION IN AFRICA

Agriculture is a key sector in a typical African economy but its potential is limited by various burdening factors accumulated throughout the years. These factors are owed to the historiography of Africa, particularly its colonial experience and consequent socio-economic and political issues, including climatic conditions (Oyejide 1998:10-12).

Although the history of colonialism is closely tied to geographical discoveries of the fifteen century, it really took off with the renewed strength in the 19th century and at the onset of the First World War Europe's possessions covered about 84% of the world (Dickens, Gould, Clarke, Mather, Prothero, Siddle, Smith, Thomas-Hope 1996:55). The colonies generally were not areas which experienced balanced development but they were rather ordained principally to fuel development in Europe supplying cheap raw materials and offering extra markets for overproduction. In this way, colonies became a part of an international economy and political system controlled from Europe and characterized by

an unequal relationship (idem. 38:48). However, Dickens et al (1996:46) claim that the colonial penetration was not the main factor leading to the future detrimental development, but rather it was the fact of Africa being on the periphery of global events. Likewise, Ki-Zerbo (2000:354) states that the isolation of the African continent was one of the main causes of later slow technological progress. However, they also point to many other negative consequences of colonialism which affected new independent African states, such as: an administrative vacuum (very few local civil servants were properly trained to administer vast territories), creation by the colonial powers of the economy of supply rather than developing manufacturing capacity or setting artificial boundaries between countries among other (Dickens et al 1996:49).

The post-independence period in many African countries was characterized by social disorder, conflict and adopting models of development which put emphasis on industrialization to the detriment of agriculture (UNDP 1998: 133:196). In this way, already under-developed due to colonialism, agriculture suffered additional years of neglect, reflected today by poor mechanization and low productivity. The FAO reports that while the world's agriculture is mechanized in 16% of countries, it is mainly so in the developed countries where the share of mechanization as a component of overall agricultural capital stock is as high as 40%. In the developing and mainly sub-Saharan countries this share is only 4-5% (FAO 2006:1, FAO 2012a:25).

Poor mechanization and lack of use of other inputs such as fertilizers is reflected by poor productivity (UNCTAD 1998:149). Mazoyer (2001:6-9) says that at the moment the difference in labour productivity between manual and motorized agriculture is at the ratio of 1-500 for net productivity. He explains that a farmer in a developed country can work on a hundred or more hectares and produce on average between 5 to 10

tonnes of cereals per hectare. In sub-Saharan Africa a peasant farmer is able to work on just one hectare and produce less than a tonne.

Kandiera and Randa (2004:6) blame Africa's weak agricultural performance on poor domestic policies and restrictive trade policies in the developed countries.

Jensen and Gibbon (2007:5,16) state that it is due to various internal and external factors. The internal factors are macro-economic instability and poor infrastructure especially in the transport sector - the legacy of colonialism, civil wars, industrial and technological under-development and lack of capital; in short, the legacy of dependence discussed earlier. The external factors are: barriers on agricultural imports (requirement of high sanitary and quality standards) and the rising competition from new emerging markets, e.g. Brazil and India. In fact, Jensen and Gibbon (2007:9) state that most of African countries not only fail to satisfy their local demand but also, in spite of the potential of natural capital (land, climate, etc), are net importers of agricultural food products, such as (cereals, oil, dairy, meat and sugar).

Thus, Krugman and Obstfeld (2006:19) state that in 2000 agriculture accounted for 8% of global trade and the share of Sub-Saharan Africa was only 1.8% (Kandiera and Randa 2004:8). Twelve years later the WTO agricultural statistics does not show a substantial improvement. In 2012 out of 17.816 US trillion of global trade, agricultural trade accounted only for 1.660 US trillion, which is about 9%, and food trade accounted just for 1.356, about 7%. Africa exported only 59 US million worth agricultural products, which is about 3.5% of global agricultural trade (WTO 2012b). In terms of global economy it is indeed a very insignificant share.

Unfortunately, it seems that it will be difficult to change the scenario of low productivity as the African agriculture in general and peasant African agriculture in particular is heavily under-invested, dominated by women workforce, and aggravated by HIV/AIDS pandemic, and it operates in a risky and fragile environment negatively affected by the climatic changes (UNCTAD 1998:149,151).

It is for instance reported that women produce on average between 30 to 80% of food in Africa (Kabeer 2003:109). However, Kabeer says that even when women produce and have access to land, they do not usually have title to it, which results in insecurity of tenure. A woman can easily lose the right to land when her husband dies (IFPRI 2005:3). Furthermore, women face difficult access to inputs, such as: credit, technology, extension services, training and marketing, and they often lack power of decision-making due to the social constraints of a patriarchal society (Manuh 1998:7). According to FAO (2012b:12), women could increase yields 20 to 30% if they had the same access to productive resources as men.

HIV/AIDS poses an additional challenge to agriculture, especially in the sub-Saharan countries. Slater and Wiggins (2005:1) report that it affects agriculture directly and makes a negative impact indirectly at the household level. HIV/AIDS directly causes loss of labour from death, sickness or care. It makes an impact on financial assets, requiring additional cash for medication, diet and transport to hospital. It causes an age ratio imbalance, leaving the old and orphaned children and taking the productive workforce. According to FAO (2013), AIDS has killed so far seven million agricultural workers since 1985, mostly in sub-Saharan countries and up to 25% of the agricultural workforce could be lost by 2020, which will have a devastating effect on national economies as more than a third of the gross national product comes from agriculture (FAO 2013.).

To make things look even grimmer, the share of public spending on agriculture in Africa fell to less than 7% and the agricultural Official Development Assistance (ODA) decreased by 58% from 1980 to 2005 (FAO 2012a:22). This trend reflects the guidelines of earlier discussed neo-liberal policies under the Washington Consensus and the imposition of Structural Adjustment Programmes (SAPs) on the developing countries in order to liberalize their markets and increase productivity.

In this way the liberalization of the land market is reflected by the recent land grabs (purchase or lease of vast tracts of land) in many African countries accompanied by peasant dispossessions endangering their food security (Shepard and Anuradha 2009:1-3). Shepard and Anuradha say that since 2008 around 180 of such land deals have been recorded worldwide and many of those are in Africa including Mozambique. It is not only countries like China, Japan or South Korea which try to secure their long term food security by new land acquisitions in developing countries; private investors operate in a similar manner; for instance, Jarch Capital in Southern Sudan gained control over 800,000 ha of land or Daewoo Logistics Corporation tried to acquire half of arable land in Madagascar and there are many other similar deals (idem. 5;13).

# 2.5.1 Agricultural trade liberalization in Africa

Notwithstanding the challenges experienced by Africa, such as the legacy of colonialism, political instability, patriarchy in agriculture, HIV/AIDS and many others, agriculture remains important for millions of people, especially in the sub-Saharan Africa (SSA) where it contributes on average a 28% share of the GDP (data from 1997). Kandiera and Randa (2004:6), UNDP, (1998:134) and OPM (2007:2) confirm this; however, they also say that in most poor African countries the share of agriculture as a percentage

of GDP remains unchanged for decades and that the agricultural exports as a share of GDP actually reduced in all African countries between 14 to 50% in the last two decades.

Under the General Agreement on Trade and Tariffs (GATT), which was established in 1947 and regulated international trade for nearly five decades, conditions for agricultural trade were deteriorating, the protectionist subsidies in the developed countries were increasing and prices were declining (Tanner 1996:1).

The WTO was created to solve this situation and since its foundation at the end of the Uruguay Round (UR) in 1994, it has been engaged in creating mechanisms to increase trade volumes around the world and especially among and from the developing countries (WTO 1994b). The UR negotiations produced many agreements amongst which are the: General Agreement on Trade in Services (GATS), Agreement on Trade-Related Aspects of Intellectual Property (TRIPS), Agreement on Application of Sanitary and Phytosanitary Measures (SPS), Agreement on Technical Barriers to Trade (TNT), and finally the Agreement on Agriculture (URAA), which was approved in December 1993 (WTO 1994a, Oyejide 1998:3). It is the latter agreement that introduced many changes in the area of agricultural trade. Oyejide (1998:12-15) reports that some of these changes have brought far reaching implications for African agriculture, especially in terms of market access, conditions for exports, conditions for African agricultural imports and a commitment to reduce protectionist subsidies. He explains that market access, as from the day of approval of the URAA by their member states, with the exception of developing countries needing more time to upgrade its agricultural capabilities, was to be regulated by the regime of tariff protection only and that all non-tariff barriers were to be either eliminated or converted to tariffs. Moreover, he says that the signatories to the URAA agreed to introduce two important

measures to facilitate trade with the developing countries: first, they agreed to limit their domestic support for agriculture, and, second, they also agreed to start introducing "progressive restrictions to trade-distorting agricultural prices" (idem. 13). Therefore, the URAA, at least in principle, sets some foundations which were to make trade from the developing and especially from sub-Saharan countries into "Western markets" fairer and easier.

However, Kandiero and Randa (2004:13) and Oyejide (1998:15) report that for many major agricultural products that are of particular export interest to Africa peak duties are still very high. Oyejide, for instance, says that foods industries of many developed countries are protected by very high tariffs which can constrain exports. He gives an example of some protected by tariffs products: processed foods (12%) orange juice (31%), peanut butter (132%) and tobacco products (350%) (idem.).

Tanner (1996:8-9) also presents similar findings and points to the fact that the abolition of non-tariff barriers contributed to even higher protectionism by the developed countries, introducing safeguard provisions or calculating base level tariffs at a very high level.

The tariff escalation has a negative impact on agricultural production for the developing countries which seek to diversify their export through food processing and particularly they make it difficult to access Western markets (Lindland 1997:1). Developed countries specialize in making high quality food industry products, which make up 32.5% of their food exports (Lindland 1997:3). Therefore, agricultural tariffs protect their processing industry from cheaper imports and also their farmers from bankruptcy. In this way EU general agricultural protection level is 22%, Japan 52% and the USA the lowest, 8% (Lindland 1997:19-23).

Despite general trade agreements, Sekkel underlines that most of the sub-Saharan countries can enjoy lower tariffs or even zero tariffs under various preferential treatment agreements (Sekkel 2009:1-15). In this way the US, under the African Growth and Opportunity Act (AGOA) grants access to its markets (Condon and Stern 2011:5). And the EU under Everything But Arms (EBA) initiative, which is part of its Generalised System of Preferences (GSP), grants most of the sub-Saharan countries, which are also part of the Least Developed Countries group (LDCs), unilateral quotafree and tariff-free access to its markets for all products, expecting preferential treatment in return (Hinkle and Schiff 2004:26, EU 2012:3).

However, interestingly, according to the 2012 EU trade Regulation a product may be removed from the preferential list.

This takes place when the average value of Union imports of such products over three consecutive years from that GSP beneficiary country exceeds the thresholds listed in Annex VI of the EU trade Regulations. The threshold shall be calculated as a percentage of the total value of Union imports of the same product from all GSP beneficiary countries (EU 2012:6).

Furthermore, the same Annex VI of the EU trade Regulations, states that this will apply when the percentage share exceeds for most of the products 17.5% and for some, especially fabrics, clothing and apparel, 14.5% (EU 2012:58). Additionally, the alteration in preferential treatment, according to article 22, will occur if a product is imported from the beneficiary country "in volumes and at prices threatening or causing local EU producers of like or directly competing products serious difficulties (economic financial situation)", which means that "the preference" exists in fact only when the goods from the developing countries do not effectively compete with the EU products (EU 2012:12-13).

There are also many regional agreements between African countries, for instance, the Southern African Development Community (SADC) which integrates 15 countries mostly in the sub-Saharan region. However, according to Yang and Gupta (2007:406; 413), the volume of African regional trade is very insignificant and does not contribute to poverty alleviation or welfare improvement.

#### 2.5.2 Trade liberalization and rural livelihoods in Africa

There is a lot written about the effects of trade liberalization on the economy and agricultural sector in general. However, agriculture, is not only "just a sector of the economy" but it provides the livelihoods of millions of families, and the destiny of approximately three billion people, mostly in the developing countries, who depend on agriculture for their survival (Mazoyer 2001:2).

Camfield and Roelen (2012:6-7) using in their research retrospective qualitative data, report chronic poverty in rural Ethiopia. The study identified many factors that drive to and maintain households or individuals in poverty. Although their research did not specifically focus on trade liberalization, it did however point to four important determiners of household poverty caused by liberalization, such as: high food prices, rising cost of inputs - fertilizers and seeds - bad debt, and low prices of peasants' produce (Camfield and Roelen 2012:13). Their study points to the plight of peasants, saying that they find it difficult to come out of poverty. Lack of financial assets adds to their suffering limiting access to entitlements such as: education and medical treatment (idem. 19-20). The situation of Ethiopian peasants was also examined by Bluffstone, Yesuf, Bushie and Damite (2008:1). They report that on average financial assets generated from selling crops made up to 85% of their total income but

between 2000-2005 this value diminished by 7% (idem. 10). In this way, per capita peasants' nominal income in 2005 was \$46.68 (idem. 12). This would in fact point not only to a worsening economic situation of peasants in Ethiopia but also to a quite impossible task of surviving on barely \$0.12 per day.

In a different study Blake, McKay and Morrissey (2001:15) evaluate the impact of the liberalization of world trade on agricultural commodities in Uganda and conclude stating that although the overall impact of trade liberalization on the country is slightly positive (but benefiting principally urban self-employed), the poor segments of the population experienced falling living standards.

For instance, coffee producers at the time of their research could get a base price of only about \$1.82 per kg and this price with full liberalization could only rise to \$4.00 per kg. (Blake et al 2001:5). This is still far below the retail coffee price at any supermarket.

In fact, according to the Agency for Cooperation and Research in Development (Acord 2010:1-8) peasant farmers in Uganda benefit very little from trade liberalization. The study conducted among banana peasant producers in Isingiro district states that the gate price for bananas is low and only the traders benefit. The research points to the main difficulties encountered by the peasant producers. They complain that as a result of high costs for inputs and the diminishing role of extension services, the quality of the production is rather poor. That is why it is difficult for peasant farmers to access profitable EU markets which demand high quality and high sanitary standards unattainable for peasant producers (idem. 6).

Mazoyer (2001:2) states that over "1,250 million people existing or scratching a living off agriculture" are neglected by projects (financing) and

research (use of modern means of agricultural production). Their gross productivity can barely exceed 1 tonne of grain per worker per year (idem. 2). This creates a grave inequality situation with developed countries where a farmer produces 10 tonnes per hectare. It would, therefore, seem that low productivity is also one of the causes of rural poverty (idem. 3).

Nevertheless, Mazoyer (2001:4-5) principally attributes to trade liberalization the responsibility for the distress of peasant farmers. In his view, the overproduction of agricultural commodities in the developed countries, and the agricultural subsidies, drive the prices for agricultural products down and these low-cost surpluses stimulate international trade and negatively affect both prices and wages in the developing countries (idem. 4).

He states, for instance, that the fall in prices affected tropical export commodities (sugar, groundnuts or cotton), which face competition from the mechanized crops, such as beet, soybeans and subsidised cotton from the United States (Mazoyer 2001:14). He further underlines that poverty which is created through unfair trade practices, affects households in many different ways (2001:14-16). The lack of financial assets causes hunger and sickness and peasant farmers often have to sell livestock for survival. Similarly, due to only one failed harvest they may very easily incur a debt, which may push them even further into misery or it may even cause their migration. In order to avert this situation, peasant farmers need prices sufficiently high so that they can not only survive but also develop.

Peasant farmers' livelihoods are furthermore affected by additional constraints affecting African agriculture mentioned already in the theoretical part, such as: HIV/AIDS, small size of land, high levels of illiteracy and worsening climatic conditions. They intensify the challenge of

effective participation of peasant farmers in an already very unfair and competitive agricultural trading market.

Slater and Wiggins (2005:1-3) say that the HIV/AIDS pandemic generates new poverty as households suffer reductions in total income owing to illness, the diversion of household resources to caring for those affected or total loss of income due to death of a breadwinner. Furthermore, the great majority of peasant farmers are unable to satisfy their basic needs just from agricultural production due to the small size of their farms (0.5 - 2 hectares), thus in order to make ends meet, they derive 42% of their household income from non-farm activities (UNDP 1998:139-142).

Another constraint among peasant farmers is lack of education and illiteracy. It is reported that 38% or 153 million of the adult population in sub-Saharan Africa are illiterate, the majority of whom are women accounting for 60% and most of them live in rural areas (UNESCO 2010:2). Fitterand Kaplinsky (2001) state that this lack of sufficient knowledge is reflected in inability to diversify agricultural production, thus making them unable to meet the expectations of consumers, who in their home countries demand more diversified, better quality goods. As a consequence peasant farmers find it difficult to become integrated into a liberalized food system and profit from it (Braun and Díaz-Bonilla 2008:3).

#### 2.5.3 Who benefits from trade food liberalization?

Looking again at the 2012 WTO statistics we may verify that the great bulk of food trade goes on between the developed countries which are also the leading world food producers. The biggest world food exporters are EU, their share in world food exports is 528 US billion dollars or 39% of the global value of food trade, followed by the USA with 131 US billion dollars or 9.7%, Brazil with 77 US billion dollars or 5.7%, China with 54 US billion

dollars or 4% and Argentina with 44 US billion dollars or 3.3% (WTO 2012b: Table II. 20, p.74). These five countries trade nearly 65% worth of world food products.

According to Wise (2009:855-869) the potential gains for peasant farmers from trade liberalization claimed by its advocates are overstated. In his study he argues that peasant farmers are unable to compete with the industrial agriculture of the developed countries where the cost of production is kept low due to massive subsidies. He says that besides the subsidies in the developed countries the level of mechanization is very high and the use of pesticides and fertilizers is also widespread which guarantees high productivity. A peasant farmer in a poor country, not subsidized, due to various factors is unable to invest in fertilizers and pesticides and compete on the international food market (Wise 2009:858:860). Firstly, use of modern means in agricultural production would raise its overall cost while the prices for commodities are kept low. Thus he wouldn't make any profit. Secondly, without insurance peasant farmer would be exposed to big potential risks due to changing climate and other weather related hazards. Thirdly, a peasant farmer on his/her own is unable to sell on the global market.

Wise (2009:860) is also critical about the benefits of liberalizing the market by removing tariffs, barriers and price distorting policies. According to his study only few agricultural commodities, namely, cotton, rice and oilseed, may see a change in the price as a result. Murphy (2006:26) supports this view by saying that the food commodity prices don't tend to change in the same way as the retail prices which go up constantly due to differentiation of products.

For Wise (2009:883) only a few countries will join the already benefiting nations making the most from food trade liberalization. These are: Brazil,

Argentine, China and the former Soviet Union, where arable land is available in quantity and there is a high level of mechanization and farmers' competence. For Wise the great winners of trade liberalization are big modernized farms with access to markets. He concludes that the goal of this economic model is to displace peasant farmers from land under the assumption of inefficacy and create more competitive food enterprises controlled by a few multinational firms.

Murphy (2006:5) in her study explains that the big winners of liberalized trade are those who control agricultural food market (e.g. those who set the price, reduce competition and set standards) for instance: Cargill, Continental, Bunge and Louis Dreyfus, supermarket chains and firms providing agricultural inputs especially seeds, pesticides and fertilizers (idem.6;11). Guttal (2007:525-526) states that national and transnational organizations are the main beneficiaries of international trade.

There are only a few marketing options for the agricultural products on the international market. Either they find their way to a supermarket shelf or a processing factory. According to Murphy the control of these marketing options becomes very restrictive. For instance Cargill, the American-based multinational, is one of the main US maize, beef and poultry producers. It is present on most international markets extending its services to transport, banking, storage and packing. Its total revenue in 2013 exceeded US\$ 136 billion, which is far more than the entire food exports from Africa in 2012 (WTO 2012b, Cargill 2013). According to *The Guardian* (2013) it wants to further acquire 40,000 hectares of land in Mozambique for commercial purposes.

The biggest challenge according to Murphy is the control or dominance of agri-business in agricultural markets and this should be of a concern to public policy makers in order to protect producer and consumer rights.

Multinational retail outlets set standards which often are unachievable to local producers, e.g. in Brazil Nestlé and Parmalate sent 50,000 dairy farmers out of business when they forced them to have refrigeration units at each farm (Murphy 2006:14). Concentration of power affects the local market as a more centralized retailer wants to do business with a more centralized supplier. Small producers in order to sell their products must improve standards according to the retailer demands and they must enter the commodity chain. In agriculture most of the chains are buyer-driven. A buyer looks for a cheap and good quality supply and ships it to where there is a market for the final product (Murphy 2006:17). Farmers who are left out find it difficult to sell products and those who entered a commodity chain don't have influence over the price and are exposed to the risks of the global market (e.g. price fall, diminishing demand or a firm moving its production elsewhere).

One may, therefore, say that the big food trade liberalization winners are global retail outlets and global agribusiness firms. They benefit the most and slowly spread their influence to control global food markets. Their greatest concern is to guarantee consumers a variety of products at an affordable price. They increasingly control the commodity markets setting the price irrespective of farmers' concerns. The commodity prices tend to be kept at the same level or even go down due to global market forces and consumer demand. Peasant farmers are producers without a say. They cannot decide what to grow, how to grow, who to sell to and at what price. They are the most exploited part of the global food chain and, as a result, their livelihoods are negatively affected.

## 2.6 CONCLUSION

This chapter has provided conceptual clarity on key concepts such as globalization, liberalism and trade liberalization used in the study. The

chapter has also reflected on some theoretical issues around trade liberalism and views of various schools of thought such as Marxism, dependency, moderate, post-modernist and liberal.

According to the Marxist school of thought trade liberalization opened the door to international capitalism reaching the furthest markets. The dependency school of thought postulated that development should be based on developing agriculture which should fuel modernization and industrialization. Unfortunately, developing countries are on a periphery and serve the interests of Western nations. The moderate school of thought saw benefits in trade liberalization but it advocated greater participation of the developing countries in the global governance which will help set more equitable rules for all. The post development school of thought rejected development with all its elements as not serving the purpose. Their main argument was that the last 40 years of development did not really diminish poverty; on the contrary it reinforced Western hegemony. The liberal school of thought promoted trade liberalization as a tool to eradicate poverty thus economic growth benefits all segments of society.

The chapter pointed out that agriculture is the market which, in principle, can be dominated by the developing countries which have a comparative advantage (cheap labour and hot climate), but the developed countries find various strategies to impede the imports from developing countries (they subsidize their agriculture and impose high tariffs on products which would jeopardize the local producer). Nevertheless, the chapter underlined the fact that the most important element allowing the greatest benefits from agricultural trade depends, in fact, on the host country and the peasants' readiness to produce quality goods. Following on this, case studies showed that trade liberalization does not help peasant farmers increase their financial assets as they are not able to compete on the global market

due to either the limits of the domestic markets (lack of transport and marketing infrastructure, low productivity and quality, small scale farming) or structural problems of the host country (lack of funding on agriculture or lack of capacity to access foreign markets).

The chapter also found that trade liberalism is a highly contested issue and that it privileges multinational companies over peasant farmers who face many difficulties due to the absence of technology, small scale operations, deteriorating environmental conditions, health problems, the legacy of colonialism and an unfavourable international policy environment.

Finally, having presented in this chapter the larger context of trade liberalization in Africa and its impact on peasant farmers' livelihood, the research goes to the next stage and presents the chapter which provides more specific and focalized information on Mozambique. Chapter three is going to use similar methodology as the previous one; first, it is going to describe the background and speak on Mozambique's agriculture and trade in its historical and socio-economic context and then present the results of a few case studies. Chapter three prepares for the case study which follows thereafter.

# CHAPTER 3: TRADE LIBERALIZATION AND AGRICULTURE IN MOZAMBIQUE

#### 3.1 INTRODUCTION

The present chapter concentrates on the issue of trade liberalization and agriculture in Mozambique. Therefore, it provides the context to the main objective of the study - the research of the impact of trade liberalization on the livelihood of peasant farmers in Marera, Central Mozambique. Consequently, the chapter will first give some background information on agriculture in Mozambique, reflecting on the legacy of colonialism and Mozambique's recent turbulent history. Second, it will narrate the story of Mozambique's efforts to integrate the international trade policies into its legal framework.

Having presented the above, the chapter will present various case studies from different parts of Mozambique portraying practical experiences of peasant farmers in relation to trade liberalization.

#### 3.2 BACKGROUNDOF AGRICULTURE IN MOZAMBIQUE

## 3.2.1 Historical perspective

Although Portuguese influence in Mozambique goes back 500 years, the territorial state with its frontiers can be identified only as from the end of the nineteenth century. Newitt (1995:378-382) says that at that time (in the 1890s), the Mozambique colony had none of the characteristics of the modern state. It did not have a unified system of administrative laws and the basic administration was only created in the 1850s. There were no public revenues, very little infrastructure and very few basic services. In fact, due to Portuguese incapacity to manage the colony most of the

Mozambican territory was leased to foreign companies, e.g. The Mozambique Company occupied the centre of the country and its origins go back to 1878, when Paiva de Andrada obtained mineral and timber concessions. However, his efforts to exploit the concession were unsuccessful and the Company was subsequently acquired by Edmund Bartissol for just 40,000 pound sterling (Newitt 1995:369). Up to the early twentieth century, though, the Company was unable to impose the rule of law and was the scene of continuous banditry and slavery (idem. 370). The Nyassa Company occupied 100,000 square miles in the north of Mozambique. It was instituted in 1893 and it was controlled by a British board of shareholders, (idem. 368-369, 372-373). However, its operations became more systematic and organized only in 1908 (idem. 373). The companies operated their own commercial policies and were oriented to exploit the available resources but they derived their profit only from taxation, labour and the lease of sub-concessions (idem. 366, 373).

After the First World War the Portuguese were more active trying to establish a modern state. The Nyassa Company's Concessions were due to expire in 1929 and that of the Moçambique Company in 1942 (Newitt 1995:387). The basis of local administration was created but it was totally controlled by Lisbon where the local policies were set and exported (idem. 389). During those years Mozambique's agriculture was marked by the "prazo" system of exploitation and "prazo" law. A "prazo" was an area rented by a concessioner with the right to establish its own taxation system and command labour over its area. In the centre of the country the "prazos" were leased by six companies: the Mozambique Sugar Company, the Boror Company, the Société du Madal, the Luabo Company, the Lugella Company and the Zambesia Company. They all started to specialize in monocultures producing huge quantities of copra, sisal, tea and sugar. The success of the companies was based on access to "semi slave-forced" labour (idem. 421-427). The production was entirely export oriented and

the strength of the companies attracted foreign investment. Newitt (1995:427) says that this pattern of development was disadvantageous. In his view the companies promoted self-contained development. Plantations were isolated islands of production linked to the transportation system and the nearest port. They only benefited a foreign owner with much of its profits being also exported.

In 1975 Mozambique became an independent state but its independence was preceded by an 11 years long liberation war with the Portuguese occupier and the early years of independence were marked by the civil war between Frente de Libertação de Moçambique (Frelimo) and Resistência Nacional Moçambicana (Renamo) (Newitt 1995:540, 564-565).

The war had a very negative effect on the country and agriculture. Newitt (1995:570-571) states that the result of Renamo's activity was destruction on a massive scale, including damaged and destroyed infrastructure. By 1990, 100,000 people had lost their lives and one third of the population (4 million) was displaced or recurring to the subsistence life in the bush. Only heavily controlled by Frelimo areas saw some development in the form of the communal villages but even these were systematically destroyed and the peasantry told to disperse into villages in the bush (idem.571).

In general, one may divide the post-independence era into three periods: socialist (1975-1983), transitional (1983-1987) and neo-liberal (1987-2013).

The socialist period was characterized by the creation of state-owned farms and community villages. By 1982 state farms occupied 140,000 hectares (Newitt 1995:553). The priority was to rapidly mechanize agriculture and establish a new proletariat group of workers. The agricultural production followed the colonial pattern concentrating on cash

crops for exportation and it was ideologically oriented, that is, it had to achieve the goals established in the state's economic development plan, irrespectively of local conditions or market forces (Newitt, 1995:557, Mosca 2011:39). Furthermore, in Mosca's view the investments in the agricultural sector were done according to political confidence rather than professional competence resulting in misuse of funds and low productivity (Mosca 2011:46). The ideology inspired and forced the transformation of a peasant into a worker but it did not take into account cultural and structural factors such as the lack of an organizational, technical and economic base, the low level of the peasant farmers' preparedness and the strong traditional culture (idem.43).

In addition to this, state owned farms received only 2% of government agricultural investment and thus did not attract peasant farmers (Newitt 1995:557). Having been taken from the land during colonialism and suffering constant abuses under the "prazo" system of forced labour, peasant farmers hoped to get back on land and own it. However, nothing like this happened under the ideologized agrarian politics (Mosca 2011:45).

The socialist approach to land and peasant farmers and their neglect in the first years after independence was accompanied by the civil war which ended only in 1992. At the end of the civil war and up to the early 1990s Mozambique depended on foreign aid which constituted 70% of GNP; this did not help to develop agricultural sector as well (idem.45-46).

The second period in agricultural development was initiated in 1983 after Samora Machel's visit to the United States (USA) and the Mozambique's negotiations to be admitted by Bretton Woods Institutions (Mosca 2011:106). The negotiations were believed to help both solving and facilitating various issues amongst which were the question of Mozambique's external debt and a desire to increase foreign investments

and humanitarian help. As a result of the negotiations with the BWIs and the conditionality of aid, the food market started to be liberalized and even big state owned farms followed some reforms, such as workforce reduction and more market oriented production (The Oakland Institute 2011:11, Mosca 2011:107-108). However, the macro-economic reforms picked up pace only in 1987 and thereafter (idem.109). This is indeed the beginning of liberalization and thus the beginning of the third and current postindependence era. The liberalization process affirms the strict compliance with Williamson's Washington Consensus manifesto, that is: financial liberalization and price deregulation, inflation control and privatizations of state enterprises, including agricultural state farms. The reforms were oriented to promote production for exportation and they were meant, as it is stated in the Agricultural Policy Paper from 1995, to contribute to the balance of payments (Mosca 2011:109-113, Mozambique 1996:10). In 1996 Mozambique signed the final act of the Uruguay Round (WTO: 2001) and in this way it also began the process of trade liberalization. Mozambique figures on the GSP list among 138 countries and it is also one of the Least Developed Countries benefiting from reductions of import tariffs.

The government published many documents and programs containing various aspects of agrarian policies, including, in 1996, "Política Agrária e Respectivas Estratégias de Implementação" or PAEI (Agrarian Policies and the Implementation Methods). The document states that the agriculture sector contributes 40% to the GDP and makes 60% of export revenue (Mozambique 1996:7). In point 9, the same document prioritizes investment in agriculture; however, it underlines lack of public funds and it considers as a limitation Mozambique's dependence on foreign investment which, it points out, comes with donor's conditionality (idem. 8). In point 13, the document states that it is crucial that the small and medium agricultural producers increase productivity and at the same time it gives the

responsibility to local authorities to foster local development (idem. 9). The above policies clearly reflect the Washington Consensus discussed in the theoretical part, especially its point 2 - Reordering Public Expenditure and point 7 - Liberalization of Inward Foreign Direct Investment.

Furthermore point 21, "Política Agrária e Respectivas Estratégias de Implementação" presents some crucial strategies which are meant to foster development. These are: production for exportation in order to contribute to the balance of payments and restructuring or privatization of agricultural enterprises (Mozambique 1996:10). Two points also reflect the Washington Consensus ideology, namely: points 6 and 8, which speak respectively about liberalization of trade and privatization. Point 24, "Política Agrária e Respectivas Estratégias de Implementação", indicates the need to improve local markets, especially the need to create local structures and establish some price controls for agricultural products which would foster both production and commercialization (idem. 11). Furthermore, the same document in point 25 indicates the principal cash crop cultures, among which are: cotton, cashew nuts, sugar, tea, copra, oranges and tobacco (idem. 12). Most of these cultures were already developed on a large scale in colonial Mozambique as was previously affirmed by Newitt. Interestingly, the "Política Agrária e Respectivas" Estratégias de Implementação" in point 26 states that the principal agent of production for export is a business sector (Mozambique 1996:12). Therefore, peasant farmers, who constitute 2.5 million families and who use 90% of the available land for agriculture, as stated in point 4, are not principal agents based on export development.

Thus, it seems that although "*Política Agrária e Respectivas Estratégias de Implementação*" recognizes the need for improving peasant farmers' productivity, it prioritizes commercial farms, which is in line with previous colonial and later socialist and now neo-liberal models of development.

The weakness of agricultural policies may be reflected in multiple subsequent documents which do not bring changes in the main policy thrust explained above, a point which is noted by Mosca (2011:276-278). He even states that the documents are similar; they repeat priorities and they present what he calls a vertical strategy according to the bureaucratic structure lacking practical applicability by poorly trained local government structures (idem.277).

Thus, in 1998 the government published "Programa de Desenvolvimento de Agricultura" or PROAGRI (Programme for Agricultural Development); in 2007 "Estratégia de Desenvolvimento Rural" or EDR (Rural Development Strategy); in 2008 "Programa de Apoio à Intensificação e Diversificação da Agricultura e Pecuária em Moçambique", or IDAP (A Programme for Intensification and Diversification of Agriculture and Cattle Ranching); also in 2008 "Plano de Acção para a Produção de Alimentos" or PAPA (An Action Plan for Food Production); and, finally, in 2009 and 2010 "Plano Estrátegico de Desenvolvimento Agrário" or PEDSA (A Strategic Plan for Agricultural Development), which is the last in the line (Mosca 2011:239-276).

PEDSA (Mozambique 2010b:4-5) in the same way as previous documents, acknowledges that the agriculture lies at the very basis of development as 80% of the population live on land and 90% of women get their subsistence from agricultural activities, the common trend of African agriculture and a challenge pointed out earlier by Kabeer and FAO documents.

However, PEDSA points out that in 2009 agriculture contributed only 24% to GDP (idem.). The 1996 Política Agrária e Respectivas Estratégias de Implementação puts this figure much higher at 40%. However, already

earlier Kandiero and Randa (2004), reported that agricultural exports as a share of GDP reduced sharply in all African countries. PEDSA explains that in Mozambique this declining trend is not due to the diminishing agricultural outputs but rather due to the new investments which contributed to the substantial GDP increase (Mozambique 2010b). Thus, the investments are principally coming from abroad which is contrary to what the neo-liberal theorist Rostow postulated when he explained the process of development and said that the development of agriculture and its output should contribute to the development of other sectors of the economy. Whichever the cause of diminishing agricultural participation in GDP, PEDSA (Mozambique 2010b:5) recognizes that agricultural exports are very low, constituting only 16% of total exports, which does not reflect the country's agricultural potential. Most of local production is used for subsistence. Low productivity is blamed on two factors already mentioned in this paper: the limited role of extension services and the very small portions of land under cultivation by peasant farmers. The role of innovative and dynamic extension services is vital and Mosca blames BWIs for the austerity measures and budgetary cuts which forced the government to limit spending on agriculture (Mosca 2011:233).

At the same time the poor competitiveness of local products is blamed on cheaper subsidized imports, exchange rates and difficulty in accessing markets of the developed countries (Mozambique 2010b:13).

The cited PEDSA (Mozambique 2010b) is very extensive and presents many problems faced by the sector of agriculture. Some of these above mentioned issues are already present in the earlier documents. One may, therefore, think that there is some lack of ability to implement the strategies, which may be true but Cunguara and Hanlon (2012:634-636) state that the lack of development of the agricultural sector is the result of donors' insistence that the government should not interfere with market

forces and especially the sector of agriculture. In line with the liberal agenda, they forced the government to close marketing boards, ended seed production in the country, curbed agricultural research and blocked hiring more extension workers (Cunguara and Hanlon 2012:635, 642). It was presumed that the neo-liberal strategy of development would stimulate local production and open export possibilities. Yet, the forced changes to liberalize the market failed (idem. 635). The donors' upper hand in dictating to the Mozambican government is based on the fact that they actively support over 50% of the national budget (idem. 643). Therefore, in Mozambique agriculture policies affirm the dependency and the Marxist school of thought that there is a dependent relationship between the core and the periphery.

Interestingly, The Oakland Institute (OI 2011:12-13) points out similar problems which indicate the dependence between the core and the periphery. It says that Mozambican agriculture was and still is based on small-scale farmers who do not have technical capacity to develop land, thus they depend on aid and assistance. In order to deal with agriculture one has to tackle the problem of increasing capacity of peasant farmers both theoretically and financially. However, liberalization of agriculture in Mozambique imposed a very rigid model of no agricultural subsidies, no government investment in agriculture and promotion of foreign investment for large scale farming. Obviously this cannot solve the problem of rural poverty and help peasant farmers in acquiring the capacity to produce and compete on international markets (idem.).

One of the additional effects of BWIs imposed policies is the recent trend of "land grabs", which favours large-scale investments (Mosca 2011:120). For instance, Malonda Foundation from Sweden leased over 285.000 ha, Portucel from Portugal leased over 173,000 ha and ProSavana - the joint venture between Brazil, Japan and Mozambique - is going to develop its

activities on 14.2 million of hectares of land in the north of Mozambique (The Oakland Institute 2011:4, Mozambique 2013a). In Mosca's view (2011:120), which is also reflected by the Marxist school of thought, the new redistribution of land has a discriminatory nature because peasant farmers are frequently removed from land or turned into cheap, exploited workforce who benefits mainly investors.

The Oakland Institute (2011:13) reports that the hard line of agricultural development started to soften in 2011. The Council of Ministers reversed two WB impositions: on local seed production and on the Mozambique Cereal Institute's role as a marketing board. However, in view of both Valá (2009:85-88) and Mosca (2011:114-115) neither the socialist nor the neoliberal model of development as yet addressed the problem of poverty of peasant farmers with success. Both of them point to various problems which still hinder local agriculture: poor institutional capacity reflected by lack of coordination between different sectors of public administration, and the poor infrastructure and high costs of transaction. In their view, liberalization in agriculture came too early and the local market did not manage to embrace its dynamics (Mosca 2011:114-115).

# 3.2.2 Agricultural trade in Mozambique

The agricultural potential of Mozambique is immense with 36 million hectares of arable land, and only 10% in use by peasant farmers. (Mozambique 2010b:14). However, it is the backbone of the economy providing employment for about 80% of the workforce and contributing on average 25% to the GDP (WTO 2001). Therefore, agriculture should be a priority area for development and growth.

However, the International Fund for Agricultural Development and International Food Policy Research Institute (IFAD-IFPRI 2010) reports

that in Mozambique the share of agricultural exports to total exports was reduced by half from 31.4% in 2002 to 14.4% in 2008. In this way Mozambique, where agriculture makes up 32% of the GDP in 2012, exported only 61 million Euros worth of agricultural products. In comparison South Africa, where agriculture makes up only 2.4% of the GDP, exported 1,590.4 million Euros worth of agricultural products (DG Trade 2013).

The Third National Poverty Assessment (Mozambique2010a) reports some rather worrying data reflecting, to a certain extent, the state of the Mozambican agriculture. For instance, in 2008 only 2.6% of rural households received a bank credit, and the share of farming households benefiting from extension services declined from 13.5% in 2002 to 8.3% in 2008. Similarly, the use of pesticides fell from 6.8% to 3.8% (Mozambique 2010a:47). As stated in the previous chapter, Hanlon and Cunguara pointed out that fiscal and budgetary cuts on agriculture were due to the liberal agenda of the Washington Consensus. Furthermore, The Third National Poverty Assessment reports that, although there was a slight increase in total production in most of the major crops, the level of production per person from 2002 to 2008 fell considerably, e.g. maize from 90 kg to 80.7kg, rice from 7.5kg to 5.8kg or sorghum from 11.2kg to 8.4kg (Mozambique2010a:48). This suggests that the agricultural production is outpaced by population increase.

Poor agricultural performance is explained by a variety of factors: high prices of food and fuel on the international markets, preferential development of the southern part of the country due to geographic and historical reasons or general lack of direct investment in order to increase agricultural production and improve its quality and diversification (Osman and Saúte 2009:331). Furthermore, the average size of a farm in Mozambique is only about 1.2 ha which does not permit a peasant farmer

to improve substantially the production level and trading capacity which is crucial to increase households' financial assets (Mozambique2010a:46).

The Mozambican liberal agricultural trade system seems to have provided results contrary to what BWIs and neo-liberal theorists Rostow (1991), Deardoff and Stern (2006), or Dollar and Kray (2001) postulated, i.e. that growth-enhancing policies - especially free trade - benefit the poor and increase productivity and competitiveness. On the contrary, neo-liberal policies benefit traders who take advantage of the high risk environment and the inefficiency of transport system and the large scale foreign agricultural investment, which takes advantage of abundant arable land and cheap peasant farmers' labour. The following cases affirm these assertions.

### (i)The case of cashew nuts

Kanji and Vijvhuizen (2009:51-55) report that Mozambique specialized in cashew nut production. In 1972, for instance, the country exported 216,00 tons of cashew kernels and it used to be its second largest export. Millions of peasant growers, the majority women, used to contribute up to 95% of marketed production. At the industry's peak up to 17000 workers were employed in 14 large mechanized factories which led to a strong export market (Aksoy and Yagci 2012:4). The policy of the government was to export already processed kernels, mostly to the American market. However, the WB pressured and demanded the Mozambican government to liberalize the cashew sector on the basis of Hilmar Hilmarsson's contentious report, which presented the industry being in decline and inefficiently run (Hanlon 2000:34). According to Hanlon, the WB study said that the free export of raw nuts would lead to the substantial income gains for the growers (Hanlon 2000:34-35). Therefore, the existing processing factories began to close and the raw nuts were exported to India.

The decision of the WB to move processing cashew nuts to India negatively impacted on peasants' livelihoods. It was reported that 10000 workers lost their jobs and means of income (Hanlon 2000:29). The move affected not only the development of the local food processing industry but it also had a negative impact on the raw kernels price making it dependent on market forces. In consequence, the policy to liberalize the market did not benefit growers either as they very much depended on the processing industry offering more marketing possibilities and technical support to growers (Hanlon 2000:35).

This contentious policy reform contributed to the vacuum in the market which was filled by other countries specializing in this crop, e.g. Vietnam (Aksoy and Yagci 2012:2). As a result, the cashew-nut industry in Mozambique started a decline producing in the 1990s cashews worth US\$15 million which was just 2.8% of world exports (idem. 2). The number of peasant farmers deriving their livelihoods from cashew nuts also diminished (idem. 3).

## (ii)The case of the maize trade

Jayne, Mukumbu, Chisvo, Tschirley, Zulu, Weber, Johansson, Santos and Soroko (1999:13-22) published their research titled "Successes and challenges of food market reform: Experiences from Kenya, Mozambique, Zambia and Zimbabwe" in which they gave an account of the maize grain trade in Mozambique. According to the authors the market trade liberalization of maize grain in the 1990s was positive for the country and its constant availability at the retail level benefited consumers.

Both the informal and formal private sectors managed to take advantage of liberalization and succeeded in linking the surplus and deficit regions within and outside the country. However, the paper points to very high marketing costs due to poor transport, storage and sales infrastructure (idem. 22).

Probably because of that, the report also says the price of maize in Beira in 1998 was higher than that in Maputo where deficits could be easily solved by relatively cheap imports just across the border from South Africa. It is also necessary to state that the north of the country presents a high potential to export maize, but the magnitude of such exports to Malawi in 1998 caused the domestic price of maize to increase by 400% (idem. 19-20).

Two factors seem to be important in Jayneet al.'s research (1999). First, trade liberalization of maize grain in Mozambique benefited the informal and formal private sectors and consumers alike. The market forces were freed and surplus production was commercialized. Second, as the state did not control the maize export market, the prices increased due to over-exportation and there was lack of maize on the domestic market. The research, however, does not provide any data whether peasant financial assets improved due to the increase in trade and if the gate price benefited peasant farmers.

### (iii)The case of cash crop preference

Lukanu, Green and Worth (2009:758-759), present one of the most recent studies which discusses cash crop preferences in northern Mozambique and their profitability. According to their study in the Niassa Province the peasant farmers produce 99% of the cash crops for export and locally based organizations, e.g. João Ferreira dos Santos Company (JFS Company), Oxfam, World Relief – Sempre Verde (V&M), help in the commercialization of the products. However inputs such as pesticides or fertilizers are only used by cotton and tobacco growers through the JFS Company which guarantees better yield only for these crops (idem.758).

The study suggests that a household was able to use approximately 1.8 ha of land for cash crops, which is more than the national average. The

peasant farmers used to choose those cash crops for which they not only could obtain a good price but also those for which the price was reliable so that they could benefit from extension services and could sell. According to the study the most profitable crops were tobacco, paprika, food cash crops, sesame, cotton and sunflower (Lukanu et al 2009:761).

What appears from that study is that trade liberalization is not the only factor which could impact positively on profitability. Peasant farmers need a more secure environment to produce and the reliability of price and buyers. The extension services were considered important when the peasant farmers wanted to grow a crop unfamiliar to them, as for instance paprika. The general lack of access to inputs has a negative impact on the yields and profitability. Thus, the study points out that the relative gains from these various crops was not big enough to offer more comfortable and decent living conditions for peasant farmers; e.g. for tobacco, gross income per household was 360 USD, for paprika 325 USD, for food crops 162 USD, for sunflower 162 USD, and for sesame 152 USD (idem. 761).

#### (iv)The case of cassava

Donovan, Haggblade, Salegua, Uambe, Mudema, and Tomo (2011:1-47) present the report on commercialization of cassava in Northern Mozambique. The authors say that cassava is the most important security crop, providing about 30% of all calories consumed in Mozambique. There are over 100 different types of cassava and they can be harvested year round and are easily preserved (idem. 5). Above all, commercialization of this crop offers some new food processing opportunities, e.g. composite cassava baked goods, cassava beer and packaged prepared foods using cassava leaves and roots (idem. 11-16).

Donovan et al (2011:19-24) say that the peasant farmers on average commercialize 11% of the crop, although in the Northern Province the

percentage can be higher. Commercialization of fresh and dry cassava follows different channels but it is mostly commercialized by small-scale traders. Especially commercialization of dry cassava passes through more complex marketing chains and a few firms started to experiment with several sets of new cassava-based products already mentioned before. The wholesale price of a 50 kg bag of dried cassava doubles over a 200 km distance from 160 MT per bag to 350 MT per bag (Donovan et al 2011:25). Obviously, intermediaries gain much more than peasant farmers.

If we presume that the average peasant's farm size is 1.5 ha (Mozambique 2010a:46) and if the farmer uses 1 ha for commercial cassava production, and harvests on average 380 kg of cassava from a hectare (Donovan et al 2011:19), he will only be able to earn 3,200 MT which is just over a 100 USD, which is far less than 1 USD per day. Therefore, under the present circumstances peasant farmer will not benefit from trade liberalization. In order to do so, they must increase productivity and preferably the farm size.

Unlike most of the other crops in Mozambique, the government is interested in promoting cassava production, commercialization and research; however, Eduardo Mondlane University, for instance, has focused on some areas of research into cassava processing but this research is aimed at raising productivity further up the cassava value chain (Donovan et al 2011:38), which means that for now the fate of peasant cassava producers is going to remain unchanged with very small incomes.

## 3.3 CONCLUSION

Chapter three dealt with the historical perspective and information about trade liberalization in Mozambique. It explained that many difficulties which

Mozambican agriculture faces today are in fact rooted in the past. Therefore, in the beginning, the chapter gave an account about some emerging patterns of land use in Mozambique. It suggested that over the years the Portuguese colonizers, the socialist government and at present the neo-liberal economic system have been giving a priority to large-scale agricultural development. Under each system, peasant farmers were either exploited or simply failed to get integrated into a production value chain.

The chapter then gave an account of the Mozambican legal framework which is related to agriculture and trade liberalization. It showed that the agricultural trade policies from the various documents are repetitive, not specific, and they reflect the liberal agenda of the Washington Consensus. Thus, agriculture in spite of being considered important, can neither be financially supported nor subsidized by the government. Instead, the land market is opened to foreign investment and peasant farmers, although the majority, remain at the periphery of development.

Lastly, the chapter presented some case studies from Mozambique which also pointed to various problems, among which are the interference of the WB in cashew production, high transaction costs, inefficiency of the transport system and low productivity.

The next chapter presents the research methodology and it explains how the research was conducted.

## **CHAPTER 4: RESEARCH METHODOLOGY**

#### 4.1 INTRODUCTION

In the beginning chapter four presents the design of the study, namely, the mixed method approach, which was chosen to provide the composite (coming from different angles) picture of the reality under study.

In order to set the context the researcher presents a situational analysis with some important facts about Marera and then he explains the procedures of selecting a sample and the steps in data collection. This is followed by the description of the analytical tools; namely the quantitative and qualitative techniques to analyse and manipulate the data.

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The chapter concludes by discussing some limitations related to the research methodology and also the main ethical concerns and guarantees.

### 4.2 DESIGN OF THE RESEARCH

The research used mixed method procedures, e.g. a quantitative questionnaire in order to gather numeric information and then qualitative in-depth face to face interviews to expand, explain and cross-validate the primary source information with more detailed account. Creswell states that mixed methods allows analysing both quantitative and qualitative data within one study (Creswell 2003:208-209). The quantitative data was derived from using measurable, independent and dependent variables to obtain an objective assessment of the reality. The qualitative research dealt with the subjective experiences in the form of a story. Previously, subjective experiences used to be considered non-scientific (Auerbach and Silverstei 2003:22). It was thought that they could not be generalized. However, today academia uses mixed methods more frequently because it

verified that the results taken from more than one frame of reference complement each other and enrich the final outcome of the study (Auerbach and Silverstain 2003: 22-28, Creswell 2003: 208-210).

Furthermore, it is believed that integration of qualitative and quantitative methods offers other additional benefits; for instance, it increases the validity of the research. Thus in Cowger and Menon's view (2001:7), in the process of mixing or triangulation a researcher has a chance to explore specific strengths of each method and provide a more comprehensive assessment of reality.

# 4.2.1 Situational analysis

The site of the study was in Marera Locality (20 km south of Chimoio in Manica Province in Central Mozambique). It is a rural administrative unit, comprising five smaller areas: Muconde, Muconje, Mugagea, Kanyeza and e Chicanga.

According to the 2007 census carried out by the Instituto Nacional de Estatistica, (INE 2007), the population of Manica Province was about 1,412,025, of which 677,412 were men and 734,617 were women, with the average demographic density of 22.9 per km<sup>2</sup>. The population growth was estimated at 3.7%.

In 2007 in Manica Province the level of illiteracy reached 43%, of which 23.8% was among men and 59.7% among women and the average secondary school graduation rate was 15.2% (INE 2007:7). In 2007, only 7.9% of the population had access to electricity and 0.8% had access to a piped water supply, mainly in the urban areas (idem. 7-8).

The Province is predominantly agrarian. At the time of the research 84.1% of the population lived on agriculture, 2.6% were employed in an industry or in construction, 7.1% were involved in commerce and 3.8% were employed in the public sector, education and health (INE 2007:29). According to the Relatorio Final do Inquérito ao Orçamento Familiar, (INE 2010:33), the average monthly spending per family in Mozambique between 2008-2009 was about 3,368.00 MZM (110 USD) and per capita 721.00 MZM corresponding to just about 24 USD. However, in rural areas the income per capita was even lower 541.00 MT corresponding to just 18 USD, far below the internationally accepted poverty level of 1 USD per day.

The demographic profile was as follows: In Marera there were about 18,727 inhabitants of whom 9,211 were men and 9,516 women. Over half of the population of Marera – 10,562 or 56% - was under 20 years of age. Those who were between 20 and 60 years old (the age range which is of interest to the research) were just 6,402 or 34%. Those over 60 were only 689 or 3.6% (INE 2007:24-25).

### 4.2.2 Data collection

The researcher's interest throughout the study was guided by the intent of achieving a broader, overall, composite assessment of the impact of trade liberalization on peasant farmers' livelihood. The composite assessment in view of Gerring (2007:49) means a deeper and a detailed understanding of the problem, thus it relates to the depth aspect of the study. The researcher's goal was thus primarily achieved by mixing the research methods and using a quantitative analysis of systematically collected data and a qualitative examination of peasants' narratives in relation to their experience of free trade.

In view of achieving the goal, the researcher adopted a sequential explanatory strategy (data collection phase during which first quantitative and then qualitative data were collected). Creswell (2003: 215-216) explains that in a sequential explanatory strategy, typically priority is given to quantitative data that guides the project and the qualitative results assist in interpreting the findings. Hence, by using the sequential explanatory strategy, first the researcher dealt with and manipulated statistical, standardized information establishing general characteristics of the sample in relation to the impact of trade liberalization. Then, in the qualitative part of the study, the researcher interviewed a limited number - the most representative respondents from the sample -to get more detailed information on free trade and its impact on their lives. The interviews provided the context (intermediate factors) and they also helped to interpret and understand the results of the quantitative part of the research (Cowger and Menon 2001:12, Gerring 2007:45). In this way, using the sequential explanatory strategy the researcher achieved a more holistic picture of the peasant farmers' situation and a better understanding of the problem of free trade set in the real context.

Creswell (2003:215-216) emphasizes that the straightforward nature of this design is its main strength, especially the clear steps to follow: first the quantitative questionnaire and then the qualitative interviews. Furthermore, in Gerring's view (2007:37-57) mixing the research methods produces designs which have various advantages. In the context of this study and its goals the advantages were as follows:

1. The quantitative part of the research assisted in testing the hypothesis of the research; namely, to find out if the peasant farmers who have access to markets and assets benefit from free trade. However, the study also gained from the insights which came from the qualitative part.

- 2. The quantitative part, although conducted with many respondents, did not provide a comprehensive picture of the correlation between the tested variables x and y. This was in line with Gerring (2007:40) when he said that a simple number of examples of a given phenomenon (in the quantitative study many respondents are involved in order to build a representative sample) does not by itself produce an insight. He added that most commonly insights are produced in a study with a few or a limited number of respondents.
- 3. The quantitative part of the research, which used a survey, led to identifying respondents who were more representative of the phenomenon under study. Subsequently, they were interviewed and they provided a more detail account (intermediate factors) of their experience of free trade. Similarly, the interviews helped to test the casual implication of theory providing confirming evidence (Gerring 2007:45).
- 4. However, in Gerring's view (2007:43) a qualitative study or a case study may guarantee only limited external validity (especially a case study may be less representative of the population). But, in fact, a qualitative study is not so much concerned with external validity as it is with the subjective and personalized interpretation of reality in line with the underlying philosophical theory (Auerbach and Silverstein 2003:78). Therefore by mixing the two research methods and using the sequential explanatory strategy the researcher guaranteed both external and internal validity. In this respect the weakness of the qualitative interviews was supplemented by the strength of the quantitative survey which was administered to the representative sample.
- 5. In addition, the researcher used textual material from books, journals, policy documents, digital documents and websites.

#### 4.2.2.1 Questionnaires

In order to collect data the primary quantitative research method used a survey in the form of a questionnaire. A questionnaire is a tool to gather data and if well designed it maximizes the relationship between the answers and the phenomenon under the study or precisely between the answers and what a researcher is planning to measure (Babbie 2001: 238-239, Fowler 1986:74). In the case of this research the questionnaire was a self-designed instrument for the purpose of the study.

The researcher used mostly closed ended questions. Closed ended questions contain a list of acceptable or possible responses (Fowler 1986:86). Fowler explains that the advantage of closed ended questions over open ended questions is the precision of easy measurable answers. It contributes to the validity of the results – in other words the meaning of the answers is reflected by what is measured in a clear straightforward way (idem. 87).

The questionnaire addressed the impact of trade liberalization on the financial assets of peasant farmers - an independent variable in the study. It was therefore concerned with establishing how or to what extent peasant farmers benefit from trade liberalization. It collected information on the following dependent variables: peasant's current assets, access to banking services, access to marketing outlets, access to extension services, a volume of tradable production, level of profit from agricultural trade, price satisfaction, non-agricultural income, a measure of living-conditions and life satisfaction.

The use of the questionnaire was advantageous in many ways: it was less time consuming to obtain information from many respondents. The questionnaire was administered by interviewers in face-to-face encounters (Babbie 2001:253). Two previously trained interviewers who were supervised by the researcher accessed the respondents in five main areas of Marera; this guaranteed a relatively swift turnaround of data. The interviewers were taught how to ensure cooperation of the potential respondents and how to stimulate their collaboration. They also played an important role in solving difficulties in interpreting questions; therefore the answers of the respondents were only conditioned by their different status or experience and not by lack of comprehension of the questions (Babbie 2001:258-259, Fowler 1986:107). Thus, a closed ended questionnaire contributed to the credibility of the result.

The reliability of the answers was guaranteed by the questionnaire design which used simple, short and widely understood terminology (Fowler 1986:79). The interviewers were trained to convey the meaning of the difficult concepts and questions in the local language. They asked for things about which the respondents were likely to know the answers; therefore, the respondents were able to answer exactly what questions asked for. Additionally, the content validity of the questionnaire was established after a prior pilot test (idem. 103-104). The variables preserved a logical relationship offering construct validity. For instance, benefits were presented as: peasant's income, ability to satisfy the needs of the family or general life satisfaction. Also, there was a logical connection between the variables related to the process of fruit production, market access and price as all of them have an impact on the benefits. Nevertheless Babbie (2001:268-269) pointed out that surveys tend to be artificial and that the responses are often only approximate indicators of what the researchers had in mind when they framed the questions.

In sum, the questionnaires served to obtain standardized information from many respondents which was later recorded and presented by the use of the statistical instruments (idem. 9).

#### 4.2.2.2 Interviews

The secondary research method used open ended, semi-structured interviews with a few respondents, the most representative participants from the sample (they were selected randomly from the previously made list of the peasant farmers who benefited the most from free trade, according to the questionnaire results). The open-ended questions gave the respondents the opportunity to explain the issues which had been raised in the form of a narrative or a story, which in the view of Auerbach and Silverstein is the best way of presenting subjective experience (2003:22-24). They provided supportive data and helped gain a deeper understanding of the issue under study. Each face-to-face interview lasted around 30 minutes and each was recorded using a Sony digital voice recording device. The interviews were administered by the researcher to guarantee fulfilment of the objectives of the interview and to guarantee greater confidentiality. Furthermore, the interviews followed standardized questions in order to achieve consistency (Fowler 1986:14,71).

The interviews followed live histories approach. The objective was to understand the perception of the respondents as to how they evaluated their lives and trade liberalization in the past and how they evaluated it now. The researcher invited the respondents to reflect on their experience of free trade in the decade of the 1990s and now in 2014. The choice of this particular starting date was dictated by three reasons:

a) In the 1990s Mozambique introduced free trade policies, as is reflected in the document from 1996 "Política Agrária e Respectivas Estratégias de Implementação" or PAEI (Agrarian Policies and the Implementation Methods) (Mozambique 1996).

- b) In 1996 Mozambique signed the final act of the Uruguay Round and started the process of trade liberalization (WTO: 2001).
- c) In 1992 Frelimo and Renamo signed the Peace Accord ending a long civil war (General peace agreement for Mozambique 1992:1-2).

Therefore, the researcher wanted to establish if there was progress in the area of free trade among the peasant farmers in Marera. Apart from a few questions which arose from the questionnaires needing supportive or cross-validating data, the peasant farmers were guided to explore the following grand tour questions:

The questions used in the interviews were as follows:

- 1. To what extent have your assets (possessions) changed over the years?
- 2. What do you do to improve your fruit production?
- 3. Do you have money in order to invest in your fruit production? If yes why? If no why? Explain.
- 4. How do you assess the price of fruit? Explain.
- 5. Do you think there is a link between the knowledge of fruit growing and the later profit?
- 6. How do you assess your knowledge in this field?
- 7. What is your experience of selling fruit (harvest)?
- 8. What can be done to improve the peasants' benefits?

The interviews were effective in placing the issue under study (trade liberalization and the impact it has on peasants farmers' livelihood) in their life contexts and they provided a deeper interpretation and understanding of the phenomenon (Mack, Woodsong, MacQueen, Guest and Namey 2005:29-30).

# 4.2.2.3 Sampling method

According to the 2007 census (INE 2007:24-25), the population of Marera, which is made up of five areas: Muconde, Chicanga, Mugagea, e Kanhyeza, e Muconje counted 18,727 inhabitants. However, in the study the researcher was only interested in the peasant farmers who had fruit orchards and sold fruit for their subsistence and who were in the age range 30 to 59. The researcher's choice of this particular age range was dictated by a number of reasons explained thereafter. The experience in growing fruit and trade and the age range were, therefore, two of the most important characteristics on which the selection of the sample was based (Gerring 2001:82).

- a) In the interviews the researcher was interested in the information regarding how the assets of the peasant farmers have changed over the years. Therefore only peasant farmers who were at the time of the study 30-59 years old could have a recollection of their assets going back to the decade of the 1990s.
- b) Also, the age range 30-59 is the most productive, peasant farmers already having some work and trade experience.

The process of defining a sample was as follows. In real numbers, the researcher had dealt with the universe of 3,810 inhabitants or 20% of the total population of Marera who were selected on the basis of the age range requirement (INE 2007:24-25). However, in practice the universe under study was much smaller due to the fact that in Marera not every inhabitant is a peasant farmer and grows and sells fruit as his or her primary activity. The local administration was not able to provide the records of peasant farmers who specifically grow fruit. Instead, it provided information that in Marera there are 3,288 families and 13 peasant farmers associations

consisting of 328 peasant farmers. Therefore, in reality the researcher dealt with an unknown number of peasant farmers, ranging somewhere between the previously established number of the inhabitants – 3,810 and the number of those congregated in peasant farmers' associations.

Due to the specificity of the field work situation the researcher used the non-probabilistic sampling method called the snowball sampling method. It helped the researcher to focus on the target population, that is, on peasant farmers who complied with the previously established prerequisites. The advantage of snowball sampling is explained by Berg (2001:33) who stated that it is the best way to locate subjects with certain attributes or characteristics necessary in the study. Furthermore, Denscombe (2007:17) underlines that it is also an effective way to build up a reasonably sized sample. Selected in this way the sample contributed to its external validity as it was genuinely representative of the population under study (Balnaves and Caputi 2001:89). Therefore, during the process of "snowballing", that is going from one to another respondent, who nominated two or three others with the similar characteristics, the researcher arrived at a sample of 90 peasant farmers, approximately 20 from each of the five areas of Marera (Denscombe 2007:18).

A sequential explanatory strategy of the design used two phases of the research and data collection. The first phase of the research used a questionnaire which provided standardized information.

The second phase used the interviews which provided in-depth information. For this phase in the research, ten respondents from the previous stage were randomly chosen. The most representative respondents refer to the peasant farmers who benefited the most from the free trade. On the basis of this it was presumed that they had the greater knowledge of the matter under study.

## 4.3 ANALYSIS OF DATA

# 4.3.1. Quantitative analysis

The researcher tested the following directional hypotheses:

Peasant farmers who have investment capital, knowledge, access to better markets and grow fruit in quantity benefit from trade liberalization.

The researcher distinguished various independent variables, among which  $x_1$ - investment capital,  $x_2$ - access to markets $x_3$ - knowledge,  $x_4$ - number of fruit trees, and a dependent variable y - benefits from trade liberalization (income level or satisfaction level).

The data was analysed using different statistical tools:

## 4.3.1.1 Descriptive statistics

In the process of analysis the researcher used nominal, ordinal and ratio measures. In the study nominal measures offered the choice of yes - no answers or the choice of the exhaustive, mutually exclusive categories (Belnaves and Caputi 2001:47, 77-78). Ordinal measures are variables with attributes which can be logically rank ordered and they represent relatively more or less of the variable (Babbie 2001:135). Ratio measures are variables with a true zero point (idem. 136). The researcher tested the central tendency and graphically presented the mode (the most frequently occurring value in the distribution) for each dependent variable especially dealing with nominal and ordinal measures. In this way he determined and presented the typical situation of peasant farmers in relation to various set of data.

Descriptive statistics helped to organize numeric data and present it in the form of figures, graphs and tables because it is an effective and efficient way of conveying and summarizing large amounts of information (Balnaves and Caputi 2001:118-119).

**Table 4.1: Description of the variables in descriptive statistics** 

Name of Variable	Range of possible values	Measurem ent level	Dependent (Y) or Independe nt (X) variable	Value and labels (nominal) the meaning of a higher score (for ordinal, interval, ratio)
Trees	0-200	ratio	Х	HV – richer, more assets
Years of farming	10-45	interval	Х	HV – more experience
Farm size in ha	1-5	interval	X	HV – more possibility, more assets
Title	1 to 2	nominal	Х	1 – has a title 2 – no title
Fruit type	1 to 4	nominal	Х	1 – bananas 2 – tangarines3- oranges 4 - pineapples
Productivity	1 to 3	ordinal	Х	1 – improvements 2 – same productivity 3 - less
Quality	1 to 3	ordinal	Х	1 – improvements 2 – same quality 3 - less
Pesticides	1 to 2	nominal	X	1 – use 2 - no use
Income per year	0 to 150.000,00 MZM	ratio	Х	HV – more benefits
Difficulty in commercializa tion	1 to 2	nominal	Х	1 – has difficulty 2 – doesn't have
Place of commercializa tion	1 to 2	nominal	Х	1 – locally 2 – In town

Price level	1 to 2	nominal	Х	1 – better 2 - the same
Price satisfaction	1 to 5	ordinal	Х	Higher Score – better satisfaction and benefits from trade
Access to markets	1 to 5	ordinal	Х	Higher Score – better access
Life quality	1 to 5	ordinal	X	Higher Score — better capacity to guarantee livelihood for the family
Bank account	1 to 2	nominal	X	1 – has 2 – doesn't have
Applied for a loan	1 to 2	nominal	X	1 – yes 2 – no
Got a loan	1 to 2	nominal	X	1 – yes 2 – no
Investment capital	0 to 150.000,00 MZM	ratio	Х	Higher Score – more money to invest
Loan difficulties	1 to 3	nominal	X	1 – yes 2 – no 3 – I don't know
School literacy	1 to 5	ordinal	Х	1-none 2-1-7 3- 7-10 4-10-12 5-university
School benefits	1 to 2	nominal	Х	1 – yes 2 – no
Level of knowledge	1 to 5	ordinal	Х	Higher Score – knowledge is more useful in agriculture
Access to extension	1 to 7	nominal	Х	Higher Score - better access
Life satisfaction	1 to 5	ordinal	Х	Higher score – life has improved more

### 4.3.1.2. Inferential statistics

## (i) Correlation coefficient

A correlation is the level of relationship between the variables under study (Balnaves and Caputi 2001:41). By using this statistical tool the researcher determined the level of correlation or its strength between the dependent (benefits from trade in terms of income) and the independent variables (farm size, number of trees and knowledge). Due to the fact that it was difficult to assess peasants' knowledge in the field of fruit production, the researcher created a new compound index of know-how. It was done by summing the scores of a number of questions related to knowledge, such as: experience, education, productivity, use of pesticides, contact with the extension worker, place of marketing, knowledge about markets, knowledge about loan application process, use of bank account, and the self–assessment of know-how in the field of fruit production. The researcher created a new compound index of know-how. The scores on this variable varied between: 13 - the lowest and 26 - the highest.

Table 4.2: Description of the variables in inferential statistics

Name of	Range of	Measurement	Dependent	Value and
Variable	possible	level	(Y) or	labels
	values		Independent	(nominal) the
			(X) variable	meaning of a
				higher score
				(for ordinal,
				interval,
				ratio)
Income per	0 -	ratio	Υ	Higher value
year	150.000,00			(HV) –
	MZM			greater
				benefits
Life	1 to 5	ordinal	Υ	Higher score
satisfaction				<ul><li>greater life</li></ul>
				satisfaction
Number of	0-20000	ratio	X	HV - richer

Trees				
Self assessment of "know- how"	1 to 5	ordinal	Х	Higher score  – better  knowledge  of agriculture
Education	1 to 4	ordinal	X	Higher score  – more years of education
Experience	1 to 4	ordinal	X	Higher score  — longer experience in fruit production
Productivity	1 to 3	nominal	X	Higher score  – better productivity
Use of pesticides	1 to 2	nominal	X	Higher score  – indicate  use of  pesticides
Knowledge about markets	1 to 5	ordinal	X	Higher score  – better access
Knowledge about loan application process	1 to 2	nominal	X	Higher score –indicate better knowledge
Bank account	1 to 2	nominal	X	Higher score  – indicate some knowledge in financial issues
Contact with extension	1 to 3	ordinal	Х	Higher score  – better access

The compound index of know-how was then divided according to the scores of the two groups: peasants with poor knowledge who scored 10 to 18 and peasants with better knowledge who scored 19 to 26.

# (ii) ANOVA test

By using this statistical tool the researcher tested the null hypothesis and the significance of the difference between the means of two and then three groups of peasants in relation to the benefits from trade, the dependent variable. The scores of the independent variable sum of know-how were divided into three groups: peasants with poor knowledge who scored 10 to 14 points, moderate knowledge 15-19 points and better knowledge 20-26 points. The data was computed with the SPSS programme, one of the most commonly used statistical packages in the social sciences (Greener 2008:57-58).

#### 4.4 QUALITATIVE ANALYSIS

# 4.4.1 What is a qualitative analysis?

The interviews were transcribed in Portuguese. The first part of the analysis of qualitative date is coding in order to describe a pattern in the data (Auerbach and Silverstein 2003:31). By doing this, the major themes and concepts were identified and they provided supplementary insights into the impact of trade liberalization on the livelihood assets of peasant farmers. According to Berg (2001:246-258) a theme is a simple sentence with a subject and a predicate, whereas a concept involves words grouped together into conceptual clusters (ideas). Some of the themes which emerged from the interviews were: life improved, the education is irrelevant, dissatisfaction with the price, lack of support in trading efforts, sense of helplessness.

The researcher was opened to the new ideas and theories which added to the richness of the qualitative approach and added new information to the theory (Auerbach and Silverstein 2003: 32-33).

## 4.4.2 Steps in coding

In the beginning of the process of coding it was difficult to see through the text, simply because there was so much textual information at hand. First, therefore, it was necessary to cut the text down to manageable proportions (Auerbach and Silverstein 2003:37). The researcher used Weft QDA software and followed the questions from the interviews to cut the text into smaller units.

Second, the researcher noticed that different respondents used the same or similar words and phrases to express the same ideas, thus themes were formed which expressed the implicit ideas of the respondents (Auerbach and Silverstein 37-38). The next step in coding was to elaborate theoretical constructs. In that stage the themes were joined into clusters, and the data started to be linked to theory.

Finally, the researcher organized theoretical constructs into a theoretical narrative, which summarized what was discovered and learned about the topic of the impact of trade liberalization on peasants' livelihoods (Auerbach and Silverstein 38-41). At this stage the researcher was able to retell the participants' stories in terms of theoretical constructs.

#### 4.5 LIMITATIONS OF THE STUDY

In order to guarantee the objectivity of the study the researcher reflected on some of the limitations of the research approach that was adopted (Denscombe 2007:5).

- that is measuring the benefits of fruit production and trade. In Denscombe's view (2007:22) a study which is focused on the income aspect is rather sensitive in nature, because it is difficult for a respondent to disclose his or her true income. Additionally, in case of the present study, the response rate might have somehow lacked precision as the fruit trade does not guarantee a regular income. It was also complicated to establish a precise annual income as peasant farmers do not keep any records of the transactions. Giving this, the researcher alternatively tested other indicators of income, such as ability to guarantee a livelihood for a family, to improve living conditions and their general life satisfaction.
- (ii) The study used a non-probabilistic sampling method snowball sampling. The limitation of non-probabilistic sampling method is that it may

not be representative of the population. However, the researcher used this method for various reasons, one being the lack of access to the list of inhabitants (the voting list). Secondly, the purpose of the research was to study how peasant farmers benefit from trade. The respondents had to fulfil the conditions to take part in the study. The conditions were related to their age and work (they had to be between 30-59 and they had to be fruit producers). The snowball method depended on the good will of the respondents who led us to other potential respondents. In order to guarantee that the researcher was assisted by the government local representatives who were informed about the objectives of the study and helped to access the respondents at their houses.

(iii) Another limitation was the language. The research was written in English; however, the questionnaire and the interviews had to be conducted in Portuguese. Some data or meaning can be lost in translations but the pre-test with three local peasant farmers helped to clarify some problems arising from the lack of comprehension of some terms, for instance, 'livelihoods' and 'assets'. The interviewers were prepared to deal with the problems as they were native and also local language speakers. Similarly, the researcher's knowledge of Portuguese and his ability to communicate in the local language "Chiutee" helped to clarify the linguistic problems.

(iv)The use of an informant (local extension worker) could have affected, to the certain extent, data collection, as he was a government employee and the choice of interviewees could have been manipulated in order to preserve good image. However, the objective of the research was to interview peasants who are involved in fruit production and who already had positive results. The snowball sampling method was also transparent in this regard.

(v)The race and the outside status of the researcher could have steered the research in particular direction however the researcher worked with an informant who helped to reduce fear or suspicion between him and the peasants. Similarly, the researcher tried to guarantee the objectivity by following the scientific rigor and in a qualitative part he triangulated the quantitative and qualitative data as a verification process and to achieve objectivity.

(vi)In this study gender (as a category) was not under consideration. The researcher was interested in peasant farmers' benefits (it was not specified if they should be male or female). The respondents had to fulfil only two already earlier mentioned conditions related to age and type of production. The objective was to determine if and how peasant farmers benefit from trade. It is possible that in a future study which may have a comparative nature, attention will be also paid to gender as a category.

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### 4.6 RESEARCH ETHICS

During the study the researcher used a questionnaire and an interview with a selected population.

## (i) Informed consent

The participants in the research were informed about the purpose of the study and their role. They were asked if they voluntarily consented to take part in it. The photographs were taken with their oral consent.

# (ii) Anonymity and confidentiality.

Each participant had his or her privacy guaranteed and the effort was made to ensure that any information which might hurt or damage participants' integrity was not disclosed neither intentionally nor accidentally. In order to do this the participants in the interviews were

attributed numbers so that their anonymity was protected. Those with access to information provided in the survey or interviews were bound to preserve participants' privacy.

## (iii) Management of information.

The study is authentic and the researcher did not manipulate date to suite his own personal views but, instead, he presented the true facts of the findings. Notes, transcripts and recordings with the information concerning the research were kept secure in a form of password-protected files on the researcher's personal computer and the questionnaires were locked in the researcher's cabinet.

#### 4.7 CONCLUSION

The chapter presented the research methodology and it explained how the field work was undertaken. It explained how the mixed method approach was used and what its main advantages were. The researcher described his methodology and presented a plan for the field work and the sampling and interviewing strategies. It also gave the format of the subsequent analysis of the quantitative and qualitative data.

Thus in the next chapter the researcher is going to present the data analysis using various statistical techniques and, at the end, he will discuss the findings.

## **CHAPTER 5: DATA ANALYSIS**

## 5.1 INTRODUCTION

In this chapter, the researcher presents the analysis of the data obtained in the fieldwork. The chapter is divided into two sections: presentation of the quantitative data and then presentation of the qualitative data.

In order to establish if peasant farmers benefit from free trade, the researcher used descriptive statistics and presented factors which impact on their income. They are: experience, size of a farm, number of fruit trees, quality of production, use of pesticides, access to banking services and markets, price and the agricultural know-how.

The researcher tested the following directional hypotheses: Peasant farmers who have investment capital, knowledge, access to better markets and grow fruit in quantity benefit from trade liberalization whereby the benefit is measured in income per year.

The directional hypothesis based on what proponents of trade liberalization believe as stated by Head (2008:168) when he argues that increased trade brings economic gains. It is also in line with the Washington Consensus' strategy to foster development, especially as presented in John Williamson's 10 points manifesto (2004:3-4) for economic reform in developing countries: especially under point 6 (Trade Liberalization), point 8 (Privatization) and point 9 (Deregulation). These three issues are interlinked and advocate less involvement of states in matters of economy, privatization of state-run enterprises and promotion of trade as a program to foster development and lead the countries out of poverty.

However, data analysis of this chapter contests these claims and shows that even though the economic situation of peasant farmers is slightly improving, the gains from free trade are very limited. Therefore, the findings of this chapter are in line with the case studies from the literature review, for instance: Cooksey's (2011), Roy's (2010), Sharma's (2010) and Topolova's (2007).

#### 5.2 PRESENTATION OF THE QUANTITATIVE DATA

# 5.2.1 Background information

During the fieldwork the researcher surveyed 90 peasant fruit farmers. The process of collecting data was time consuming due to difficult terrain, access roads and dispersed farm locations. In order to deal with the situation the researcher rented two bicycles to facilitate moving between the farms and was accompanied by the local extension worker who showed directions and helped to establish friendly and trustworthy contacts during the interviews (Photo 5.1 and 5.2).



Moving around in the terrain. The roads and paths are only known to the locals. (Photo 5.1: Author)



The researcher and peasant farmers collaborated with ease and friendliness. (Photo 5.2: Author)

The mean number of years that the sample of peasant farmers had experience of growing fruit was established as 20.38 years (see *Table 5.1 below*). 57.8% of the farmers have been growing fruits for 20 years or more. Thus, all the respondents were experienced farmers, capable of providing information on the issues under study. In fact, during the fieldwork in Marera, the researcher encountered few younger generation fruit growers which may indicate a possible drain of human resources (moving to town in search of better living conditions).

Table 5.1: Years of experience of growing fruit (N=90)

Years of experience	Frequency	Percent
Land the second	00	40.0
Less than 20 years	38	42.2
20-24 years	31	34.4
25 + years	21	23.4
Total	90	100.0
Mean	20.	.38

As shown in Table 5.2 (below), the principle types of fruit plants grown in Marera were bananas (on average 1661.33 trees per farm), tangerines (on

average 818.96 trees per farm), oranges (on average 307.53 trees per farm) and pineapples (on average 1206.25 plants per farm). The figures represent the mean of each type of a fruit plant per peasant farmer. The figures show that, on average, peasant farmers have a significant number of fruit plants although the numbers were recorded on the basis of the respondents' information. On various occasions the researcher had a chance to visually verify the veracity of the facts reported (Photo 5.3).



The researcher verifies visually one of the banana plantations. (Photo 5.3: Author)

It is noteworthy to mention that during the course of the fieldwork it was found that none of the surveyed respondents kept a record of his or her assets, expenses or income. Due to the lack of written information, the respondents were able to provide only approximate numbers. As a result, one may conclude that peasant farmers lack basic managerial skills and are unable to have a clear idea about their turnover in fruit production.

Table 5.2: Mean number of fruit plants/trees per farm (N=90)

	Bananas	Tangerines	Oranges	Pineapples
N	90	90	90	88
Mean	1661.33	818.96	307.53	1206.25
Std. Deviation	1829.623	851.698	679.396	4583.114

The researcher linked the apparent lack of management knowledge among the farmers in Marera to their low literacy level. As shown in Table 5.3 (below), 83.3% of the respondents had some primary school education and only 14.4% had some secondary school education. This low level of educational attainment by the peasant farmers should be seen in terms of colonial constraints that limited access to schooling to just four years for the indigenous population (before 1975) and the 17 year long Civil War (1975-1992) (Newitt 1995, Chirime, 2000).

Table 5.3: Highest level of education attained (N=90)

Qualification	Frequency	Percent
None	1	1.1
Primary school	75	83.3
Secondary school	13	14.4
Other	1	1.1
Total	90	100.0

The mean farm size in Marera was established to be 4.24 ha, although more than half (51.2%) of the farms are smaller, ranging from 1 to 3 hectares (see Table 5.4 below). This corresponds with the national average of 1.8 ha. which is quoted by the Ministerio de Planificação e Desenvolvimento (Mozambique 2010a:46). On the other hand, 82.3% of all farms in the research area were between 1 to 5 hectares. Based on the

farm size one may say that many fruit growers have the potential to increase their production. It is also necessary to point out that out of 90 farmers only 87 held the legal property title to their land (see Table 5.5 below). Commentators, such as Mosca (2011:120) and The Oakland Institute (2011:4), suggest that the reason for this might be that peasant farmers are unaware of the potential implications (for example acquisition of land by a foreign company).

Table 5.4: Size of a farm in hectares per farmer (N=90)

Hectares	Frequency	Percent
1-3	46	51.2
4-5	28	31.1
6 + hectares	16	17.7
Total	90	100.0
Mean size	4.25	5 ha

Table 5.5: Whether the farmers hold a legal title to their land (N=90)

	Frequency	Percent
Yes	3	3.3
No	87	96.7
Total	90	100.0

## 5.2.2 The process of labour

The fieldwork verified that peasant farmers' agriculture relies mainly on their physical strength, which affects productivity. All work, such as preparing a field, planting, weeding, or harvesting is done manually. Some farmers rely on a hired workforce to carry out labour-intensive tasks, such as weeding, especially during the rainy season when the grass grows fast and easily takes control of plantations. In relation to this the FAO (2006:1 and 2012a:25) reports that a lack of mechanisation is the principle cause of

low productivity. Rostow (1991:23-24) also believes that the mechanisation of agriculture is a necessary precondition for the "take off" of national development. According to his view, agriculture is a motor of development and it can contribute a substantial part of its surplus to the overall economy (Rostow 1991:23-24).

For the peasant farmers in Marera, mechanisation of agriculture is a farreaching dream. Their production is not only manual but also raindependent. Yet, a surprising 86.7% of the respondents declared that they increase their production every year and 24% of the respondents were of the opinion that the quality of their fruit production has improved. At the same time, however, two thirds (66.7%) of the respondents linked fruit quality to the amount of rain received (see Table 5.6 and 5.7 below).

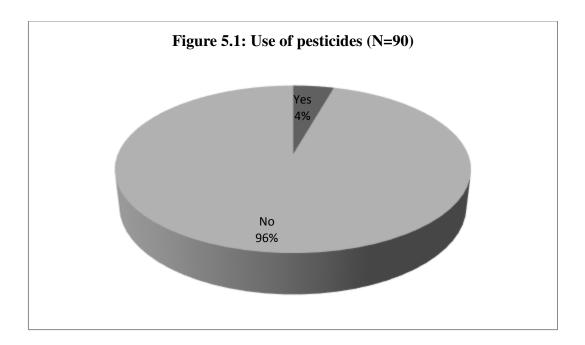
Table 5.6: Whether production increased since last year (N=90)

Response	Frequency	Percent
Yes	78	86.7
Production is the same	9	10.0
No	3	3.3
Total	90	100.0

Table 5.7: Responses to the question: "Is the quality of your fruit production improving?"

Response	Frequency	Percent
Yes	22	24.4
Same quality	6	6.7
No	2	2.2
Depends on the amount of rain	60	66.7
Total	90	100.0

As shown in Figure 5.1 (below) only 4.4% of the respondents declared a limited use of pesticides to protect their harvest from pests. This corresponds with the Ministerio de Planificação e Desenvolvimento report, pointing to the diminishing use of pesticides from 6.8% to 3.8% (MPD, 2010:47). Furthermore, in the view of Cunguara and Hanlon (2012:634-642), the state's role in agriculture is limited by the fiscal and budgetary cuts. These cuts, in turn, imply less money made available for subsidies, extension help and other direct help for the farmers. However, this is in line with the Washington Consensus regarding privatisation and deregulation.



The experience of the Ugandan banana producers as discussed in the literature review is very much in line with what was found in this study. However, unlike the Marera peasants, the Ugandan farmers were more aware of the diminishing quality of the fruit that leads to poor access to more profitable markets (Acord 2010: 1-8).

#### 5.2.3 Access to finance

As shown in Tables 5.8, 5.9 and 5.10 only 24.4% of the peasant farmers in this study had a bank account. In addition, 11.1% had already applied for a bank loan and 8.6% had received a bank loan. Table 5.11 shows that in real numbers out of ten who applied for a bank loan, eight were successful.

Table 5.8: Responses to the question: "Do you hold a bank account?" (N=90)

Response	Frequency	Percent
Yes	22	24.4
No	68	75.6
Total	90	100.0

Table 5.9: Responses to the question: "Have you ever applied for a bank loan or a loan from a microfinance organization?" (N=90)

Response	Frequency	Percent
Yes	10	11.1
No	80	88.9
Total	90	100.0

Table 5.10: Responses to the question: "Have you ever received a loan from a bank or from a microfinance organisation?" (N=90)

Response	Frequency	Percent
Yes	8	8.9
No	82	91.1
Total	90	100.0

Table 5.11: Loan application responses by loan received responses (N=90)

		Loan received		Total
		Not	Received	
		received		
Loan	Yes	2	8	10
application	No	80	0	80
Total	•	82	8	90

Nevertheless, as shown in Table 5.12, 96% of peasant farmers in the study consider the loan application process to be either too difficult (38.9%) or do not have sufficient information regarding application procedures (57.8%). Only 3.3% of peasant farmers considered loan procedures to be easy. Table 5.13 shows that the majority of peasant farmers, even those who applied for a loan, consider the application procedures difficult.

Table 5.12: Perception of loan procedures (N=90)

	Frequency	Percent
Easy	3	3.3
Do not know	52	57.8
Difficult	35	38.9
Total	90	100.0

Table 5.13: Perception of the loan procedure by loan application history (N=90)

		Perception of loan procedures (Frequency)			Total
		Easy	Do not know	Difficult	-
Loan	Yes	2	0	8	10
application (Frequency)	No	1	52	27	80
Total	•	3	52	35	90

Therefore, the peasant farmers in the study can expand their production only by relying mostly on immediately available funds from sales. It is necessary to emphasise that although they tend to go to Chimoio, which is only about 20 km away from Marera and many sell the harvest there, most do not have a bank account and do not try to use other banking services which are available in Chimoio.

#### 5.2.4 Access to better markets

Access to better markets and fetching better prices seem to be the principle concerns of the peasant farmers in Marera. Free trade principles open the markets for agricultural products to be sold at any domestic (and in principle any international) market. At least this is what is affirmed in the trade liberalization principle. However, the Marera peasant farmers' experience is rather limited in relation to new markets. Most of their production is sold locally in Marera, although some of them manage to take their harvest to Chimoio and very few are able to sell in other locations.



Transporting bananas to Chimoio. 2014 (Photo 5.4: Author)



Transporting bananas to Chimoio. 2014 (Photo 5.5: Author)

During the fieldwork, the researcher often heard the farmers mention the high cost of transport as one of the difficulties in making more profit. Often bananas are transported to Chimoio market (a distance of 25-30 km) on bicycles (see above Photos 5.4 and 5.5). Peasant farmers who decide to sell locally are exploited by middle men and tradesmen who come to Marera to buy and take advantage of the peasant farmers' multiple vulnerabilities: such as their lack of education, the lack of storage facilities and the lack of negotiating power due to the pressure to sell the harvest lest it spoils at the road side. The data shows that it is difficult for many of

the peasant farmers to access markets other than the Marera and Chimoio markets (see Tables 5.14 and 5.15).

Table 5. 14: Responses to the question: "Is it easy to sell fruit in Marera?"

	Frequency	Per cent
Yes	72	80.0
No	17	18.9
Total	90	100.0

Table 5. 15: Responses to the question: "Where do you sell your fruit?"

	Frequency	Per cent
Locally	60	66.7
In Chimoio	26	28.9
Other	4	4.4
Total	90	100.0

Comparable peasant farmers' experience was already reported in the literature review indicating that the high marketing costs are influenced by poor access to transport, a lack of storage facilities and poor sales infrastructure (Jayne et al. 1999:13-22). Fourteen years after the end of the civil war, two thirds (66.7%) of the farmers sell locally (see Table 5.15 above). Although 56.7% realize that the price is better in Chimoio or elsewhere, they have no other option than to sell locally (see Table 5.16).

As shown in Table 5.16, when the respondents were asked if they knew about the markets which offer a better price, their answers were generally limited to two places: Marera (43.3%) and Chimoio (44.4%). The sales preferences were divided evenly based on the peasants' subjective

experience. However, it is necessary to underline that 11% of peasant farmers knew that they could sell their produce for a better price at "other" markets that are further from away from the place of production.

Table 5.16: Responses to the question: "Where can you get a better price?"

	Frequency	Percent
Locally	39	43.3
Chimoio	40	44.5
Other	11	12.2
Total	90	100.0

But Table 5.17 shows that 86.6% of the peasant farmers in this study have neither sufficient access to the markets where they can fetch a better price or lacked reliable information on better marketing possibilities. This is a picture of a "dependent periphery" as presented by Cardoso and Faletto (1979:160-162), when he says that in dependent countries development is conditioned by the process of expansion of the developed and capital abundant economies. According to this scenario, the peasant farmers in Marera are waiting for the investment capital to unleash the potential of their agriculture and facilitate the process of marketing.

Table 5.17: Responses to the question: "In your opinion, is the access good to the markets where you can get a better price?"

	Frequency	Percent
I do not have information on such markets	11	12.2
I have no access to such markets	67	74.4
Do not know	1	1.1
Yes, I have reasonable access to such markets	11	12.2
Total	90	100.0

#### 5.2.5 Peasant farmers' assessment of the price of fruit in Marera

The government tried to introduce some basic control on prices in Marera to protect peasant farmers from exploitation. This is in line with point 21 of "Política Agrária e Respectivas Estratégias de Implementação", where it states the need for improving local markets, and establishing some price control for agricultural products (Mozambique 1996). Thus, for instance, a bunch of bananas is sold for 40 MZM (1.25 USD) and a case of tangerines (250) for about 70 MZM (2.10 USD). Contrary to this, 93.3% of peasant farmers testify that they have to negotiate the price (see Table 5.18). In addition, tangerines and oranges are not crated but, instead, simply loaded on pick-ups and small trucks and then transported to Chimoio. A pick-up price of tangerines (about a ton) can reach roughly 1,500.00 MZM (about 50 USD).

Table 5.18: How the price of fruit is determined

	Frequency	Per cent
By the seller	1	1.1
Price is fixed	5	5.6
Price is negotiated	84	93.3
Total	90	100.0

Peasant farmers are generally not satisfied with the price they obtain for their fruit. As shown in Table 5.19, only 2.2% were satisfied. The majority (75.6%) declared that they are just surviving, whereas 18.9% were dissatisfied and 3.3% were very dissatisfied. In the researcher's view the peasant farmers assessed the price satisfaction according to their own limited marketing experience and conformed to it.

**Table 5.19: Perceptions of price (satisfaction level)** 

	Frequency	Percent
Very dissatisfied	3	3.3
Dissatisfied	17	18.9
Just surviving	68	75.6
Satisfied	2	2.2
Very satisfied	0	0.0
Total	90	100.0

In the literature review the researcher has already discussed the issue of low prices for agricultural commodities. In that discussion reference was made to case studies that showed that the low price for cotton, coffee or bananas is the reason for peasants' poverty (Acord 2010:1-8, Cooksey 2011:557, Roy 2010:309). At the same time, it was argued that the prices do not depend on producers, but instead are either set by traders or they are regulated by the international market. It was also argued that low food prices principally benefit consumers in developed countries. This is also in line with Murphy (2006) who argues that liberalization benefits foremost those who control the market and set the price. He underlines that the dominance of supermarkets and retail chains in market control should be a concern to public policy makers (Murphy 2006). Moreover Engels (1847) in his early analysis of free trade concluded that it only served, as he put it, "economic bourgeoisie to dominate the world and it contributes to greater exploitation of the workers" (Engels 1847:282).

#### 5.2.6 Knowledge of agriculture

The question of know-how in agriculture, like in any other productive activity, is decisive. The low literacy levels among peasant farmers has already been reported as having a negative impact on their managerial skills which was reflected earlier by the lack of records of income,

expenses and assets. Agricultural know-how is related to the process of farming, which is the efficiency of labour in achieving good results. As shown in Table 5.20, only 53% of the respondents declared to have some knowledge in the area of growing fruit and only 6.7% a lot of knowledge.

Table 5.20: Respondents' self-rated know-how on how to improve production

	Frequency	Per cent
Do not have any knowledge	2	2.2
Do not have a lot of knowledge	34	37.8
Have some knowledge	48	53.3
Have a lot of knowledge	6	6.7
Total	90	100.0

In Marera all labour is manual and peasants need various skills. Most have access to good quality seeds through the local agricultural department; however, their lack of access to finance impacts negatively on production in as far as it is necessary to upgrade fruit growing procedures and effect improvements.

As shown in Table 5.21, only 3% of peasant farmers in Marera declared frequent contact with an agricultural extension worker who performs his duties but with very limited resources. It has already been pointed out in the literature review that there is a trend of limiting budgetary expenses on agriculture in Mozambique. For instance, the Third National Poverty Assessment stated that households benefiting from extension services declined from 13.5% in 2002 to 8.3% in 2008, which means that there is less training for farmers. Mosca (2011:233) sees the lack of agricultural knowledge as a principle reason for low productivity. Therefore, it would be

very beneficial for the peasant farmers, who do not have higher or even secondary education to have constant training and specialized supervision.

Table 5.21: Whether the respondents have received a visit from an extension practitioner in the last year

	Frequency	Percent
Never	71	78.9
A few times	16	17.8
Many times	3	3.3
Total	90	100.0

Apart from the limited extension services, the farmers can improve their skills by attending training courses at various associations. According to the information provided by the local administration, Marera has 13 farmers' associations which specialize in improving agricultural skills. At the time of the data-gathering there were 328 peasant farmers involved in such activities but only 23 directly linked with fruit production. It was rather a surprising discovery, bearing in mind the importance of fruit production as a principle cash crop for so many peasant farmers.

#### 5.2.7 Income and satisfaction

The research focused on peasant farmers' income and life satisfaction. Although peasant farmers have diversified livelihood strategies, fruit growing provides the most important cash crop in Marera. As shown in Table 5.22, the average peasant farmers' income from fruit sale per year is 30,737.22 MZM, giving roughly 2,561.41 MZM per month (about 85 USD). However, the median is much lower. It is 24,000.00 MZM and a standard deviation is high, 22,336.92, which points to a lot of dispersion in income levels among farmers. The lowest income is 3,000.00 (100 USD) and the highest is 101,000.00 around (3,300.00 USD).

While peasant farmers' income is low, it is still higher than the national minimum income in the agriculture sector – 2,500.00 MZM (Mozambique 2013b). On the other hand, the peasant farmers' income can be foremost attributed to their hard work and not so much trade liberalization.

Table 5.22: Income per year in MZM

N	Valid	90
	Missing	0
Mean		30737.22
Median		24000.00
Std. Deviation		22336.923

As shown in Table 5.23, the majority of the respondents (73.3%) assess their lives as little better than 10-15 years ago, although only 5.6% have experienced substantial improvements. Less than one out of five (17.8%) of the respondents regarded their situations as unimproved and 3.3% regarded them as worse than in the past.

Table 5.23: Responses to the question: "Do you consider your general situation better than 10 or 15 years ago?"

	Frequency	Percent
NA/	0	0.0
Worse	3	3.3
The same	16	17.8
Little improvement	66	73.3
Quite improved	5	5.6
Total	90	100.0

#### 5.2.8 Hypothesis testing

The researcher tested the following directional hypothesis: Peasant farmers who have investment capital, knowledge, access to better markets and grow fruit in quantity benefit from trade liberalization.

 $H_0$ : p = 0 Null hypothesis implies that there is no linear relationship between the dependent and independent variables.

 $H_1$ :p < 0 The alternative hypothesis is directional because the researcher believes that the income per year will increase when the investment capital, knowledge, access to better markets and fruit in quantity increase, implying a positive correlation.

#### 5.2.8.1 Access to finance through loans and their impact on income

During the course of the fieldwork, the researcher established that peasant farmers have some, yet very limited, access to finance. Among the interviewed peasant farmers, 88.9% never applied for a bank loan and 96% either did not have sufficient information about the loan procedures or considered them difficult and thus had never tried. Effectively, out of ten applicants for a bank loan, eight had been successful.

Table 5.24: Income per year in MZM for two groups of farmers with and without a loan

Loan received	Mean	N	Std. Deviation
No	30881.71	82	21541.441
Yes	29256.25	8	31118.592
Total	30737.22	90	22336.923

As shown in Table 5.24, the amount of money which was loaned ranged between 3.000,00 MZM and 20.000,00 MZM (100-670 USD). Thus, those

with a loan have a slightly lower annual income than those without it. The size of the loan-receiving group influences this, as only eight had loans. In addition, the amount loaned was not very significant in terms of cash crop fruit production. Taking into account the peasant farmers' limited experience in dealing with banks, the researcher established that the only investment capital is their land, the number of fruit trees and the availability of manual labour.

## 5.2.8.2 Access to the productive resources and their impact on income

The researcher performed two correlation tests and tested the significance of the relationship between independent variables (x<sub>1</sub>) farm size and (x<sub>2</sub>) number of fruit trees in relation to the dependent variable (y) - income per annum. As shown in Tables 5.25 and 5.26, the Pearson coefficient for the relationship between size of a farm and income was 0.596 and the Pearson coefficient for the relationship between the numbers of fruit trees was 0.482. Both coefficients are positive, which means that as farm size or number of trees increase, income per year increases, too. However, the relationship between farm size and income at 0.596 is stronger than the relationship between number of trees and income at 0.482. At the same time both results are half as large as possible (perfect correlation is 1), which means that other factors influence income.

Table 5.25: Correlation of farm size and income

		Income per	Size of a farm in ha
		year in	
		MTN	
	Pearson	1	.596**
Income per year in	Correlation	1	.550
MTN	Sig. (2-tailed)		.000
	N	90	90
	Pearson	.596**	1
Size of a farm in ha	Correlation	.550	'
	Sig. (2-tailed)	.000	
	N	90	90

<sup>\*\*.</sup> Correlation is significant at the 0.01 alpha level (2-tailed).

Table 5.26: Correlation of the number of fruit trees and income

		Income per year in MTN	Number of fruit trees
Income per year in	Pearson Correlation	1	.482**
MTN	Sig. (2-tailed)		.000
	N	90	90
Number of fruit	Pearson Correlation	.482**	1
trees	Sig. (2-tailed)	.000	
	N	90	90

<sup>\*\*.</sup> Correlation is significant at the 0.01 alpha level (2-tailed).

The correlation matrix in two cases also gives the probability of being wrong if we assume that the relationship we find in our sample accurately

reflects the relationship between farm size and the number of trees and income per year that exists in the total population from which the sample was drawn. The probability value is .000, which is below the threshold of p < .01. Thus, the alternative hypothesis is supported. There is a positive relationship between the size of the farm and income and the number of fruit trees and income and the results can be generalized to the population (p < .01).

Furthermore, knowledge and access to better markets are two more variables which are important in the researcher's hypothesis. As far as knowledge or know-how is concerned, it was already noted that most peasant farmers in this study did not complete secondary school education. In addition, the analysis of data pointed out two facts: firstly that peasant farmers in Marera have limited contact with the extension services and, secondly, that the respondents' subjective evaluation of their knowledge in respect to fruit production is poor.

#### 5.2.8.3 Access to knowledge and its impact on income

The researcher tried to assess the relationship between the knowledge and the income level by summing the scores of a number of question items. These questions items were related to: experience (Table 5.1), education (Table 5.3), productivity (Table 5.6), use of pesticides (Figure 5.1), contact with the extension worker (Table 5.21), place of marketing (Table 5.15), knowledge about markets (Table 5.16), knowledge about loan application process (Table 5.12), use of bank account (Table 5.8), and the self–assessment of know-how in the field of fruit production (Table 5.20). In this way the researcher created a new compound index of know-how. The scores on this variable varied between 13 - the lowest and 26 - the highest.

Spearman's rho is designed to analyse variables that are not normally distributed, or which are not parametric as is the case of the variable knowhow. The researcher used SPSS to calculate both the Pearson's correlation coefficient and the Spearman's rho and found some divergence. As shown in Table 5.27, the Pearson's correlation coefficient was significant at .376 whereas Table 5.28 shows that the Spearman's rho was higher at .381

Table 5.27: Pearson's correlation of the sum of know-how and income

		Income per year in	Sum of know- how
		MTN	
	Pearson	1	.376*
Income per year in	Correlation	1	.570
MTN	Sig. (2-tailed)		.000
	N	90	90
	Pearson	.376*	1
Sum of know-how	Correlation	.070	'
Carri of Know-now	Sig. (2-tailed)	.000	
	N	90	90

<sup>\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

Table 5.28 Spearman's correlation of the sum of know-how and income

		Income per year in MTN	Sum of know- how
Spearman's rho	Correlation	1.000	.381**
Income per year in	Coefficient	1.000	.501

	Sig. (2-tailed)		.000	
	N	90	90	
	Correlation	.381**	1.000	
Sum of know-how	Coefficient	.301	1.000	
Sum of know-now	Sig. (2-tailed)	.000	•	
	N	90	90	

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

However, taking into account that the perfect correlation is 1, these are weak correlations implying that other factors play a role. Both tests are also significant. In the case of Pearson's coefficient the probability value is .000, which is below the threshold of p < .01, meaning that the results can be generalized to the population. In case of Spearman's rho the probability value is also at .000 which is also below the threshold of p < .01.

The two correlation tests indicate that knowledge or know-how is indeed important in order to achieve good results but it is not the only factor. As it was already demonstrated also the size of a farm and the number of trees are important and correlate positively with income level.

# 5.8.2.4 Testing if there is a difference between poor, moderate and better knowledge groups and income benefit

The question arose as to whether or not the peasants with better know-how benefit from it. To answer this question, the scores of the variable sum of know-how were divided first into two categories: peasant farmers with poor knowledge who scored 13-18 and peasant farmers with better knowledge who scored 19-25.

In Table 5.29 the means between the scores are compared. It was found that the peasant farmers with better knowledge have a better mean income

per year of 46,174.07 MZM and the peasant farmers with poor knowledge had much a lower income of 24,121.43MZM.

The difference in mean annual income is quite significant, thus better knowledge has a positive impact on income levels among peasant farmers in Marera. At the same time it was noted that the number of cases in both groups is not equally distributed. There are 63 peasant farmers with poor knowledge as compared to 27 with better knowledge.

Table 5.29: Mean annual income by score for two categories of know-how scores

know-how Score	Mean Annual	N	Std.	Minimum
Group	Income		Deviation	
13-18(Poor	24121.43	63	17869.583	3000
knowledge)	24121.43	03	17009.303	3000
19-25(Better	46174.07	27	24350.088	9500
knowledge)	40174.07	21	24000.000	9300
Total	30737.22	90	22336.923	3000

The researcher decided to further divide the scores of the variable know-how into three categories: peasant farmers with poor knowledge: 13-14, peasant farmers with moderate knowledge: 15-17 and those with better knowledge who scored 18 and above.

Table 5.30 demonstrates that the mean annual income per group with poor, moderate and better knowledge differ. However, the differences are not equally distributed. The peasant farmers with better knowledge have a higher mean income per year (46,143.07 MZM) than the peasant farmers with moderate knowledge (23,239.47 MZM) and poor knowledge (18,973.68 MZM).

Table 5.30: Mean annual income by score for three categories of know-how scores

know-how Score Group	Mean	N	Std. Deviation	Minimum
Poor knowledge	18973.68	19	15685.763	3600
Moderate knowledge	23239.47	38	15309.766	3000
Better knowledge	46143.94	33	24177.575	9500
Total	30737.22	90	22336.923	3000

#### 5.2.8.5 ANOVA for testing the null hypothesis

To test if the observed differences are significant in terms of hypothesis testing, the researcher performed a univariate analysis of variance test (ANOVA). ANOVA is considered a robust test accepting various abnormalities in the data (Moore 2000:511-512, Elifson, Runyon and Haber 1998:367). Nevertheless, the researcher checked various assumptions before running the ANOVA and used Welch's ANOVA for discussing the results.

## (i) Testing for outliers in the data

As a first step the researcher tested for any outliers in the data. As shown in Figures 5.2 and 5.3, outliers were identified as values greater than 1.5 in the poor knowledge group there were three outliers and in the better knowledge group there were also three. The researcher identified some data entry errors due to either the interviewers' negligence while recording income data or the peasant farmers' imprecise information. In fact, it was stated earlier that peasant farmers do not have any written records of their income and at times it might have been difficult to elicit relevant information.

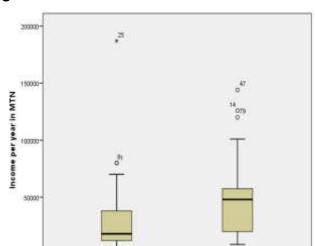


Figure 5.2: The outliers before the correction

Having made the corrections, most of the outliers were eliminated. However, a single data entry, respondent number 25, remained an outlier even with corrections. Nevertheless, the researcher decided to perform the tests as he believed that a solitary outlier would not affect the results significantly.

Groups

Poor knowledge

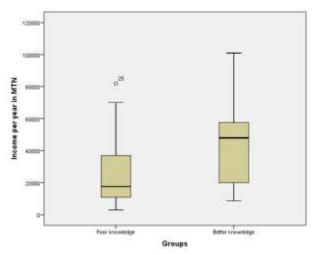


Figure 5.3: The outliers after correction of the data.

### (ii) Testing for normal distribution in the data

In the next step the researcher performed a Shapiro Wilk Test of normality for both data sets, namely the groups with two and three categories, in order to verify if data was distributed normally.

Table 5.31: Tests of normality for two groups

	Group2	Kolmogorov-			Shapiro-Wilk		
		Sn	nirnov	<sub>/</sub> a			
		Statistic	df	Sig.	Statistic	df	Sig.
Income per	Poor Knowledge	.197	63	.000	.890	63	.000
year in	Better	.089	27	.200*	.966	27	.501
MTN	knowledge						

<sup>\*.</sup> This is a lower bound of the true significance.

Table 5.32: Tests of normality for three groups

	Group3	Kolmogorov-		Shapiro-Wilk		'ilk	
		Smirnov <sup>a</sup>					
		Statistic	df	Sig.	Statistic	df	Sig.
	Poor knowledge	.251	19	.003	.784	19	.001
Income per	Moderate	.177	38	.004	.925	38	.014
year in	knowledge	, ,	00	.001	.020	00	.011
MTN	Better	.098	33	.200*	.962	33	.297
	knowledge	.000		.200	.002	00	.207

<sup>\*.</sup> This is a lower bound of the true significance.

In Table 5.31 the result shows that the assumption of normality is violated. The significance level for the poor knowledge group is less than .05 (i.e., p<.05) p=.000. This demonstrates that the dependent variable is not

a. Lilliefors Significance Correction

a. Lilliefors Significance Correction

normally distributed. For better knowledge p=.501 it reflects a marginally normal distribution.

Table 5.32 shows that in the poor knowledge group (p= .001), in the moderate knowledge group (p=.014) and in the better knowledge group (p=.297) the assumption of normality is violated. Thus, both tests show that data is not normally distributed.

#### (iii) Testing for homogeneity of variance

ANOVA assumes that the population variances of the dependent variable are equal for all groups. Therefore, the researcher tested for the homogeneity of variance by performing Levene's test. The Levene's test assesses the null hypothesis that the variances in different groups are equal. As shown in Tables 5.33 and 5.34, the tests showed the following results: for the independent variable with two levels (poor and better knowledge) p = .053 (p> .05) the assumption of the homogeneity of variance is marginally preserved. However for the data with three levels (poor, moderate and better knowledge) p = .011 (p< .05), meaning that the assumption of the homogeneity of variance is violated.

Table 5.33: Income per year in MZM, two groups

Levene	df1	df2	Sig.
Statistic			
3.853	1	88	.053

Table 5.34: Income per year in MZM, three groups

Levene	df1	df2	Sig.
Statistic			
4.729	2	87	.011

Having asserted the homogeneity of variance for the independent variable with two levels, the researcher decided to perform ANOVA on the basis of Moore's (2000: 511-512) and Elifson's et al. (1998:367) information about its robustness (the ability to deal with abnormal sets of data).

#### (iv) ANOVA, testing for the differences between groups

First, the researcher performed an ANOVA for the two "know-how" groups – those with poor and better knowledge. As shown in Table 4.35, the Fratio is 22.969 at a significance level below 5% (p=.000). This indicates that there is a statistically meaningful difference between the mean annual income of peasant farmers with poor and better knowledge. Thus, knowledge has a significant effect on income.

Table 5.36 and the box plot shown in Figure 5.4 demonstrate the differences in the mean income for the three "know how" groups. Incomes increase as knowledge increases.

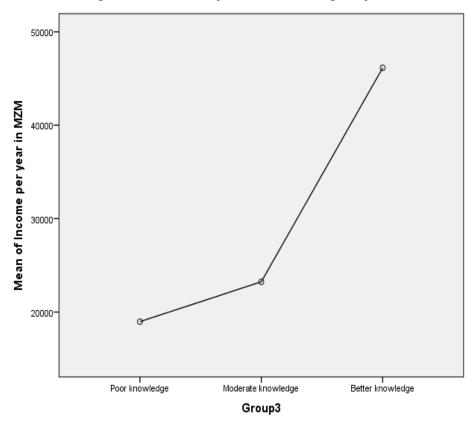
Table 5.35: ANOVA for two groups: differences in income per year in MZM

	Sum of Squares	df	Mean Square	F	Sig.
Between	9191432382.275	1	9191432382.275	22 969	.000
Groups	3131402002.273	•	3131402002.273	22.505	.000
Within Groups	35214060423.280	88	400159777.537		
Total	44405492805.556	89			

Table 5.36: Means for three groups: difference in income per year in MZM

	N	Mean	Std.	Std.	95% Co	nfidence
			Deviation	Error	Interval f	or Mean
					Lower	Upper
					Bound	Bound
Poor	19	18973.68	15685.763	3508 561	11413.39	26533.98
knowledge	19	10973.00	13003.703	3390.301	11413.33	20333.90
Moderate	38	23239 47	15309.766	2483 572	18207.28	28271.67
knowledge	30	20200.47	13303.700	2400.072	10207.20	20271.07
Better	33	16113 91	24177.575	4208.776	37570.94	54716.93
knowledge		40140.04	24177.575	4200.770	07070.04	547 TO.55
Total	90	30737.22	22336.923	2354.518	26058.84	35415.60

Figure 5.4 Means plots for three groups.



As shown in Table 5.37, the results for the ANOVA for the three "know how" groups are similar to the ANOVA for two "know how" groups. Furthermore, in order to confirm the veracity of the results, the researcher ran a Welch ANOVA for equality of means, which is indicated for asymptotically distributed values. The results affirm that the income benefit is statistically significantly different between the three different levels of "know how" with an F-ratio of 17.32 and a Welch test statistic of 13.748 with the p=.000. Therefore, the researcher reaffirms that the directional hypothesis  $H_1$ :p < 0 is correct and that the investment (consisting of capital, knowledge, access to better markets and fruit in quantity) correlate positively with income benefits.

Table 5.37: ANOVA for three know-how groups: differences in income per year in MZM

	Sum of Squares	df	Mean Square	F	Sig.
Between	12598561386.098	2	6299280693.0	17.23	.000
Groups	12330301300.030	۷	49	0	.000
Within	31806931419.458	87	365596912.86		
Groups	31000931419.430	07	7		
Total	44405492805.556	89			

**Table 5.38: Welch ANOVA** 

	Statistic	df1	df2	Sig.	
	а				
Welc h	13.748	2	47.353	.000	
a. Asymptotically F distributed.					

#### (v) A post hoc test – a comparison between group differences

The researcher performed a Games-Howell *post hoc* test for multiple comparisons among means for different groups (poor, moderate and better knowledge), when equal variances are not assumed. As shown in Table 5.39, the bold text reflects the finding that income benefits rise with increasing knowledge or know-how. This is also in line with the directional hypothesis  $H_1:p<0$ , which states that the income per year for peasant farmers will increase with the increase of their knowledge or know-how. Looking at the differences between moderate knowledge and the poor knowledge groups, the significance tests statistics are greater than .05, p=.597, (p<.05). Therefore, the difference between these two groups is not statistically significant. However, between the better knowledge and the poor knowledge groups, the significance test statistics are smaller than .05, p=.000. (p<.05). Therefore, the difference between these two groups is statistically significant. The same can be said about the comparison between the better knowledge and the moderate knowledge groups.

Table 5.39: Multiple comparisons for the dependent variable "income benefit" in MZM

(I) Group3	(J) Group3	Mean	Std. Error	Sig.	95% Co	nfidence
		Difference (I-			Inte	rval
		J)			Lower	Upper
					Bound	Bound
Poor knowledge	Moderate knowledge	-4265.789	4372.387	.597	-14961.82	6430.24
Miomoago	Better knowledge	-27170.255*	5537.457	.000	-40552.41	-13788.10
Moderate	Poor knowledge	4265.789	4372.387	.597	-6430.24	14961.82
knowledge	Better knowledge	-22904.466*	4886.913	.000	-34690.39	-11118.55
Better knowledge	Poor knowledge	27170.255 <sup>*</sup>	5537.457	.000	13788.10	40552.41
	Moderate knowledge	22904.466*	4886.913	.000	11118.55	34690.39

<sup>\*.</sup> The mean difference is significant at the 0.05 level.

#### 5.2.8.6 A summary of the ANOVA results

The test performed identified outliers; however, the researcher dealt with them successfully. The data was not normally distributed for each group as assessed by the Shapiro-Wilk test (p>.05). Homogeneity of variance for two groups was asserted p=.053, but for three groups was violated p=.011, as assessed by Levene's test of homogeneity of variance. The Welch's ANOVA showed that the difference between the mean incomes for the different "know how" groups is statistically significant. Income benefits showed a mean difference of 27170.255 between better and poor knowledge groups, and 22904.466 between better and moderate knowledge groups. These increases were statistically significant in both cases.

#### 5.3 CONCLUSION

The quantitative part of the analysis affirms the following, that:

- a) 57.8% of the peasant farmers in the study have 20 years or more experience in fruit production and on average work on 4.25 ha.
   Farms.
- b) these farmers have on average a considerable number of fruit plants, i.e. banana trees =1,661, tangerine trees = 819, orange trees = 308 and pineapple plants = 1,206.
- c) production is manual and rain-fed with only 4.4% of peasant farmers using pesticides to combat pests (fruit fly) which has a negative impact on production (many fruits fall from trees and rot) and selling (peasant farmers cannot sell all their production and even some markets are closed for them, for instance, they cannot take their fruits to Maputo).
- d) most have a limited access to finance; 24.4% have bank accounts and 11.1% applied for a loan from a bank in 2013.

- e) 66.6% of the peasant farmers in the study prefer to sell their fruits locally; however, 56.6% think that other markets offer a better price.
- f) only 2.2% of the respondents were very happy with the price which 93.3% declared has to be negotiated with the buyers.
- g) agricultural know-how among peasant farmers in Marera is limited, although 60% said that they have some or a lot of knowledge in this area.
- h) the peasant's knowledge is generally acquired through experience as, for instance in 2013, an agricultural extension practitioner visited only 21.1% of peasant farmers, and their education level is low with 84.4% with either no or some primary school education.
- i) the peasants farmers' mean income per year is 30,737.22 MZM, which is a little above a 1000 USD (per month 2,561.43, about 85 USD) corresponding the national average salary in the sector of agriculture.
- j) most of the farmers declared little improvements in their lives and only 5.6% are very satisfied with their general livelihood situation.
- k) The Pearson coefficients for the relationship between the size of a farm and income and number of fruit trees and income are 0.596 and 0.482 respectively, and between income and know-how is 0.376. This would indicate that assets such as land and the number of plants impact more on fruit production than agricultural knowledge.
- the Welch's ANOVA reaffirmed that there is a statistically significant difference in the incomes for poor, moderate and average knowledge groups of peasant farmers.
- m) a *post hoc* Games-Howell test found a statistically significant difference between better and moderate and better and poor knowledge groups.
- n) there was no statistically significant difference in the incomes of the poor and the moderate know-how groups.

Despite these findings, one is still left with the question as to why the incomes of peasant farmers are generally low. Because a weak correlation was found between the variables of know-how and income, it can be deduced that other factors (besides know-how), impact on peasant farmers' benefits. To help shed light on this, the next section presents the findings from qualitative interviews with ten peasant farmers. These interviews were intended to expand and deepen information on pertinent issues related to the process of labour, selling and the price of fruits.

#### **5.4 PRESENTATION OF THE QUALITATIVE DATA**

The researcher interviewed ten peasant farmers in order to gather and, in particular, deepen and validate information on peasants' life satisfaction, their productive activities, the price of fruit and the process of selling their harvest. The questions in the interview were organized around the abovementioned themes and followed the same order in each case. In the course of the interviews, however, it was also necessary to interact with the interviewees and sometimes expand or clarify the original questions. The interviews were recorded using a Sony digital recorder. Then the audio files were downloaded and transcribed, totalling 23 A 4 pages.

The interviews were conducted in Portuguese language in order to preserve the originality and the uniqueness of verbal raw material (Patton 2002:500). Subsequently, to facilitate textual analysis and in order to identify any recurring patterns in the data, the researcher used Weft QDA software, an accessible and easy to use tool for the analysis of textual data such as interview transcripts.

The questions used in the interviews were as follows:

- 9. To what extent have your assets (possessions) changed over the years?
- 10. What do you do to improve your fruit production?
- 11. Do you have money in order to invest in your fruit production? If yes why? If no why? Explain.
- 12. How do you assess the price of fruit? Explain.
- 13. Do you think there is a link between the knowledge of fruit growing and the later profit?
- 14. How do you assess your knowledge in this field?
- 15. What is your experience of selling fruit (harvest)?
- 16. What can be done to improve the peasants' benefits?

#### 5.4.1 Data analysis

The researcher was interested to understand how the peasant farmers perceived their lives. It was reported that over the years they have experienced positive changes in their asset accumulation. These changes were principally attributed to their fruit production. They mentioned 16 times that their lives either have changed, or that they experience an improvement comparing life now and before. Most of the reported changes were experienced in two areas: household assets and fruit production.

#### 5.4.1.1 Changes in household assets

Peasant farmers narrated with pride how they improved their houses and, especially, how they roofed them with corrugated iron sheets. It was also the most important element reoccurring in six interviews. The researcher sensed in their voices achievement while they were reporting how they were able to, thanks to fruit production, purchase unattainable before items such as: a motorbike, a TV or a water pump. Twelve times in the course of

the interviews peasant farmers used words like "I already have". The positive changes reported in the qualitative interviews are in line with the results of the quantitative analysis, which also established that 73.3% of the peasant farmers experienced some and 5.6% considerable changes in their lives over the years (Table 5.23).

In addition to this, peasant farmers narrated about two other major achievements which are schooling of their children and being able to pay for their fees and upkeep. All of the interviewed farmers unanimously said: "I have managed to send my children to school". Therefore, they positively relate knowledge to their children's possible future life success. However, the interviews did not specify if the fact of sending the children to school was being seen by the peasant farmers as a way of making of them better farmers or as offering them the possibility to choose a different career, which would indicate that there was not much future in fruit production or staying in the country with few possibilities of employment.

The researcher also noted that the interviewed peasant farmers did not have haughty expectations. They are simple and hard-working people, used to rustic conditions. They are satisfied with few achievements and they are proud of their way of life. The most important things for them are the basics such as food, clothes, shelter and a bicycle. However, some new elements, such as the desire to educate their children, to improve working and marketing conditions or to have new, modern items at home, show that their aspirations are gradually rising.

#### 5.4.1.2 Transformation of fruit production

Peasant farmers were very concerned about the manner of fruit production. They spoke 25 times about various important elements of fruit production.

- a) The most important was weeding around the trees and keeping the plants free from high grass. The plantation cleanness was seen as a positive strategy to guarantee good fruit quality and it was also seen as a strategy which prevents pests from taking control over plants. Nevertheless, weeding was also seen as the most expensive and the most laborious part of fruit production. Peasant farmers perform all the productive tasks manually and depend solely on their physical strength. Additionally, during rainy seasons they need to hire some paid workforce to help with weeding. Therefore, peasant farmers implicitly point to the importance of mechanization, the element which is crucial in order to improve productivity (UNDP 1998, UNACTAD 1998, FAO 2006).
- b) The other productive activities reported by peasant farmers were plant grafting and running plant nurseries. These were taught by the local extension services.
- c) During the interviews peasant farmers spoke about their lack of capacity to fight pests due to high costs and poor availability of pesticides. They were aware that they lose a substantial part of their production due to a fruit fly pest which affects tangerines and oranges in the process of ripening and the fruits prematurely drop from trees (see Photo 5.6).



Tangerines drop due to pest (Photo 5.6: Author)

The achievements or benefits of fruit production, although tangible, are of limited scope. The farmers used the term "a little" 21 times in relation to work and their benefits. A common expression was "a vida está melhorar poco aos poços a frente". The literary translation is "the life is improving little by little going ahead".

#### 5.4.1.3 Availability of assets in order to invest in production

Availability of assets was indicated in the literature review as one of the main preconditions to improve production and secure livelihoods (Ellis 1998:4). According to the BWIs, growth oriented policies are the solution to eradicate poverty and to bring long-lasting benefits such as promotion of rapid exports and rise in profits (De Matteis 2004:576-578, Todaro 2000:519). It was pointed out in a previous chapter that in 1996 Mozambique signed the final act of the Uruguay Round and started the process of trade liberalization which is referred to in many official policy documents mentioned in the literature review. Contrary to the promised benefits of trade liberalization, the interviewed peasant farmers unanimously declared three "lacks": investment assets (especially the money to improve production), access to markets and little profits.

The researcher tried to establish the main reason for such a scenario, which is: the production turnover is not much; as they put it; "it is difficult to break even with all the expenses and little income".

#### 5.4.1.4 Discussion on the price

The interviews showed that the issue of the price was, to some extent, the crux of the matter. According to the quantitative analysis only 2.2% of peasant farmers were "quite happy" about the price and the majority, 75%,

were "just surviving", meaning not very happy or just able modestly to cover their expenses (Table 5.21).

The qualitative part of the research showed that peasant farmers in general were not satisfied with the price. There was also a lot of emotion mounting around the issue of the price. Farmers for instance used to say, "The price harms us, the price doesn't benefit us, the price does not bring us any profit, the price is a big problem, it is not possible to benefit with such a low price, the price does not cover the inputs".

As a matter of fact, officially the price is fixed by the local authorities: a banana bunch costs 40 MZM (1.30 USD) and a box of tangerines and oranges 75 MZM (2.5 USD). These prices were set to protect the rights of the producers. However, peasant farmers complained that the set prices, although low, have to be always negotiated with the buyers and they never manage to obtain the price they want. They were stating, "The buyers decide the price" - it was repeated seven times. Others said that it is better to sell at a low price than risk losing the crop at the road side.

The interviews revealed that peasant farmers had no conditions to preserve already harvested fruits and thus they always operate under stress. They are required to accept low price. The pressure to sell makes them vulnerable to buyers' exploitation and, as a consequence, they do not benefit much. Fruits not bought are being wasted very quickly. This was also apparent in the accounts of various case studies in the literature review. Cooksey (2011), Fitter and Kaplinsky (2001), Oxfam (2013), Roy(2010) and Sharma (2010) all gave accounts of how low prices for agricultural products negatively impact on producers' benefits and welfare.

The process of selling and buying is crucial to the whole practice of fruit production. The quantitative study showed that 66.7% of peasant farmers

sell locally in Marera, 28.9% in Chimoio and 4% sell in other, further situated places (Table 5.17). Qualitative interviews revealed some interesting data, reported below, in connection to selling fruits in Chimoio, where the price is better. Seven out of ten interviewed peasant farmers sell locally, but most have some experience in trying other options.

First, it is the high transport cost to Chimoio – the distance of 20-30 kilometres. For instance a 50-60 kg bag of tangerines (about 500 tangerines) is sold locally in Marera for 150 MTM and it is frequently transported to Chimoio for 25 MTM, which is 25% of its gate value. Second, the risk of transporting the harvest to Chimoio may not be met with the fulfilled expectation of a higher profit because peasants lack up-to-date information about the Chimoio market demand. If the demand is low, the price also goes down and there is a very little profit for a peasant farmer. This was reported by four interviewees.

However, one peasant farmer spoke about the necessity of "marketing reconnaissance". However, that was directly linked to his previous work experience on a citrus plantation. He said, "When there are no fruits on the market, the price goes up, but there are times when I arrive at the market and it is full of fruits, the price crashes down" and later, "I also have to calculate the price of transport first to see if carrying fruits to Chimoio will be beneficial". According to his analysis this is a problem of lack of a fixed price for fruit (or fluctuating market demands) which, according to Adam Smith, is an invisible hand underpinning the reality of free trade (Martinez 2010).

Furthermore, peasant farmers do not have the capacity to deal with fruit overproduction which has to do with both fruit preservation techniques and the existence and the knowledge about other marketing possibilities, which was also reported in the quantitative part of the research. Only 12.2% have a reasonable access to markets (Table 5.19).

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Being faced with this imperfect "market" situation, peasant farmers readily responded to the question: "What can be done to improve the benefits?" In this way they reported both their frustration as producers and vendors and the shortcomings of the local market. They indicated further that selling fruit solely for consumer consumption is neither an incentive nor a motif to increase production. They pointed to a very real and frustrating reality: lack of marketing opportunities and exploitative marketing procedures. Seven times in the interviews they spoke about the need of having a local processing plant which could buy their products. In their view the factory would alleviate the constant stress of having to look for clients and the worries of losing the harvest to rot. This is also a reason why they spoke about the need for establishing selling points, introducing scales to weigh the products and sell by kilogram with a set price.

#### 5.4.1.5 Discussion on the importance of knowledge

In the quantitative analysis it was reported that 48% of peasant farmers have some and only 6% a lot of knowledge in the area of fruit growing. It was also illustrated that knowledge correlates positively with the benefits. The qualitative part of the research shed some more light on this point. Peasant farmers were asked two questions: "Do you think there is a link between the knowledge of fruit growing and the later profit?" and "How do you assess your knowledge in this field?" The first question, being more general, and of a philosophical nature was not understood by some respondents; however, others provided some interesting information.

Two peasant farmers, for instance, said that there was no connection between their knowledge and benefits. They explained that even though they have sufficient knowledge, while selling they have to accept low prices to their disadvantage. Three others answered that they work a lot but the profits are minimal, yet another claimed that they receive technical training but they do not manage to make a profit due to low prices.

It would, therefore, appear that the farmers positively correlated knowledge and profits; they also send their children to school and consider it to be a crucial element of their life improvement; however, they involuntarily said that they operate in the deficient and in a limited market, a market which is exploitative in its nature and lacks sophistication in terms of quality demands. This, in the long run, does not incentivize peasant farmers to improve the quality of fruit production.

In relation to their own knowledge, all interviewed peasant farmers were quite optimistic; they believed that they have sufficient knowledge, for instance, in the areas of weeding, grafting or setting up the nurseries, which also reflects 60% of the peasant farmers with some and good knowledge in quantitative research (Table 5.22). They demonstrated awareness of pests but at the same time expressed complaints about the lack of capacity to control them. Some peasant farmers were aware of the need to improve their own managerial skills so that they are able to administer profits more efficiently. In fact, during the course of the field work, the researcher was repeatedly faced with the peasant farmers' difficulty of speaking about either income or expenses, due to not keeping any personal records. Needless to mention, only 24.4%, as was shown in the quantitative part, had a bank account and thus the possibility to better control their incomes and outflows (Table 5.10).

## 5.4.2 CONCLUSION

The mixed method approach was a very demanding part of the research. It followed two stages: the quantitative survey with 90 respondents who answered 38 questions, and qualitative in-depth interviewers with ten peasant farmers who answered eight questions.

The data was triangulated around the following issues: life improvements, fruit production, price and marketing possibilities and the main findings were as follows:

- Peasant farmers have considerable assets in terms of land, fruit, and experience. However, they do not have access to finance, which limits the intensions to expand fruit production.
- 2. 78.9% of peasant farmers felt that their life was improving, although they modified their responses by saying "pouco", a little.
- 3. Peasant farmers identified the price as a stumbling block. In the survey 97.8% expressed different levels of dissatisfaction with the price. In the interviews all were quite adamant and said that the price neither benefits nor compensates for their efforts.
- 4. Most 66.7% of peasant farmers sell fruit locally. The interviews confirmed this. In addition, the results of the survey show that the price does not vary much be it in Marera or in Chimoio. The interviews clarified that issue pointing to high transport costs affecting later profits, fluctuating market demands, and, above all, lack of fixed prices which contributes to exploitation.

- 5. Peasant farmers confirmed that there is a lack of marketing possibilities. Although over 80% reported that it was easy to sell fruits, very few were aware of other existing marketing possibilities. That was confirmed by the interviews. Most of respondents preferred to sell locally and their uniform complaint was lack of buyers with the better fixed price or a factory which would buy in bulk.
- 6. In both approaches, quantitative and qualitative, there was a positive correlation between knowledge and profits. Interestingly, the interviews narrated the similar scenario in two different ways: first, in answer to the direct question, peasant farmers spoke about the benefits of knowledge and training in relation to improving production. Second, indirectly they were proud of guaranteeing schooling to their children which proves that the value of knowledge is being pursued.

The mixed method approach, contributed to providing a composite picture of the situation of peasant farmers in Marera in relation to fruit growing. It became evident that lack of access to markets and finance stifle peasant farmers' productive efforts. It also became clear that the market by itself is not going to create favourable conditions for fruit growers, which puts in question Washington Consensus' and BWIs' rhetoric about free trade benefits.

In the next chapter the researcher will sum up the findings and write conclusions.

## **CHAPTER 6: CONCLUSIONS**

#### **6.1 INTRODUCTION**

In this chapter the researcher summarizes in five sections the main findings. In the first one the reader is reminded about the original idea for the research and the problem it attempted to explain. The second section describes the procedures which helped to arrive at the findings. In the third section the researcher presents the main findings and he also discusses the limitations. The fourth section proposes some new possible areas for future research and a final section underlines the contribution of the research to the field of development studies.

#### **6.2 RESEARCH OBJECTIVE**

Agriculture is a crucial sector for the Mozambican economy. As stated in the second chapter, the Ministry of Planning and Development reports that most people, around 80%, live on farming (Mozambique 2010a:46). However, in spite of its importance for both the national economy and households' well-being, agriculture is poorly developed and faces various problems. Newitt (1995) explains that lack of development finds its origin in the colonial history when agricultural expansion, promoted by various multi-national companies, was based on semi slave-forced labour, known as "prazos". Then, later, in post-colonial history, four million people, mostly peasant farmers, were displaced from land due to the 17 years civil war and the agricultural development just after the independence in 1975 was limited to the communal villages, inspired by the Marxist-oriented strategies. Therefore, agricultural development did not take place at the level of a local peasant farmer.

During the last two decades and especially since the signing of the final act of the Uruguay Round in 1996, Mozambican agriculture was exposed to the global market with its driving force – trade liberalization. The literature review presents various perspectives on trade liberalization, ranging from that proposed by BWIs, which optimistically consider trade liberalization as a strategy to boost economic growth and well-being around the world to more sceptical views, seeing in it a mechanism which creates dependency on the Western economies (i.e. Cardoso and Faletto 1974) or an instrument which only benefits the rich countries or companies, and marginalizes millions of people in the developing countries (i.e. Prabhakar 2003).

The research tried to test these ideas on peasant farmers from Marera in Manica Province in Central Mozambique whose main cash crop is tropical fruit (bananas, tangerines, oranges and pineapples), therefore an agricultural system with a lot of potential. Thus, the research was oriented in two main areas, attempting to answer the following questions: Does trade liberalization help to improve the financial assets benefiting local peasant farmers' households in Marera? or Does trade liberalization, to a certain degree, hinder households' development? In other words, the researcher was interested to establish if peasant farmers were able to use their potential to increase their own financial assets and contribute to Marera's development.

## **6.3 RESEARCH PROCEDURES**

In order to attain the above aim, the research used mixed method procedures, called a 'sequential explanatory strategy'. The data was collected in two stages. In the first stage the researcher used a questionnaire to gather quantitative data. The respondents (peasant farmers who grow fruits and already have between 15-20 years'

experience in the field) were identified by means of the snowball sampling method. In the second stage qualitative data was gathered using an interview with a smaller, representative group of peasant farmers (Creswell 2003). The following strategy was used in order to achieve the composite assessment of reality whereby qualitative data expands and validates a quantitative analysis (i.e. Gerring 2007).

The choice of this strategy was dictated by the geographical and administrative conditions. Marera is a place with the population spread across a large area with few reasonably good access roads. In order to move around Marera, the researcher used a bicycle and travelled with a local extension worker. It proved quite challenging (due to the time factor and tiredness) to arrive at a sample of 90 respondents who took part in the research. The local administration was also unable to provide either the list of households or even the list of fruit growers. In this way the researcher did pioneering work in identifying those peasant farmers who are not only specifically involved in fruit production but also who live in the area for a lengthy period of time and are also able to compare their life in the past and in the present in order to see the changes which occurred over the years.

## 6.4 RESEARCH FINDINGS

Research produced many interesting findings which shed light on and helped understand the reasons for the limited financial assets of peasant farmers.

# 6.4.1 General findings

Although the majority of peasant farmers - 57.8% - have more than 20 years' experience in the field of fruit production and on average they work

on 4.25 ha of land, which is considerably more than the national average (1-2 ha) reported by the MPD (Mozambique 2010a), their gains are limited. This is due to various factors: the production is manual, the land is rain fed and 95.6% never used pesticides in order to combat the fruit fly pest, all of which undermine their productive efforts. This is in line with FAO (2012a), blaming poor African productivity on lack of mechanization and lack of use of inputs. This also corresponds with the MPD report (Mozambique 2010a) describing diminishing use of pesticides among Mozambican farmers (3.8%).

The striking finding was the farmers' limited access to finance; only 24.4% of peasant farmers have bank accounts and only 11.1% applied for a loan from a bank in 2013. Therefore, in order to invest peasant farmers depend mostly on their own resources and their physical strength. In spite of that, 86.7% reported that they increased their production since last year. This indicates the will and the determination to work on land and strive for improvements. Unfortunately, this peasants' enthusiasm is not matched with the level of agricultural investment in Marera. The government has been trying to develop appropriate strategies; however, it was prevented by the Washington Consensus agenda for development from active involvement with and direct support to peasant farmers. In this way the first comprehensive document after independence on agriculture, "Política Agrária e Respectivas Estratégias de Implementação" (1996), delegated the responsibility for development to local authorities reflecting the Washington Consensus agenda for development point 2, "Reordering Public Expenditure", which aimed at limiting government's public spending.

Furthermore, Cunguara and Hanlon (2012) accuse international donors and BWIs of interfering with the country's policies. Ultimately, the lack of direct support to peasant farmers is also reflected in the recent government's agricultural development projects which favour large-scale

land acquisition by foreign investments over supporting peasantry (Mozambique 2013a, Mosca 2011).

Another important discovery was that the researcher could visually verify that none of the respondents had a written record of their income and expenses. It was difficult to elucidate their approximate income from fruit production. This may be linked to a generally low level of schooling among the peasant farmers. 84.4% of them reported limited primary school education; however, almost 60% are rather enthusiastic about their professional knowledge, acquired through experience and contact with the extension officers. Nevertheless, only 12.2% of the peasant farmers had knowledge about better markets or access to them. It would indicate that the peasant farmers lack both managerial and marketing knowledge which is crucial in the liberalized markets.

Most of the peasant farmers linked the limited benefits to the price. Although the gate price for fruit was set by the local authorities, 93.3% said that they had to negotiate it, and eventually sell at the buyer's lower offer. 97.8% were not happy about the situation, using various diminishing adjectives to describe their discontent. It would therefore seem that there is some lack of implementation capacity on the part of the local authorities. But, in fact, it is difficult to monitor the price with the situation where every peasant sells at his or her farm.

# 6.4.2 Specific findings

In order to test the directional hypothesis that peasant farmers who have investment capital, knowledge, access to better markets and grow fruit in quantity benefit from trade liberalization, the researcher performed the Pearson correlation tests: between the size of a farm and income (0.596) and the number of fruit trees and income (0.482) and "know-how" and

income (0.376). All the results showed positive correlations although the strongest correlation exists between the size of a farm and income. It is interesting to note that the correlation between the number of trees and income and know-how and income is weaker. This would indicate that peasant farmers do not manage to take advantage of having many trees. This indicates that either there is a problem with productivity or marketing. Furthermore, the weak correlation between know-how and income confirms the previous findings about the very poor academic background of the great majority of peasant farmers.

The researcher finally performed ANOVA. In order to do so, the researcher created a composite know-how variable, where he included various indicators which are related to different aspects of knowledge and experience (Table 5.1), education (Table 5.3), productivity (Table 5.6), use of pesticides (Figure 5.1), contact with the extension worker (Table 5.21), place of marketing (Table 5.15), knowledge about markets (Table 5.16), knowledge about the loan application process (Table 5.12), use of bank accounts (Table 5.8), and the self-assessment of know-how in the field of fruit production (Table 5.20). Then the peasant farmers were divided into three groups: those with poor, moderate and better knowledge. The ANOVA results showed that there is a statistically significant difference in the incomes for poor, moderate and average knowledge groups of peasant farmers (Table 5.38). Then, to answer the question about how big the difference is between the groups, the researcher performed a post hoc Games-Howell test and found that there is a statistically significant difference in income per year between the better and moderate and better and poor knowledge groups (Table 5.39). The researcher interpreted these results indicating that knowledge is a crucial factor in increasing peasant farmers' benefits. However, it also points to the fact that it is indeed necessary to improve many aspects of peasants' know-how in order to be successful. Contrary to this, the Third National Poverty Assessment revealed that the share of farming households benefiting from extension

services is actually declining, i.e. from 13.5% in 2002 to 8.3% in 2008 (Mozambique 2010a).

The crucial finding is that, according to this research, a mean average income of a peasant farmer per month is roughly 2,561.41 MZM (85 USD) and it varies according to his/her knowledge. Interestingly, this is in line with the current minimum wage in the sector of agriculture in 2013 – 2,500.00 MZM (Mozambique 2013b). It also is in line with the average monthly family spending in rural areas which is about 2,480.00 MZM (80 USD) per month (INE 2010:32).

The qualitative part of the research confirmed and validated the findings. Moreover, it helped to understand a number of issues. The majority of peasant farmers understood life improvements in two areas: household and education. Thus, for most it was very important to improve their houses by roofing them with corrugated iron sheets and equally important to send their children to school. Speaking about productive activities, they focused their attention on weeding as the most laborious part of the fruit growing process. The area of marketing was dominated by dissatisfaction with the price of fruit and the ordeal to sell it (they spoke especially about transport costs and the need to negotiating the price). It was perceived that they often sold under stress and fear of losing the harvest if they insisted on their initial offer. Most interviewed peasant farmers spoke about the need to have more marketing outlets.

The researcher verified that the peasant farmers in Marera have the potential to increase production and improve fruit quality. However, at the moment they are facing difficulties which most find hard to overcome. In his view two main ones hinder development: the lack of alternative marketing opportunities and the shortage of investment capital. According to the researcher's study, in order to benefit more from free trade it is necessary to create conducive conditions and these include a multi aspect

type of training in order to improve productivity and fruit quality and the management of farming, as well as to improve the capacity to plan and execute. There is also a need to increase access to finance and market information and create commercialization facilities. Interestingly, all of these are foreseen in various Mozambican policy documents. However, the researcher verified that little has been done to assist peasant farmers improve their financial assets and livelihoods. On the contrary, the support according to the data is diminishing. The study showed that the Mozambican agricultural policy is shifting away from peasant farmers towards large scale projects based on foreign investment and foreign land acquisitions. According to the researcher this is reflecting Mozambique's previous experience narrated by Newitt (1995) about colonial companies which in the nineteen century controlled Mozambican territory and later the policy of introducing socialist "kolkhozes" (communal farms).

The study showed that knowledge in its broader sense is vital to improve profit and hence financial assets and livelihood. The researcher could see that the low literacy level is a big hindrance to taking advantage of the emerging possibilities. The researcher could also verify that the younger generation peasant farmers preferred to look for work opportunities in town. For the researcher this was quite understandable, taking into account that according to the study the average income per farmer is in the range of a hundred dollars per month.

The research verified that peasant farmers, although able, to some extent, to improve their livelihoods, are not able at the moment and under present conditions to substantially increase their benefits (financial assets from fruit trade) and thus they remain marginalized.

# 6.4.3 Limitations of the study

The researcher is aware of a number of limitations of this study. The most obvious limitation was related to the fact that peasant farmers lacked any written records of their assets and incomes. Even though the researcher, on a number of occasions, could visually verify the veracity of peasants' reports, it was impossible to count the plants. In this way the assets were reported only approximately. In the same way the benefits were also reported using approximate numbers. The calculations were done in the following manner: a farmer provided a number of banana bunches cut during one month or a number of crates of tangerines or oranges commercialized during the harvest, and the researcher calculated the totals.

Another limitation was the peasant farmers' accessibility. The researcher could not plan that on a given day he was going to interview, let us say, ten peasant farmers; some would be absent and because of that the researcher had to look for other available respondents. A great help was a local extension worker who was helping to arrange the interviews and was crucial in establishing the first friendly contact.

#### **6.5 FUTURE RESEARCH AREAS**

The research opens the possibility for future research in a number of areas.

(i) The research focused on peasants' benefits from trade liberalization without giving much attention to the cost of production. Therefore, a future research could tackle the issue of the cost of fruit production (labour, transport and inputs).

- (ii) The research did not investigate the real or even possible issues related to fruit exportation. Therefore, a future research could focus more attention on this practical issue.
- (iii) Another possible area is the issue of concrete local government action into agricultural development in Marera and in the Province of Manica.
- (iv) One other possible area of research is a comparative study measuring the benefits of peasant farmers with exporting possibilities as opposed to those who sell on internal markets.
- (v) Research may also look into the area of microfinance and its contribution to development. Very few peasant farmers used banking services and it is necessary to understand why.
- (vi) The last possible area of future research is looking at the overall livelihood strategy of peasant farmers (fruit production, agricultural production, animal production, off farm activities and remittances).

## 6.6 CONTRIBUTION TO THE FIELD OF DEVELOPMENT STUDIES

The research contributed to the area of development studies by offering a closer look at just one case – Marera peasant farmers and their livelihoods based on fruit production. The researcher did not encounter studies of this nature in the available literature. The study used a challenging mixed method approach and by doing this contributed to more comprehensive and closer to reality outcome.

The research concluded with the affirmation that indeed trade offers a possibility to improve peasants' financial assets; however, it also pointed to its complex and interlinked reality. The research helped to understand that agricultural trade development depends on international and the country's own policy makers, local initiatives and implementation. Peasant farmers' knowledge is vital and it makes a difference. Therefore, trade liberalization still needs to be translated into practice if one wants to open a larger window of possibilities to peasant farmers.

In Marera peasant farmers proved that even with very limited resources and without government's support they are able to produce large quantities of fruit, and they are able to enlarge their production and get involved in trade activities; however, in order to benefit more there must be a more conducive business environment, training and financial support.

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# APPENDICES APPENDIX: 1 QUESTIONNAIRE

The purpose of this survey was to provide information for the quantitative part of the research. The respondents answered questions using various techniques:

<ul> <li>a) answers were sequentially ordered on the measurement scales,</li> <li>b) they used forced-choice responses, and</li> <li>c) on a few occasions the answers were open ended.</li> </ul>
Participant's name and number Date
Instruction: circle the number of the answer which is the most appropriate to the respondent's situation (1)
1. How long have you been a farmer in Marera?
2. What is the approximate size of your farm (in hectares)?
<ul><li>3. What is your school literacy level?</li><li>1) none 2) primary 3) secondary 4) other</li></ul>
4. Do you have a title for your farm/land? 1) yes 2) no
5. Which fruits do you grow and sell for income?  1) bananas 2) tangerines 3) oranges 4) pineapples 5 other (specify
6.) How many banana trees do you have (approximately in number)?

,	oney tangerii	ne trees do you	ı have (approx	ximately in nur	mber)?	
•	How many orange trees do you have (approximately in number)?					
,	any pineappl	e plants do you	ı have (appro	ximately in nui	mber)?	
1) Yes, I c	o 2) I produ	oduction every ce the same a nd less every y	mount of fruit	every year		
1) Yes, it i	s improving	r fruit improving 2) The qua uality depends	ality is the sa	•	quality is	
12. Do you 1) yes	-	les on your tree	es?			
13. What is your approximate monthly income from banana sales?						
Tangerine Oranges . Pineapple	s your approx	 	from harvestir	ng:		
-	u have a non <sup>.</sup> 2) no	agricultural inc	ome?			
16.	If	yes,	can	you	specify?	
17. Is it ea	sy to sell frui	t in Marera (ac	cess to the ma	arket)?		

1) yes 2) no
18. If no, specify the reasons
<ul><li>19. Where do you sell your fruit production?</li><li>1) Locally 2) In town 3) Other</li></ul>
20. Where can you get a better price?  1) in Marera  2) in Chimoio  3) elsewhere (specify where)
21. Are you satisfied with the price which you get? Answer on the scale from 1 to 5.
1. I am totally unhappy with the price
2. I am not happy with the price
3. I am satisfied a little
4. I am happy with the price
5. I am very happy with the price
22. Who sets the price?
1) the price is set by you 2) the price is fixed
3) the price is negotiated with the buyer
23. Are you happy with the money you earn from fruit production and
trade? Answer on the scale from 1 to 5.
1. No, I am totally unhappy.
2. No, I am not happy.
3. I am just surviving.
4. Yes, I am quite happy.
5. Yes, I am very happy.

24. In your opinion, is the access good to the markets where you can get a better price?

Answer on the scale from 1 to 5.

1. I don't have information about the markets where I can get a better price

<ul><li>3: I don't have an opinion.</li><li>4: The access to the markets where I can get a better price is reasonable</li><li>5: The access to the markets where I can get a better price is good.</li></ul>
<ul><li>25. Do you have a bank account?</li><li>1) Yes 2) No</li></ul>
26. Did you invest money (planting new trees, improving production, buying pesticides or other) in fruit production in view of increasing your profits last year?  1. Yes  2. No
27. If yes. How much?
<ul><li>28. Have you already applied for a bank loan or a loan from a microfinance organization?</li><li>1) yes 2) no</li></ul>
<ul><li>29. Have you already received a bank loan or a loan from a microfinance organization?</li><li>1) yes 2) no</li></ul>
30. If yes, how much have you received in thousands of meticais?
<ul><li>31. Do you consider loan procedures easy?</li><li>1) yes 2) I don't know 3) no, they are difficult</li></ul>
32. In your opinion, do you have sufficient knowledge to improve fruit production? Answer on the scale 1 – 5.  1. I don't have any knowledge  2. I don't have a lot of knowledge  3. I don't have an opinion.

2. I don't have access to the markets where I can get a better price

- 4. I have some knowledge
- 5. I have a lot of knowledge
- 33. How many times did you have contact with an extension worker last year?
- 1) Never
- 2) A few times during the year
- 3) Many times
- 34. Do you consider your general situation better than 10 to 15 years ago? Answer on the scale 1 5.
- 1. My general situation is worse.
- 2. My general situation is the same.
- 3. My general situation has improved a little.
- 4. My general situation has quite improved.
- 5. My general situation has improved a lot.
- 35. Which possessions do you have now?
- 1) a brick house, 2) radio, 3) second house in town, 4) motorcycle, 5) telephone, 6) car, 7) a bicycle, 8) TV, 9) house furniture 10) other (specify)......
- 36. Which possessions did you have 15 years ago (in the past)?
- 1) house, 2) radio, 3) second house in town, 4) motorcycle, 5) telephone,
- 6) car, 7) a bicycle, 8) TV, 9) house furniture 10) other (specify).....
- 37. Do you manage to sell all your production: bananas yes / no tangerines yes / no oranges yes / no pineapples yes / no other yes / no
- 38. If not what is the reason: