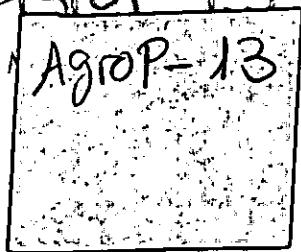


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Cultural Knowledge Systems (MAKS)

MSc Thesis

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# "I am Squeezed"

Rural livelihood in Morrumbala District, Mozambique

January 2002

MAKS 15

Luís Artur



WAGENINGEN UNIVERSITY  
SOCIAL SCIENCES

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Management of Agricultural Knowledge Systems (MAKS)

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# "I am Squeezed"

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Rural livelihood in Morrumbala District, Mozambique

A thesis submitted in partial fulfillment of the requirements of the Master of Science degree in  
Management of Agricultural Knowledge Systems (MAKS)

Supervisors:  
Dr. Paul Habinck  
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WAGENINGEN UNIVERSITY  
SOCIAL SCIENCES

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## DEDICATION

In memory of my uncle, Agostinho Sifa and his wife Azareta AIDS' victims.

## ACKNOWLEDGEMENT

Doing MSc. Course, particularly in the Social Sciences like the programme in which I am enrolled, Management of Agricultural Knowledge Systems is challenging task. Its hard mainly because you learn how to deal with people, to interpret the meaning of different kinds of knowledge, which vary in time and space, with age, sex and context: knowledge that is created and influenced by the environment in which the person grows up. This thesis, which focuses on different livelihood strategies in Morrumbala District, Zambezia province in Mozambique was possible with the involvement of many people that I would like to thank. Fiirstly, thank-you to my supervisor Dr. Paul Hebinck. Thanks Hebinck for your support, devotion, encouragement and smile. Thanks for being above all a good friend of mine. We will always be friends.

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Finally I would like to thank all people whom direct or indirectly were involved on my work.

### STATEMENT

Blessed is the man who finds wisdom, the man who gains understanding. It is more profitable than silver and yields better returns than gold (proverbs 3: 13-14)



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## LIST OF ABBREVIATIONS

- AIDS- Acquired Immune- Deficiency Syndrome  
ANRM- Agrarian and Natural Resources Management  
DFID- Department For International Development  
Frelimo- Frente de Libertação de Moçambique (Mozambique Front of liberation)  
GDP- Gross Domestic Product  
HDI- Human Development Index  
HPI- Human Poverty Index  
IMF- International Monetary Fund  
INE- Instituto Nacional de Estatística (Statistics National Institute)  
Kg- Kilograms  
Ld- Limited  
MPF- Ministerio de Plano e Finanças (Plan and Finance Ministry)  
NGO- Non-Governmental Organisation  
ODI- Overseas Development Institute  
Renamo- Resistencia Nacional de Moçambique (Mozambique National Resistance)  
Semoc- Sementes de Moçambique (Mozambican's seeds)  
U,E,M- Universidade Eduardo Mondlane (Eduardo Mondlane University)  
UNDP- United Nations Development Programme  
USAID- United States Aid for International Development  
WV- World Vision

## SUMMARY (ENGLISH VERSION)

Rural development and poverty alleviation in Mozambique has been seen as a linear and uni-directional process. In this process, farmers receive support from the government and NGOs via programmes and projects aiming to alleviate poverty. Recently the WV has started a project aiming to reduce poverty by introducing red sweet pepper- a cash crop, in Morrumbala. To measure the impact, the organisation is producing reports and basing the analysis on "averages", in order to conclude the extent to which the project was a success or failure are drawn.

In this report I argue that analysis based on averages does not allow for differentiation between the households targeted. I suggest that rural development and poverty alleviation must be seen as an arena of struggle (Hebinck & Bourdillon, forthcoming) where there are losers and winners, and as a process which creates opportunities and constraints (Arce & Long, 2000). In order to do that, a framework, which allows for disentanglement of the average data and insights into differentiation between the rural households must be used. A livelihood framework, which looks at peoples' capabilities, constraints, activities and assets to make a living, becomes very important.

This report, which is based on a study carried out in Morrumbala district in Mozambique, uses a livelihood framework, showing differences between households within a community and also differences between communities. In Sabe region, some households concentrate on livestock and trading to make a living while others depend mainly on wage labour and agriculture; marrying at an early stage in life was also found to be a livelihood strategy. In Pinda region, fishing proved to be very important for livelihood while in Megaza region, having a home in Malawi and in Mozambique was one of the most important strategies. These differences mean that households respond differently to the introduction

of red sweet pepper. They benefit from red sweet pepper to different degrees, some not at all. The use of averages does not express these nuances.

## SUMÁRIO (VERSÃO PORTUGUESA)

Desenvolvimento rural e alívio a pobreza tem sido vistos em Moçambique como processos lineares e uni-direccionais. O governo e as ONGs tem prestado apoio as populações rurais através de projectos e programas de alívio a pobreza cujo sucesso ou fracasso tem sido baseado em dados documentados em termos de médias.

Neste documento sugiro que o desenvolvimento rural e o alívio a pobreza devem ser vistos como um "um campo de batalha" ( Hebinck & Bourdillon, por vir) onde há vencedores e vencidos; deve ser visto também como um processo que cria oportunidades e constrangimentos (Arce & Long, 2000).

Para isso, um quadro de análise que permite olhar por dentro das médias e ver as diferenças entre as populações rurais deve ser usado. Análise de estratégias de sustento, um quadro que olha para as capacidades, actividades, constrangimentos das pessoas, é bastante útil.

O presente documento basea-se num estudo levado a cabo no distrito de Morrumbala e usa estratégias de sustento como quadro de análise. O estudo mostra que ha uma diferença entre familias na mesma comunidade e diferenças entre comunidades. Na região do Sabe, há famílias que se sustentam baseando-se em criação, negocios e agricultura enquanto outras vivem sobretudo trabalhando para os outros e da sua produção agrícola; casar-se cedo também é uma estratégia para o sustento de certas familias. Na região de Pinda, a pesca é uma actividade básica para o sustento das familias enquanto na região de Megaza, uma das formas de se sustentar é ter duas casas; uma no Malawi e a outra em Moçambique.

## Content of the report

The thesis is based on empirical study carried out in three localities of Morrumbala District, Zambezia province in Mozambique and focuses the adoption of paprika crop by local farmers. The study uses *rural livelihood strategies* as the entry point to understand rural people's practices.

The report is presented in 9 chapters. The first chapter is the introduction and the background of the study. The second starts presenting the research problem which goes together with the conceptual framework that was used to explore the field. Flowing from the conceptual framework the research questions and the purposes of the study are presented. In the third chapter I present the methodology used for this study and the strong and limitations on using this methodology. The fourth chapter gives a overall district description looking at the historical, geographical, socio-economic and institutional settings. In chapter five I present the findings from Sabe region. In the chapter six the findings from Pinda and in chapter seven, the findings from Megaza. Chapter eight is reserved for analysis of the findings, integrating the findings of all the areas studied. In chapter nine offers both conclusions and recommendations.

## 1. INTRODUCTION

### 1.1 Context of the research

After the peace agreement of 1992, Mozambique started a new page of its history. State attention shifted from military empowerment to development programmes. The budget for national defence decreased from 753.5 billions of meticais<sup>1</sup> in 1994 to 521.5 billions in 1995; a reduction of 30.8% of the budget allocated to defence and security ministry (INE, 1996). On the other side the international community and agencies shifted their attention from emergency to development programmes. According to the same report (pg. 127) the donors mentality has changed since the civil war. External grants for projects decreased by 4.5% while external project loans increased by 100.7% from 1995 to 1996.

The centralised economy changed to an open market economy and the government role shifted to a regulator agent rather than an "active element" in market. The country allied with the Bretton Woods institutions and as such, was compelled to follow the rules of the game. The International Monetary Fund (IMF) imposed economic measures, such as: liberalisation of the economy; privatisation of state enterprises, and; openness to private initiatives. These and other measures have had impact in national economy and human development. The Gross Domestic Product (GDP)<sup>2</sup> of the following years the civil war showed a rapid rate increment. In 1996, 1997 and 1998 the GDP increased with 7,1%, 11,1% and 11,9% respectively. The Human Development Index (HDI) increased from 0.325 in 1996 to 0.344 in 1999 (UNDP, 2000).

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<sup>1</sup> Mozambican currency

<sup>2</sup> GDP-Gross Domestic Product represents total domestic economic activities over a particular period, regardless of whom owns the means of production (UNDP,2000).



Because Mozambique is mainly an agricultural country the increment in GDP can apart from the macro-policies, be explained by the improvements in agriculture production. With the end of the military conflict, a process of reallocation of people obliged to live away from their usual production areas and live mostly on emergency aid began. More than 3 million people were reallocated and agricultural production showed a substantial increment. The following table shows the increase in maize (the principal food crop in Mozambique) from 1992 to 1996.

Table 1: maize production in Mozambique 1992-1996

| Year        | 1992  | 1993   | 1994   | 1995   | 1996   |
|-------------|-------|--------|--------|--------|--------|
| Maize (Ton) | 76082 | 142683 | 146020 | 168619 | 252672 |

SOURCE: Mozambique statistical year book 1996. INE, Maputo

An increase in production is also seen for many other crops. According to several reports (Ernest & Young, 1998; UNDP, 2000), this was possible because among other reasons, people were free to engage in agricultural production and the free circulation of people and goods allowed exchange of agrarian knowledge and other inputs. In addition, data from the Agriculture and Rural Development Ministry show an increasing amount of money allocated to this sector. In 1992, 1993, 1994 103.266,5 was allocated; 68.898,4 and 94.371,1 million dollars respectively (MADER, 1996).

The institutional landscape of agriculture dramatically changed after the civil war. A Large number of NGO's are now working on agricultural production and its commercialisation. 607 NGOs were registered by May 1999 in Mozambique and most of them were working in rural development with a focus on improving agricultural production (Artur, 1999). This thesis results from collaboration with one of these NGOs- World Vision-Mozambique that aims to improve the well being of the farmers, particularly the small farmers, in Zambezia Province, Morrumbala District.

## **1.2 The Mozambican Government and Poverty Alleviation**

The Mozambican council of ministers approved in April 1999 a programme that targeted the eradication of absolute poverty. Poverty alleviation is one of the main objectives for the next decade: a reduction of the incidence of poverty by 30% and absolute poverty by 50%. The actual human poverty index (HPI) in Mozambique is 59%, the highest in the southern Africa region (UNDP 2000). Data from different sources (INE, 1997; UNDP, 1999; UNDP, 2000; MPF-UEM-IFRIP, 1998) indicate that the rural areas are the poorer in comparison with urban. Rural livelihoods rely largely on agricultural production which constitutes the primary source of food security and income. According to INE (1997) over 75% of all Mozambican population lives in rural areas and from agricultural production. The agricultural sector contributes 40% to 50% of GDP each year and employs approximately 80% of total labour creating around 80% of national revenue from export.

Improving agriculture is seen as a means to reduce poverty, especially in rural areas. National and international communities have been making efforts in this direction. Efforts have been in form of direct aid to national government or through using NGOs working in rural areas. One of the ways for poverty alleviation via agriculture development in rural areas, has been crop diversification. The government and the NGOs have been encouraging farmers to diversify crop production: both food crop diversification and cash crops production.

### **1.3 World Vision-Mozambique and Poverty Alleviation**

In Zambezia province, where the study was carried out, the best known NGO working in agriculture development is World Vision-Mozambique, a branch of World Vision International. This report is based on the activities of World Vision in Morrumbala District, Zambezia. The original agreement between World Vision and Government in Mozambique was signed on 3<sup>rd</sup> October 1986 in Maputo. It intended to establish World Vision-Mozambique as a private non-governmental organisation with the mandate to participate in projects for the benefit of the poor of Mozambique. The agreement was valid till 1999 and the organisation received re-authorisation from the Ministry of Foreign Affairs on the 10<sup>th</sup> of May, 1999 and on the 13<sup>th</sup> of July 2001 to carry out its activities in Mozambique.

World Vision- Mozambique has been facilitating rural development in Zambezia since 1993 with the primary objective of improving the health and food security status of the rural population. The organisation has worked in Gile, Gurue, Morrumbala, Nicoadala, Namacurra and Mocuba. The number of districts increased from the first of October 2001 when Namarroi, Lugela, Alto Molocue, Inhassunge and Mopeia were incorporated. The activities taking place include training for both farmers and the Ministry of Agriculture and Rural Development staff; the identification, testing and promotion of appropriate crop varieties for use by family sector farmers; enhancing technology, through an informal rural agricultural development network designed around farmers associations. Additionally World Vision-Mozambique has been working with several local NGOs assisting them in the management of small projects and credit. The Organisation also works in the sectors of labour intensive road rehabilitation, mother and child primary health care, nutrition, AIDS awareness and water and sanitation.

In June 1996 World Vision-Mozambique made a submission to United States Aid for International Development (USAID) in Mozambique for a proposal of Agrarian and Natural Resources Management (ANRM) over a 5 year period (1996-2001). The aim of that proposal was to improve food security, income generation and the well being of rural families. This would be possible by facilitating the establishment of efficient agricultural production and commercialisation taking into consideration the maintenance or improvement of natural resources. The project was designed to take place in 11 districts of four provinces (5 in Zambezia; 4 in Nampula; 1 in Tete and 1 in Sofala). The activities involve, amongst others, increasing agricultural production by the introduction of new technologies such as new seeds, animal traction, soil and water conservation techniques, integrated pest management and livestock. For the purpose of this thesis I will look at the increase in agricultural production by the introduction of new technologies, carried out in Morrumbala District. The new technology in this case, will be red sweet pepper seeds, which have been distributed by the organisation since 1997.

World Vision started working in Morrumbala in 1995. Until 1997, the organisation was involved in an emergency programme to distribute food and agricultural inputs such as seeds and hoes. Since 1997 they designed and implemented a development programme ANRM. The activities of the programme include:

1. Investigation

- Cashew fungicides demonstration;
- Trials of different varieties of Boer beans;
- Trials of different varieties of peanuts.

2. Training

- Improved stocking techniques;
- Group development;
- Natural resource management ;
- Improved farming techniques.

3. Extension

- Research and market identification;
- Linking government-farmers' groups.

4. Production

- Establishment of school nursery trees;
- Production of fruit seedlings;
- Production of agro-forest seedlings;
- Multiplication of sweet potato foliage;
- Paprika (sweet pepper) production promotion;
- Sunflower and peanuts production promotion.

5. Visits and exchanging experiences

#### **1.4 The promotion of red sweet pepper (paprika) to alleviate poverty**

The focus for this thesis will be the promotion of paprika production. I selected paprika because currently it is considered to be a successful crop for poverty reduction in the rural areas where it is being cultivated. Apart from Zambezia province, paprika is also being promoted in Nampula and Sofala provinces.

Until 1997, paprika was an unknown crop in many areas of Zambezia, at least in Morrumbala. World Vision has signed a contract with *Cheetah Paprika Ld*, a Zambian company based in Malawi to promote paprika production in Mozambique. According to the agreement, Cheetah Ld, provides World Vision with seeds, knowledge and other important inputs necessary to paprika production. World Vision uses its own extension agents to deliver these inputs to the farmers, specifically, to poor farmers. For that purpose World Vision has been developing farmers' groups with whom they will work. Once World Vision extension agents have received the inputs, the seeds are delivered to groups leaders who are supposed to pass them on to other members of the group. The

World Vision's extension services follow the farmers through the production process, including commercialisation. After harvesting, drying and weighing the harvest, farmers are expected to sell the paprika to Cheetah, the input supplier. World Vision extension agents work with farmers in classifying the different paprika categories (there are 4 categories: A, B, C and D. Category A has the highest price: 1 US\$/Kg-2001). After the classification, the paprika is transported, using World Vision transport, from farmers' houses to a Cheetah storage place where payment is made.

## 2 PROBLEM STATEMENT

According to the 2000 World Vision working report, growth in paprika has increased from 2 tons in 1997 to 3 tons in 1998, 5 tons in 1999 and 20 tons in 2000. The institution expected paprika production in Morrumbala to be 50 tons or more in the year 2001. This information is used to point out the success of the paprika in the targeted area. In addition, the same report stresses that by producing paprika many households are improving their lives i.e. building new and better houses, buying bicycles, improving nutrition, etc.

When looking to the data on paprika production, the information is represented in an aggregate way. The production represents a whole district of Morrumbala without taking into account the specificity of the different areas composing the district. The August 2000 survey on production and marketing gives the following results:

Table 2. Production and Marketing survey August 2000

| Agroecological zone                    | Income per household from crop sales (USD) |           |           |
|--|--|-----------|-----------|
|  | 1996/1997                                  | 1997/1998 | 1998/2000 |
| Zambezy valley                         | 35   | 23        | 34        |
| Central Zambezia                       | 26   | 22        | 22        |
| Northern Zambezia/<br>Southern Nampula | 30   | 44        | 29        |

Source: taken and adapted from 2000 WV-Moz Production and Marketing survey August 2000

Presentation of the data in an aggregate manner (by averages) has many limitations. Many studies (see i.e. Francis, 2000; Ellis, 2000) suggest that aggregating data does not express the differences between farmers and more importantly, it conceals which farmers benefited from new technologies. Presenting, for example, data of agricultural production from an area in terms of average, misses the important details of minimum and maximum productions

and the explanation of the differences between maximum and minimum producers. Farmers are a heterogeneous group which becomes apparent at a low level of aggregation; low levels of aggregation allow for a closer look at processes of differentiation. The advantage of going beyond "averages" is that an explanation of the differences between farmers will help development agencies such as World Vision, target the poorest group and to design different intervention strategies for different groups. Differentiating farming populations will also provide more reliable information on poverty alleviation by paprika production. In order to see and understand these differences, the dynamics and processes taking place in the research area-Morrumbala regarding agricultural production (specifically the adoption of paprika), researchers are required to disentangle the aggregate/agroecological/districts data into more the specific characteristics of producers and the different areas. The problem emerging is the *lack of differentiated view on the producers.*



## 2.1 Conceptual Framework

Debates on differentiation, especially in agriculture, have come a long way. In the last century the Marxist- Leninist theory of class differentiation in which, because of capitalist penetration, peasants would be differentiated into a small class of capitalist entrepreneurs and a big class of proletarians (people having no access to resources and only their labour to hire/sell) was one of the most popular.

In the last decades debates on differentiation received many contributions from Sociology and Anthropology given the fact that these fields of development use theoretical frameworks that deal explicitly with the dynamics of cross-cultural practices, meanings and discourses allowing for and therefore capturing, more features on differentiation.

Wageningen University has been one among the contributors on differentiation debates by providing several theoretical frameworks. The theoretical frameworks which help to understand and analyse differentiation include: social construction, focusing the everyday social life as a process of negotiation and construction of meanings, purposes and power (Röling, 1998), and; actor oriented analyses which stress "human agency" meaning that people are knowledgeable and capable within the limits of their information and resources and the uncertainties they face (Long, 1997). The agency concept entails the generation and the use or manipulation of networks, enrolling others in your own projects... people's capacity to process social experience and to devise ways of coping with life. Van der Ploeg (1994; 1997) from the same university developed *Farming Styles* framework to analyse farmers' heterogeneity. According to the *Farming Styles* framework, different styles of farming emerge through different cultural repertoires, labour disposability and arrangements over time, and farmers' integration into market and technology.

Apart from Wageningen University contributions on differentiation, frameworks developed at other universities and institutions also look at differentiation. One of these, which is now being widely applied, is the livelihood framework. The Livelihood framework has been widely used by developing organisations such as DFID (Department for International Development) of the British Government, ODI (Overseas Development Institute) and USAID (United States Aid for International Development).

There is no recipe as to which conceptual framework is the best to analyse differentiation. Some have more pitfalls than others however, the important point is that the researcher must select the appropriate one according to the objectives of research. For this thesis research, I use the livelihood framework to analyse differentiation in the research area and the impact of paprika in poverty alleviation.

### *2.1.1 Livelihood strategies and differentiation*

Growing attention is being given to understanding the behaviour of individuals and groups - not only farmers, but also functionaries, people in the informal sector, etc. Attention is focussed on how people try to survive and improve their situation in an ever changing world. In both developing and developed countries, men and women are engaged in a number of activities (sequential and simultaneous) that contribute to their well being. These activities range from agriculture, petty hawking/trading and wage labour to the migration and long distance trading. Many researchers and authors call these "livelihoods activities".

In livelihood discourse, attention is paid to the variety of ways by which people (particularly rural people) manage to make a living for themselves with the constraints they face (Hebinck & Bourdillon, forthcoming). Therefore the concepts of actors and human agency become important (actor-oriented approach).

According to Francis (2000) when analysing livelihoods, attention must be paid to struggle, negotiations among people with different interests, power, access to resources, goals, values, discourses, etc and how they interact with each other. In addition, when doing her research on livelihood strategies in several African countries (Kenya, Tanzania, Zimbabwe, Zambia and South Africa) Francis found that among others, the variables such as the size of the field or number of fields, crops arrangements in the field, integration into the market, family size, gender, farmers' mobility, labour availability, norms, beliefs and community organisation were also important on analysing livelihood strategies (pg. 55- 75). Many households change the field sizes and number as a response to changes in labour availability or crop demand in the market. Big families are more likely to have big fields as compared to smaller sized families. Female-headed households might have different views in terms of crop importance in comparison with male-headed households. In some areas females are prohibited by local norms to engage in the production of certain crops and community organisation might limit women's engagement in certain livelihood activities. Migration and ease of mobility help some households access (out of the community) livelihood activities.

*Livelihood strategies* are dynamic realms that integrate both the opportunities and assets available to a group of people for the fulfilment of their goals and aspirations, as well as interactions with and exposure to a range of beneficial or harmful ecological, social, economic and political perturbations that may help or hinder group capacities to make a living (Singh & Wanmali, 1998). In the same line of reasoning, Verstralen (2001) exemplifies that agro-ecological conditions determine the extent to which agricultural production permits people to sustain their livelihoods both in the short and longer term, and people's interest and capacity to invest. Socio-cultural factors affects livelihood strategies through ceremonies such as marriage, initiation rites and funerals involving the generation and redistribution of (social) payments.

Mearns (1999) summarises *Livelihoods* in terms of capabilities, assets and activities required for a means of living. Mearns categorise the assets into:

- a) *Natural capital*: including natural resources and sink and service functions, that is to say, nature's goods and services;
- b) *Social capital*: relationships of mutual trust and reciprocity that facilitate action; relationship can be vertical as in a patron/client structure and/or horizontal, between individuals with shared interests, networks that increase people's to act; the cohesiveness of people and societies;
- c) *Human capita*: skills, knowledge, good health and ability to work- capabilities or the status of individuals;
- d) *Physical capital*: includes basic infrastructure like adequate water and sanitation, affordable transport, secure shelter; generally speaking the local infrastructure;
- e) *Financial capital*: stock of money, savings, pensions, remittances, accesses to credit.

I will concentrate my study on these three main concepts of livelihood framework proposed by Mearns (1999): capabilities, assets and activities required for a means of living. However, given time pressure and the complexity of the concept of capital, I will concentrate (but not limit) my study on households' activities and capabilities.

#### *Why am I using Livelihood Framework?*

Households in rural Mozambique in spite of being so-called " *camponeses*" (peasants) do not depend only on agriculture for their survival. They are engaged in a field of activities of which agriculture is just one. This household level diversification has implications for rural poverty reduction projects and policies as it means that conventional approaches aiming at increasing employment, incomes and productivity in single occupations like farming, may in fact, be missing their targets (Ellis, 2000).

*Pitfalls of livelihood frameworks*

In spite of the huge potential of this framework, many social scientists have been criticising many points which include:

1. Methodological issues: the livelihood framework focuses on the household as the unit of analysis. In many situations there are confederations of households and wider ranging interpersonal networks embracing a wider variety of activities and cross-cutting the household level, the urban-rural contexts as well as national frontiers (Long, 2000);
2. Analytical issues: the livelihood framework puts emphasis on capitals. The choice of different components of a capital is not clear. For example, remittances is one component of financial capital but, when dealing with livelihood strategies, remittances can be part of human, social or financial capital (Hebinck & Bourdillon, forthcoming).

*2.1.2 Purposes of this study*

**Societal objective**

This research was carried out in order to improve the current understanding of rural lives in Mozambique. It generates ideas and material for further debate on what role new technologies and adoption can play in rural livelihoods. It is the intention of the researcher to contribute to a better understanding of poor rural household livelihoods: poor rural households that have been for quite long time, the target group of many development organisations.

### **Scientific objective**

The main research objective is to study farmer's livelihood strategies in Morrumbala. More specifically the research aims to:

- Describe different livelihood strategies in the research area;
- Gain insight into the interaction between farmers and their surroundings and wider environment, and;
- Analyse farmers' response to paprika introduction in the research area.

### **Personal objective**

In order to fulfill the MSc degree at Wageningen University, field research is a necessary component. It is my personal interest to get master degree. By doing this research through the MSc process, I learn and am supported in carrying out research in a social context, and reporting on it.

#### *2.1.3 Research questions*

- How do the households in Morrumbala make a living?
- Do the households use paprika to make a living?
- What are the differences between households in Morrumbala?
- What are the differences between regions in Morrumbala?
- Can the differences between households and regions explain the use of paprika to make a living?

More specifically I want to know:

#### *2.1.4 Sub-research questions*

- What are the different livelihood activities and strategies?
- How are these activities and strategies made up?
- What are the differences in livelihood activities and strategies between households in the same community, and why do these differences occur?
- Do the differences explain the use of paprika as a means to make a living?
- What are the differences between the communities studied, and what explains these differences?

- Are there some particularities in the regions which ease or inhibit the use of paprika as a means to make a living?
- How have livelihood activities and strategies changed over time and why?
- To what extent is paprika production reducing poverty?

### 3 METHODOLOGY

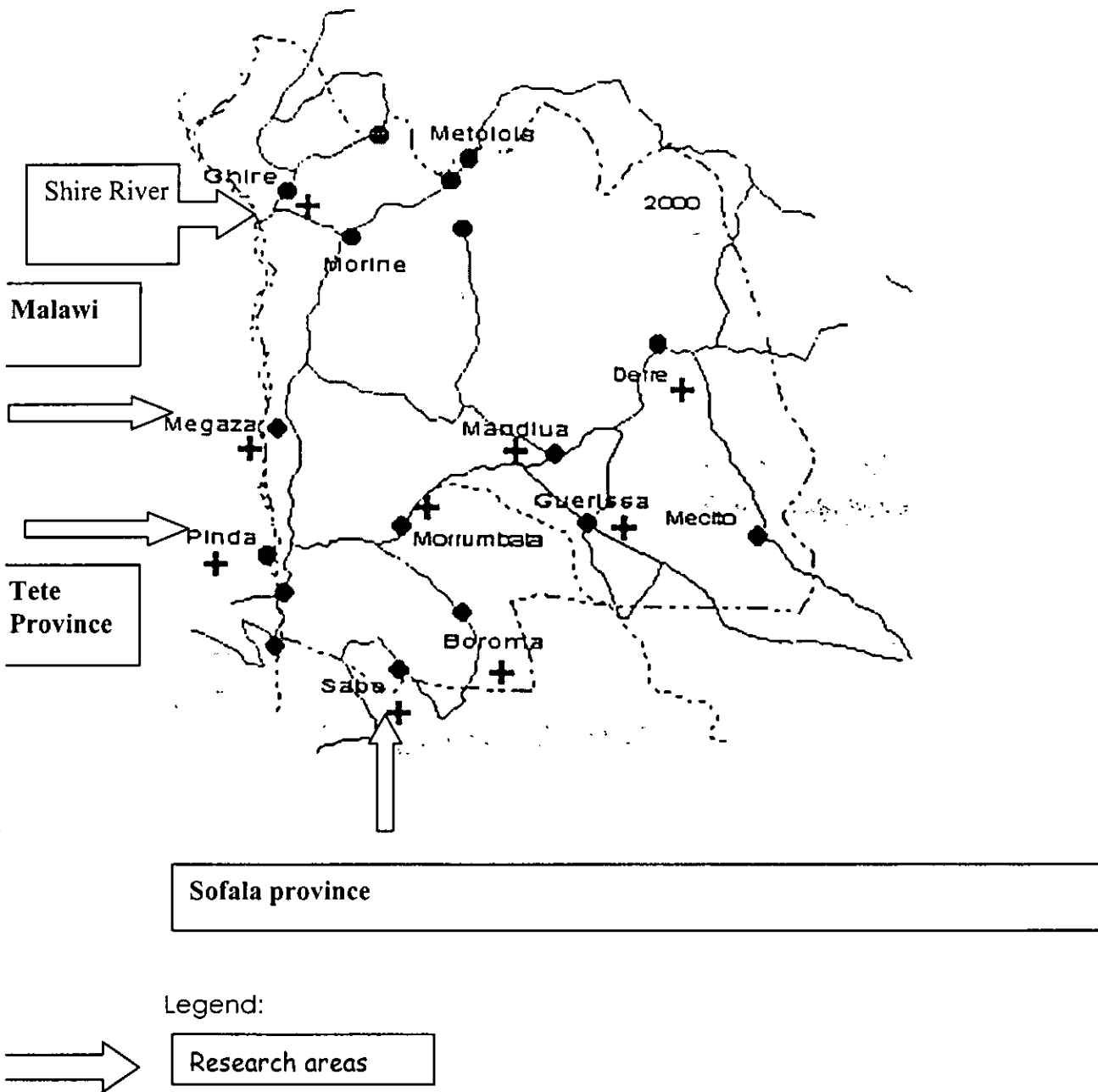
#### 3.1 Site selection

The present study was carried out in Morrumbala District, Mozambique for practical reasons. Many people in rural areas hardly speak the official language, Portuguese. Therefore I wanted to do research in area where I could communicate personally with the farmers. For this reason, selected a region that speaks Sena as a native language, as I do myself. In Mozambique, Sena is widely spoken in Zambeze valley across three provinces in the middle of the country (Sofala, Tete and Zambezia). Due to the floods that affected the Zambeze delta in the beginning of the year 2001 (year of the research) I had to select a Sena speaking area, which suffered less the effects of the floods. Morrumbala in Zambezia appeared to be the one least affected. However, that is not to suggest that the floods had not affected the district at all.

Once in Morrumbala I spent a week to visiting the paprika production areas and contacting the senior staff of many institutions working in the District. I met with District Agriculture and Rural Development Director, District administrator, World Vision representative, National Farmers association representative and Cotton fomenting enterprise (Agrimo) representative. From these meetings I realised that, there were two lowland regions across the Chire River (Megaza and Pinda), which started the paprika production in 1997, and some other areas in highlands which began production in 2000. I choose to work in these two lowland areas because they receive a lot attention for the paprika production and based on the meetings (above described) I was told that paprika production was reducing poverty. Apart from these regions I decided to work in one highland area that began production in 2000. The highland area was selected randomly. I wrote the names of all highlands areas producing paprika on small papers and I put them in an empty cup. I asked a child to select one paper from the cup after having mixed them. This is the story of how Sabe was selected as a research site. The geographical location of the regions are presented in the map below:



## Morrumbala District



### **3.2 Trust building**

Trust is one of the most important elements when conducting social science research. In spite of the existing literature on trust building, (see i.e. Russel Bernard, 1995; Spradley, 1979; Johnson, 1990; Garvin, 1993) trust building is a very personal process. It is not something that can be learnt from books. Instead, trust building is embedded in your personality, your way of speaking, smiling, making gestures, and dealing with people in general.

Once in Morrumbala I started playing soccer with extension agents from World Vision and other institutions. I played the district championship during my fieldwork. This allowed me to be close to many extension agents and to reduce the distance between them and me. Apart from playing soccer with them we went to discos, prepared meals together and ate from the same plates. While doing the research, during the evenings I invited the senior staff of the district such as the administrator, World Visions staff and others for informal chats in bars and other relaxing places. From such interaction I exhibited my non-academic side talking about all matters from sports and politics to religion. These interactions allowed me to develop closer relationships with people in the field .

In the community, I requested the community leader to arrange a room for me in their own homes. Once I used my own tent. To eat, I gave the household where I was installed money to pay what they thought was needed. In the morning I woke up early, as the rest of the household and often I accompanied the families to their fields where I helped them.

### 3.3 Data collection

To collect information in each area I used a combination of different methods and techniques. The methods and techniques applied are predominantly from the sociological and anthropological schools of thought, including:

- *Secondary data analysis:* Project documents including progress reports, extension agent reports and reports from meetings with farmers were analysed very carefully. Apart from that information I consulted socio-economic, historical and cultural information about the study area (i.e. Negrão, 2000; Serra, 1982).
- *Participant observation:* According to Jorgensen (1989) quoted by Pepper (1995) participant observation is a method based on participating in the experiences of the everyday world of the studied subject, because any understanding of the world of the subjects must begin with an insider's perspective. In being a participant observer, the assembly of data becomes a process of making a coherent whole from parts, of arranging facts to form explanations, of testing ideas and refining conclusions (pg.50). During my fieldwork (see pg.19 of this report) I camped in the localities, ate with the farmers, went to the fields with them heard and told stories during the evenings with some of them.
- *Narrative study-* According to Van der Does & Arce (1998) Narratives are stories that can be conceptualised as providing a political scope for the phenomenon of development. They are stories that define the scenario for projects, telling us what should happen and what will happen. They have a significant explanatory and descriptive value. This method was used to get points of view from the different actors<sup>3</sup> involved. The objective was not to seek the truth. For the sociologist interested in social processes there are no

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<sup>3</sup> Actors are defined here widely as people involved in the process of paprika production and commercialisation

right or wrong views; there are only differing views representing different interest groups, status, personalities, tribes, etc.

- *Network analysis*: Debate on networks is still in taking place. The idea behind networks is that everyone has social relationships. These relationships can be used to attain a desirable state of affairs. So, the notion of network relates to the extent to which a person has relationships and makes use of them to achieve certain ends. This instrument was used mostly to observe the flow of information among farmers and from farmers and extension agents and other actors involved in paprika production.
- *Interviews*: generally, interviewing is a dialogue between two or more people where one is asking and the other answering. There are according to Pijnenburg & Cavane (1998) three types of interviews: open interviews, semi-structured in-depth interviews and closed interviews. For this thesis, I used a combination of semi-structured in-depth interviews, which are based on a list of guiding questions that develop during the process, and open or informal interviews. I interviewed farmers, extension agents, local leaders and project staff.

### **3.4 Data analysis**

In total 45 households were interviewed, 15 from each research community. Important to note is that the households in the research areas included parents, married sons living with their parents and grandparents. However, I did not only talk to the head of the households, but also to the sons, daughters and other family members in order to incorporate their perceptions of livelihoods in my research. The data from each community was analysed separately (single case analysis) to see whether the households have different livelihood strategies, and in the end, all cases were analysed together (cross case analysis) to see differences in livelihood strategies between communities. The 15 households in each community were selected using the following criteria: I started interviewing one household and at the end I asked if they knew any household which differ from them with respect to one of the following elements:

- Farm size; Farm's number;
- Crops location in field;
- Market integration;
- Farmer's objectives;
- Family size and gender;
- Mobility of the farmer;
- Labour available;

### **3.5 Strong and limitations using this methodology**

#### **Strong points**

- Being able to speak the local language helped very much in getting information and reacting during the interviews or observations. Living with the research objects, being a part of their society, helped me to better understand of the situation.
- During the interviews people felt very free to talk to me especially after our common meals and during the work on the farms. In many cases people asked me if I was interested to know more things in additional to what they had already offered.
- The methodology allowed collection of what I consider to be, in-depth information. Therefore the strongest point of this thesis is a deep-rooted knowledge for understanding the problem situation.

#### **Limitation**

- Rural livelihoods are complex and as such may not be fully covered by this report.

#### **4 OVERALL DESCRIPTION OF THE MORRUMBALA DISTRICT**

Morrumbala (see map pg.18) is one of the 17 districts belonging to Zambezia province. The District limits are in the Northern Districts of Milange and Mocuba; in South there is Mopeia District; West Mutarara District, Tete province and finally to the East, the District of Nicoadala. Administratively its composed of 4 administrative posts, "postos administrativos", and managed at the District level by the district counsellor, "administrador do distrito", by post chief at level of administrative posts and by locality president at locality level. The structure described above is the formal one, created by the government after independence from the Portuguese authority in 1975. Apart from the formal structure there is the traditional authority, which still has a great deal of power in some areas. The traditional authority is composed of the regulo, sapanda and fumo. Hierarchically the regulo is the highest level of traditional authority, followed by sapanda and finally by the fumo. The administrative division of the country goes from provinces to Districts to administrative posts and ends with localities. According to the nation census of 1997 the population of Morrumbala is 243,751 inhabitants (119,115 males and 124,636 females) and most are Sena and/or Loló speakers.

##### ***Historical developments***

Mozambique was colonised by Portugal for five hundred years. During that period the native people served Portugal's interests. Given the fact that Portugal was unable to fully exploit the country, it adopted a system of granting some areas to the other European countries such as England and Holland. This philosophy established many Dutch and English traders in Mozambique from 1855/1890, especially along side Zambeze Valley. These Europeans were searching mainly for peanuts and sesame to be used in oil industries in Europe.

Sesame and peanut production was common in the family sector in Zambeze valley, especially in Shire riverbank in Morrumbala (Serra, 1980).

After 1890, sesame and peanut commercialisation by traders declined because, among other reasons, many companies and traders operating in Zambezi valley (i.e. Madal, Sena Sugar, Companhia de Zambeze, Companhia do Boror,) started to produce on their own using the "plantation system". The plantations required a labour force which was obtained by taking coercively the native people as labourers. Thus, the labour force in the family sector was drastically reduced, reducing consequently the production at the family sector. Once in plantations, production was mainly for crops highly quoted in the European market such as cotton and sugar cane. Therefore there was a shift in cash crops in the region from sesame and peanut to cotton and sugar cane.

In 1890 the Portuguese authority in Mozambique legislated that all native people were obliged to pay taxes "*the Mussoco*". The taxes should be paid half through work on plantations and the other half by monetary means totalling \$80 annually per capita (Negrão, 2000). Compulsory work in plantations and the "*mussoco*" made many native people flee from their regions, especially from Zambeze valley to other regions less rigorous in "*mussoco*" and even to other countries (Serra, 1980). In same report Serra says that Zambeze region was affected by drought in these years caused, mainly by the cutting of millions of trees without replacement which were used as fuel for ships travelling in Zambezi and Shire rivers. "*Mussoco*", compulsory work and drought were the main reasons for the start of labour scarcity in the region.

To overcome the lack of labour force the administrative structures in Mozambique advised, in 1914, that companies should find labourers outside of their working areas, leaving local people free to engage on their own production.



Alternative ways to overcome labour scarcity included the introduction of crops to be produced by farmers without going to plantations. The crops in Morrumbala included cotton in highland areas and rice and maize in riverbanks such as Shire.

After independence in 1975, many things changed. The state nationalised all industries including those big plantations. The traditional structure composed by *regulo*, *sapanda* and *fumos*, which helped the colonial structures in tax collection and labour recruitment was abolished and a new one composed of "secretarios and grupos dinamizadores" was created. Apart from that, the government brought a "marshal" plan to develop agriculture, which was based on the transformation of the big colonial plantations into co-operative farms. Farmers were obliged to spend time working on these fields. No attention was given to the subsistence agriculture as is now practised in Mozambique.

From 1976 to 1992 the country was in civil war and many people from Morrumbala were displaced, living mainly from international aid in refugee camps in Malawi and other neighbouring countries. After the peace agreement in 1992 many people returned to Morrumbala and re-initiated agricultural production with or without international aid.

Currently, the district has an accelerated rhythm of development<sup>4</sup>. According to agriculture District director, Morrumbala was in 2001 second in Zambezia in terms of agricultural production. The geographical localisation of Morrumbala allowed the district to be a convergence point for different provinces and countries (see map pg.18). It has been used as a preferential corridor for traders and businessmen's from Malawi and Tete, Sofala and Zambezia provinces. The soil fertility and the regularity of rain allows the district to be self-sufficient in food and to be one of the 4 major food producers in Zambezia province. The roads are in

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<sup>4</sup> Development as a process of social changes ( Den Ouden, lecturing notes, 2000 )

"acceptable" conditions and are maintained almost every year from the government or from the local enterprises and organisations.

Apart from the physical conditions, the presence of development organisations such as World Vision, HPI<sup>o</sup>, Save the Children and businesses like Agrimo gives a certain dynamic to the district. During the fieldwork there were in place, activities for electricity installation, telephone centre, many restaurants and rest houses. Negotiations for installation of a bank branch were also in place.

According to a World Vision report (2000) there has been an increase in the number of transactions of agricultural products from year to year. Just as an example, from 1999 to 2000 these transactions increased around 11% in Morrumbala. Many people own a bicycle, radios, and constructed better houses.

## **5 LIVELIHOOD STRATEGIES, PAPRIKA PRODUCTION AND POVERTY ALLEVIATION IN SABE REGION**

### **5.1 Description of Sabe Region**

Sabe is a locality belonging to Morrumbala village Administrative Post. It is located 41 km in Southern-West of Morrumbala district (see the map pg. 18). It has as limits Mopeia in South, Morrumbala Village in North, Boroma in East and Pinda in West. The total number of inhabitants was in 1997, 11,083 people (INE, 1997). In terms of infrastructure, there were, at the time of this research, 4 primary schools, a health post, a flour mill and diverse informal markets.

The region is administered by the president of the locality "president da localidade" - formal authority. However, there are also the regulo, sapanda and fumos - the traditional authority. The formal authority's main role is to implement government policies at the level of the localities, while the traditional authority has a more socio-cultural role. After the peace agreement of 1992 the government has been encouraging the two authorities to work together.

The local people are Sena speakers and their lives are based mainly on agriculture. Because it is patriarchal society, only men can inherit land from their ancestors. During the colonial period, people especially the men from Sabe, were forced to abandon their lands and family to work on plantations. The absence of males affected not only the production process at the household level, but also the continuation of some tasks, which only the male family member could teach the children. Ceremonies for boys' circumcision are no longer existent in Sabe. On the positive side, once returned home after forced labour, people brought with them knowledge and experience, which were applied to their farming. Four of the fifteen households interviewed, were producing cotton and reported to have learnt the cotton production process from their grand parents who had worked on plantations.

## **5.2 Livelihood Activities in Sabe**

In this section I will present and explore the different livelihood activities which I found in Sabe. The activities include:

### **5.2.1 Agricultural production**

Agriculture was mentioned as the most important livelihood activity in Sabe. To practice agriculture they require land, labour water, and seeds. The access and exploitation of these resources by the households is presented in the next paragraphs.

- **Access to land**

The access to land according to the people interviewed in Sabe, continues to be determined by indigenous systems of land tenure (the land is inherited from the ancestors). This has not been a problem because the Mozambican land law, reformulated in 1997, gives the right of land exploitation to those living on or using the land for more than 10 years. Thus, farmers who have been using the land all their lives are protected. However, the Mozambican law clearly underlines that the land belongs to the state and nobody can sell it. Using is allowed but selling, not. Newcomers were reported to gain access to land by two means:

- Asking the current users for a piece of their land, or
- Asking the government or institutions representing government.

The interviewees reported that access to land itself it still not a big problem in Sabe. However, local norms and beliefs also affect access to land (see example box below):

**Box 1: Mr. Andrade and the ancestors**

Mr. Andrade 45 years old is a farmer in Sabe. He has only one field where he mixes maize, millet, beans and cassava. In the beginning of 2001 after hearing from other people that the price of paprika was very attractive he decided to open a new field for paprika production. According to him, he found a very nice area to produce paprika. Before opening the field, as many people still do, he went to ask permission from the ancestor (the owners of the area). The ceremony to ask permission consists of the following ritual: the person puts a small amount of flour in form of mountain on a plate; while he does that he asks permission to open a field in that place and to bless the production.

The sign of acceptance is the presence (i.e. non-destruction) of the flour mountain on the plate following day. If the mountain is destroyed, it means that the spirits do not allow the person to open a field on that place. Unfortunately when Mr. Andrade went to see the answer, the mountain was destroyed, meaning that the spirits did not accept that he works in that place. For that reason Mr. Andrade did not produce paprika.

All fifteen households have more than 1 hectare of land for agricultural purposes. However, not all of them are using all of their land. Of the fifteen, only three were using more than one hectare. Six farmers are exploiting less than one hectare and they have fields on other sites. When I asked how farmers obtained these additional fields, I was told that they exchanged fields. A piece of land is given to someone else who has land in another area. The other farmer does the same. In the fields I found that those farmers exploiting less than one hectare tend to mix/inter-crop (maize, sorghum, cassava, beans and cash crops) while those exploiting more than one hectare divided their field into parcels. One parcel is reserved for cash crops and another for food crops (see photograph 5, annex). According to those farmers (parcelling the fields) they are producing cash crops for the market. The farmers inter-cropping they said that they would also like to have large fields and to mono-crop paprika because that is what was

advised by the extension agent. However these smaller farmers cannot afford to mobilise the required inputs, particularly the labour.

From the information presented above regarding access to land, some points emerge: households strategize land access and use differently i.e. those exchanging and having plots in different sites and those having plots in just one site. It emerges also that household capabilities are different. The ones inter cropping would like also to produce via mono-cropping. However, they cannot because mobilisation of resources is required. Another point of note is the influence of norms and beliefs on poverty alleviation. Mr. Andrade could not produce paprika because the ancestors did not allow him to access the land. In the next section I will look at household access to labour.

- **Access to Labour**

Labour was mentioned as the major constraint for agriculturally based livelihoods. The three farmers using more than one hectare of land told me that they hired labour initially in order to prepare the area. They also hired labour for weeding. When asked about their number of the fields I was told that they have only one because: *"when you have many fields you loose control over the production and the production process. How can you control the guys who are working on your field when you have so many? You cannot be in two or more place at same time. But, if you are really interested in production, you must be present to see what is going on"*. Two other farmers told me that they only hired labour for the weeding, after realising that it would be impossible to finish the job relying solely on family labour. The rest of those interviewed used family labour only.

In terms of household task division for agricultural purposes, the males are the first to leave home in the mornings to go to work in the fields. Later follow their wives, in some cases taking breakfast and finally the children. The children stay

longer at home because they are responsible for cleaning the back yard (boys) and the dishes (girls). In the fields, the boys work more closely with their fathers, while the girls are closer to their mothers. Many males do not stay full time in the fields. Sometimes they leave the fields to see some friends or to check on other aspects of the farm i.e. a rattrap. Cash crops, when produced, are mainly males' domain; females can participate but only as help to their male counterparts. Normally the children are the first to leave the fields. Girls are expected to make fires and heat water for their fathers' shower, while the boys take over activities left by the father.

Because of the patriarchal rules in place in the area, when the boys marry they must stay close to the parents. With this, households can be composed of more than 10 members including parents, children, grandsons and a daughter-in-law. Normally, couples have their own field, but must spend some time in their parents' fields, this is particularly true for the daughter-in-law.

The civil war after independence (1976-1992) affected labour availability in some households. Two households lost their family members and another seven households reported that some members of the household did not come back from Malawi where they fled.

The information given above shows the differentiation between households in accessing labour. At same time it shows how households strategize to overcome labour scarcity. The norm of living closer to parents is one strategy to capture labour. I also shows the labour arrangements at household level.

- **Access to water**

Sabe is a highland region with a serious water problem. People get water from a small rain-fed stream. World Vision just started a project for water supply in the region. For agriculture, the farmers depend completely on rain. Given this

reality, the agricultural production cycle is made once a year; it starts in September with land preparation and finishes in June-July with the final harvest (i.e. sorghum). To overcome this challenge, one household also has a field on Pinda riverbank.

- **Access to inputs (fertilisers, pesticides, seeds and implements)**

In Sabe none of the farmers interviewed have ever used fertilisers. Those who are or have been involved in cotton production, used pesticides. The promoting company (Agrimo) which has a cotton factory, supplies the pesticide. To improve soil fertility mulching and/or incorporation of leguminous and/or pulses are practised. The implements used by the households are still mainly "traditional", such as hoes and axes. Animal traction is not used, nor do farmers hire tractors which is regarded as very expensive.

New seeds, apart from paprika, can be purchased in Morrumbala village. The prices vary from seller to seller and per season. Buying from the Mozambican seed supply company (Semoc) is less expensive than purchase in shops. Buying the same seeds through the informal market, seems to be less expensive than the formal market. Buying outside the production season is less expensive than during it. However, none of the farmers interviewed bought seeds in at least the last ten years. They justify the affordability (capacity to purchase) and adaptability of the seeds to local environment as major constraints to the adoption of new seeds. The seed supplier narrate that the farmers are accustomed to the culture of receiving for "mahala" (without payment) which was in "fashion" during the civil war times' and immediately after that. After civil war, until more or less 1994, many NGOs were providing, free of charge, seeds to farmers in order to help them re-start agricultural production. The farmers with whom I spoke, use seeds selected from the last season. The important crops produced are: most importantly, maize; followed by sorghum; cassava, and; beans. Access to paprika seeds will be explained in the next paragraph.



Shifting from Cotton to Paprika: new agricultural opportunities and the process of decision making

Before the introduction of paprika, the main cash crop in Sabe was cotton, which has been promoted by a private national company, Agrimo, since 1997. In the agrarian year '99/2000 cotton production decreased by about 58% compared with the production of two year earlier. In 97/98 the cotton production in Sabe was 143,853 and in 99/2000 the production was 84,584 (Agrimo, 2000). According to the same report this happened due to:

- Break down of the international market price of cotton price in recent years;
- Climate changes (irregular rain), cause later planting, irregular crop density in the fields, and difficulties in pesticide application resulting in bad harvesting.

According to two farmers, the cotton price and climate changes are just small problems. Many problems related to cotton production are hidden. In the following paragraph I will present what was said to have happened to the farmers.

**Box 2. Mrs Isabel and the piece of soap**

Isabel is a farmer, widow and mother of 5 children. She planted in year 2001 more or less 1/2 hectare and harvested 5 bags. She took the harvest to Agrimo for commercialisation. After weighing and calculating the harvest, she received a piece of soap. "They said my cotton was not much and only covered the costs of the pesticides applied in my field. I don't know what I will do with my kids. I did a small field of maize and used all labour for cotton production. This is a robbery. I swear that never more cotton. I will start paprika" she finished.

**Box 3. Mr. Manuel and the balance**

"See I have here in my house a balance. Before taking my cotton for commercialisation I weighed my cotton. In first year that I produced cotton the Kgs I measured here were the same as they measured. Last year I had 47 bags. When I arrived with my bags for commercialisation one of the guys came to me and said: you have so much cotton and we should like to help you. During the measurement we are going to add for each bag 10 kg more and the money we will divide later. I said okay. However, to my surprise the weight was completely different and much less than what I had measured. At the end I took the money and I went back home. Later, the guy who approached me in the commercialisation came to my house and asked me to divide the money. I said I am not going to divide anything. If you want let's go discuss this problem with your company.

From the perspective of those two farmers, the cotton problem in Sabe will not be resolved with merely a rise in prices. They pointed to other elements. According to them, the problem always starts at the beginning of the season. An extension agent asks payment to apply pesticides. During the commercialisation, the price paid is completely different and less than announced at the beginning of the season. During the announcement of the commercialisation day, some extension agents advise the farmers to bring with them other products such as chickens, to make the day special day with food and drink.

The other point mentioned is related with their perception about the agricultural production process of both crops. In the following table I present these perceptions.

Table 3. Comparative table between cotton and paprika from the farmers' point of view.

| Compared variable    | Cotton                              | Paprika                            |
|----------------------|-------------------------------------|------------------------------------|
| Land preparation     | Same as paprika                     | Same as cotton                     |
| Weeding              | 3 to 4 times during season          | 2 is enough                        |
| Pest control         | Highly required                     | Required                           |
| Harvesting           | Labour highly required              | Does not require so much labour    |
| Processing/selecting | Labour highly required              | Does not require so much labour    |
| Sallying             | Buyer guaranteed                    | Buyer guaranteed                   |
| Price                | Less attractive (0.12US\$/kg, 2001) | Highly attractive (1US\$/kg, 2001) |

What we can see from the information above is that farmers, before adopting a new livelihood activity, judge the different livelihood opportunities at hands. In this specific case they considered price, role of the agents, labour required and pest control. The table also shows that paprika production is considered by some farmers i.e. Mrs. Isabel as a crop which can help improve life as compared with cotton. Mrs. Isabel decided to start producing paprika, shifting from cotton.

Paprika Seeds' distribution: strategizing in order to get seeds

Paprika production was initiated in Sabe in 2000. World Vision distributed paprika seeds to the farmers via associations which already existed or by creating new ones. During my research I worked with two associations which I will describe in the following paragraph.

*The "Fiction" Association Fungula Masso*

World Vision established the association that I will call "Fungula Masso" in 2000. At the beginning of year 2000 the World Vision extension agent informed some farmers that the organisation had paprika seeds to distribute. In order to distribute the seeds, he asked the farmers to form associations of 20 to 30 people and to elect leaders, this being a rule of World Vision. The association was created and had 35 members. During my fieldwork less than 15 members worked with the association. When I asked a farmer who was part of the association why he did not join the with the association, he replied: "*the most important was done. I was interested in seeds and I got them. Now I have more important things to do. I do not have time to attend meetings which do not fill my stomach*".

*The "Familiar" Association Xiverano*

The Farmers' Association of Xiverano<sup>5</sup> was established by 4 brothers and their wives. 3 brothers have 2 wives each, meaning therefore that was established by 10 elements. Later on uncles, fathers-in-law, brothers-in-law and two neighbours become members of the association making a total of 21 members in total, the present number. At the beginning of the year 2000, one of the members, the president of the association, went to World Vision office in Morrumbala village and asked for paprika seeds because he was representing an association in Sabe region. To prove that it was true he said to World Vision staff that they could ask the National Union of Peasants "uniao nacional de camponeses, which has

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<sup>5</sup> The name is not the original one. I invented the name to avoid probable undesirable interpretations

the registration of all associations of the district, about their association and about himself. The national union said yes and he received seeds and the extension agent started to visit them.

When I perceived that they were just members of a kinship, during a wedding ceremony( see footnote 6) I asked if they had other members apart and one of them said: *"If we accept one person and reject another one, people will never understand why we do that. They will think that we are selective. Another reason is that we started a long time ago when the situation was really bad. If we accept a person now that the situation is more or less good, what will this person do to pay our sacrifice during the bad times? We made a lot of effort and invested much money to build this association. We are very careful. We do not want to admit someone that in future will create problems. That's why we do not admit new members"*.

Talking with non-members about the association was not any easy task. Many people prefer to keep quiet or to simply say that everything is okay. The reason being that this family is considered by many to be powerful. Saying something against them could represent a danger. However, it was a general feeling of those interviewed that being member would help them in many situations such as access to credit, facility in commercialisation and for information from outside the community. Some people referred to the payment required to be a member ( $\approx 20$  US\$) as the major constraint to participation. Because the paprika seed was distributed via the association, most of the people who received seeds are members of the association or members of a particular family. However, I reported two cases of seed exchange. A non-member had a new maize variety and asked for paprika seed in exchange. The other case was of a member of an association who gave paprika seeds' to a non-member who had requested paprika seeds as payment for helping in the cotton harvest.

A lot of lessons can be learned from these examples. First of all we see people strategizing to get paprika seeds. Second we see differences in terms of power in the community. Different networks emerge within the community which help people obtain paprika seeds i.e. exchanging seeds or requesting them from those who have them. In terms of poverty alleviation we see how the NGO plan of working with the poorest was redesigned locally and in this regional case, is addressing only one family.

### *5.2.2 Hunting- food security element*

All households practice hunting. The commonly hunted animals include rabbits, rats, gazelles and wild pigs. Women normally hunt rats on the agricultural fields while the males go to the forest to hunt gazelles and other "big" animals. Hunting has changed over time. It was much easier to find animals before the civil war. According to the community members, many animals fled from the area due to the war. Another point stressed locally is that the government recently legislated that due to the reduced number of animals, hunting is now forbidden. If someone is found by inspectors to be hunting, he must pay a fine. When asked if they still hunt despite the legislation and the fine, the response was affirmative. Traps are set in the evening and inspected early in the morning. When caught by the inspectors, normally they negotiate.

Differences in terms of dependence on hunting between those interviewed were noted. Households which have "considerable" livestock (four households from the fifteen interviewed) practice very little hunting. Those four households include the three, which are using more than one hectare for agricultural purposes. One of them told me he is too busy with trading and agricultural production to hunt. "*Hunting is for people who have time*".

From what have been said above we see the gender relationship in hunting, people's strategies to continue hunting i.e. changing hunting times or negotiating with the inspectors and the differentiation in hunting practice between households in the community.

### 5.2.3 Livestock

Almost everybody has livestock in Sabe, the most common animals being chickens, pigs and goats. Livestock is referred to by the interviewed as financial capital. "When you have nothing to eat at home you can sell your chicken or exchange it for some cups of flour to feed your children"- one interviewed said. Livestock is important as financial capital but also serves as bride price (lobolo)<sup>6</sup> and can be used for many social events and ceremonies<sup>7</sup>. Animals also have another meaning; the four households that have a "considerable" livestock are considered to be rich.

Two of the richer households reported having sold part of their livestock and used the money to pay the labour in order to clear fields and for weeding. Six interviewed told me that they have worked for someone else and received meat as payment. The effects of the civil war (1976-1992) on livestock was tremendous. All interviewed completely lost their livestock during the war. Recognising livestock as a very important livelihood activity, which was destroyed by the war, many NGOs have been distributing animals (especially goats) to the farmers. World Vision itself and HPI (Heifer Programme International) are among these NGOs using livestock to improve farmer livelihoods. It is important to note that the animals do not have veterinary assistance thus, in the face of diseases like the Newcastle disease in chickens, the numbers are reduced drastically.

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<sup>6</sup> During my fieldwork I witnessed a wedding ceremony of 14/07/2001) Gracindas' wedding. Gracindas' father offered 3 goats: one to be killed for the party and two others (little male and female) to be taken to the new residence in Megaza.

<sup>7</sup> When someone is ill and goes to the local healer in many situations the treatment requires blood, which can be obtained by killing an animal.

There are many ways from which people obtain livestock in Sabe. Animals can be obtained from NGOs, or given by parents as occurred by Gracinda (see footnote 7). Some farmers have only chickens while others, the richer people, own a considerable number of goats and pigs. The main reason mentioned is the capability to buy the animals. I asked one of the "riches" how he got the animals and he told me that when people have limited alternatives for survival, particularly, during the weeding period, they sell their animals. Because he knows the cycle, he saves money for that period.

Livestock has different meanings and multiple purposes. Having considerable livestock is considered to be a sign of wealth. Those who sell animals during stressful times are considered or consider themselves, to be poor. Therefore, livestock becomes a crucial element in differentiation in the community. Livestock also shapes the way people practice agriculture. Those who have livestock have large fields and their paprika production is much higher in comparison to those without livestock. On the other hand we see that it is not easy to categorise the elements into capitals. Livestock is not used only to produce money but also is used in social events. So how can we categorise animals? Is it financial capital or social capital ?

#### *5.2.4 Trading agricultural products*

The demand of agricultural products in Sabe is high. Given the geographical location of the district, traders from many regions look for products in many regions of Morrumbala, including Sabe. Of the fifteen households, three sold outside the community, six sold their agricultural products locally, and six did not sell their products at all. When I asked why did the first group (three) sold their products outside the community they told me that the price is much higher than selling locally. Those who sold the products locally said that were aware that the price outside was higher but they cannot trade out because they do not have

transportation i.e. bicycle, or the money to hire transport. Those who did not sell did not have surplus.

What we observe is that trading depends on the household's capability to mobilise resources such as transportation and depends on household production. We see also how households strategize for more profits by selling their production outside the local market.

### *5.2.5 Remittances*

There is no doubt that the civil war that ended in 1992, had very bad economic and social consequences. There are no doubts also that the war dispersed many families. Some members of households fled in different directions and after the war not all members of the household came back to/with their families. They continue to live in the places where they fled. In Sabe, six of the fifteen interviewed households receive remittances from Malawi, or/and Sofala province, where some family members reside, not returning after the civil war. Another situation is that some young boys from rural areas are attracted by cities and leave their families searching for employment there<sup>8</sup>. Once they find a job (normally as housekeepers or house workers) they send remittances to their families.

### *5.2.6 Wage labour*

Seven interviewed work seasonally on others' fields. During weeding and harvesting, the labour demand is higher and those with large fields, incapable of doing the tasks alone, ask for the paid help of others. Three interviewed, who have more than one-hectare fields, hired labour. When I asked if it was easy to find labour, all of them (three) told me that the important thing is to have money

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<sup>8</sup> When I was leaving Sabe after my research a boy approached me and asked lift to Quelimane City. I asked what he was going to do in Quelimane and he replied to search a job.



or livestock. "There are so many people willing to work; all you need is to have money/meat/ cloths; they accept all things". I asked again if there are many people how they select workers. Selection is based on who charges less money.

I asked those seven farmers if they work regularly in other people's fields and one of the replies was: "imagine yourself with five kids to feed; you came back from your field and they are looking after you. At home there is nothing to cook. What would you do?"

On the one hand, wage labour helps households to make a living i.e. feeding purposes, but it is also part of a strategy. To maintain the large fields which are strategically chosen, given the market orientation of the owners, the farmers need to hire labour. We see that the two groups, those paid and those who pay, have different interests. The employer wants to pay lower wages, which is possible when there are many people looking for work; the rich depend on the poor for their survival.

### *5.2.7 Artisan work*

Apart from the activities above described two households make and sell mats, pots and baskets. One produces and sells wooden furniture; four households are members of a group which produces and sells bricks. As I mentioned, when in Morrumbala, there is a lot of constructions under way. The bricks for construction are produced in many places in Morrumbala including Sabe, using clay. Because it requires much effort, people organise themselves into groups to facilitate the process. The money is divided amongst the group members. Three farmers produce coal and only one sells it outside the community. The coal is commonly used for cooking in cities and villages.

### **5.3 The emergent groups of households: The "Bwanas" and the "Atcheregue"**

In the last section, I was describing the different activities that people do to make a living in Sabe. For each activity I tried to explore the differences between households in assessing and exploring the activity and also the strategies they develop. I looked also at the capabilities the households have to perform a given activity. When necessary I illuminate the role of the activity and of the strategy in alleviating poverty. From this exploration two groups of households emerge: The locally called "bwanas", the riches, and the "atcherengue", the poor. That is not to say that there are only these categories, but these are the most prominent.

#### **1. "Bwanas"/rich - farmers combining agricultural production, trading and livestock**

"Bwanas" is a local label for those farmers who have large numbers of animals such as goats and pigs. They are considered to be the riches of the community. The animals are kept in a closure during the night and during the day the animals are released for grazing. One of the children, usually a boy, is appointed each day to look after the animals. At the end of the day, the animals are counted one by one before going back to the enclosure. At the beginning of the agricultural season the "bwanas" sell or kill part of their animals and use the money or meat to hire labour for agricultural purposes. Normally they have a field on one site which is a strategy aiming to better control agricultural production process. The riches are market-oriented producers who have large fields of paprika. The production pattern is mono-cropping and they divide the field into parcels; one for paprika and another for food crops.

## 2. "Atcherenghe/poor- farmers combining wage labour and agricultural production

"Atcherenghe" is the local label for those farmers for whom their agricultural production is not enough to feed the family members for the whole year. In order to survive the year they work for the "bwanas" , in exchange of money or products such as meat, maize, flour or clothes (see wage labour, above). Their production is directly for family subsistence. Normally the atcherenghe sell a reduced part of their harvested products locally to those who have strong links with outside market. The " atcherenghe" have limited interaction with the outside market, however, they do have contact with outsider traders who go to Sabe looking for agricultural products. Given their inability to hire labour from outside the family and the fact that they spend quite a lot of time in others people's fields, their field sizes are reduced. One of the strategies that the "atcherengue" have adopted to reduce poverty is marrying the children at early ages. This issue will be presented in the next paragraph.

### Marrying in early stages- "atcherengue" strategy aiming to reduce mouths to feed

After their 1<sup>st</sup> menstruation the girls are considered to be mature and ready for marriage. During informal chats with local boys I learned that some mothers even force their daughter's menstruation to come earlier by using traditional medicines (leaves, roots...). The boys must show their manhood to the society at the beginning of their sexual activity. The social pressure to marry in early stages is quite high in these families, which cannot "properly" feed all of the family members throughout the year. To boys, statements like *"see your friends, there are marring, and are building their own houses and what about you? Just sitting and eating my efforts. You will never be a real man"* are common. The pressure goes so still farther to the point that if the boy do not marry people start calling him sterile, incapable of having sex or living with women. A similar process occurs with girls. These kinds of statements force some youth to leave school and marry.

The marriage provides two important things: it brings money and other things from the bride to the groom's family, and; it reduces the number of the people to be feed in the girls' household. For the boys' family, it brings two important things: more labour, and; the continuation of the family name through the offspring<sup>9</sup>.

**Summarising the main differences between the "bwanas" and the "atcherengue"**

In the following table I summarise the main differences between the two major groups in Sabe.

Table 4: differences between households in Sabe

| Characteristics            | 'bwanas'   | ' atcherenghe'                                  |
|----------------------------|--|---|
| Field size                 | > 1 hectáreas  | <1ha  |
| Field location             | Just one site  | Different sites                                 |
| Labour force               | Mainly external                                      | Family labour only                              |
| Production orientation     | Mainly for outside markets                           | Oriented to consumption                         |
| Crops disposition in field | Field divided into parcels of specific crops         | Mix of different crops in same field            |
| Livestock                  | They are major goats and pigs owners                 | Mainly chicken owners                           |
| Mobility                   | Highly mobile (many times out of the community)      | Very limited mobility                           |
| Strategy aims              | To avoid risks by controlling the production process | To spread risks by producing at different sites |

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<sup>9</sup> When a offspring is a boy the neighbours expresses to the father-in-law of the new offspring statements like: " hey Artur, you are lucky! Someone will maintain your name".

## **6 LIVELIHOOD STRATEGIES, PAPRIKA PRODUCTION AND POVERTY ALLEVIATION IN PINDA**

### **6.1 Description of Pinda Region**

Pinda was the 2<sup>nd</sup> region where I worked. It is a locality located 30 km in South-West of Morrumbala village and belongs to Megaza Administrative Post. The limits are Megaza and Morrumbala village to the North; Sabe to the West and Shire river to the South and East. According to the national census of 1997, Morrumbala's population was 13,379 : of that 7,038 being women. The infrastructure in Pinda included: a health post; 4 primary schools; a flourmill, and; diverse informal markets. During colonial period, Pinda was famous due to the Zambeze Company, who cultivated hundreds of hectares in the area for agricultural and animal production. Today, Pinda is known primarily for fishing activities and natural hot spring water.

During the colonial period Pinda was a corridor for boats carrying goods navigating the Shire River to Malawi. As such, the commercial activity between local people and the foreigners was well developed and many companies such as Boror and Companhia do Zambeze established their branches in Pinda. Because it is close to many villages in different provinces (see map pg.18), Pinda was and still is, a preferred corridor for many traders.

Once in Pinda, it is advisable to introduce yourself to the Local president (presidente da Localidade)- the formal authority, with an explanation regarding the intentions of the stay. The traditional authority plays a less significant role since independence and as such, one is not obliged to introduce oneself. However, local people have a great respect for traditional authority. During my fieldwork in Pinda, the community was building a school using local material. According to the school dean and some interviewed, the traditional authority mobilised resources making construction of the school possible. " I came

because the regulo asked me to come. If had been someone else I would not have come".

## **6.2 Livelihood Activities in Pinda**

Most of the livelihood activities mentioned for Sabe region, take place also in Pinda. In Pinda, agriculture, livestock, hunting, trading, wage labour and craft-making are the most common livelihood activities. All fifteen household interviewed practice agriculture; thirteen keep livestock; one husband hunts in the highlands, while in the other households, the wives hunt rats. Other sources of income cited, include: ten receive periodic remittances; all of them trade but to different degrees; nine have on several occasions, supplied labour to other farmers, and; five produce artisan furniture. None make bricks or produce coal as there is no clay to make bricks and insufficient wood supply for coal production.

Apart from these activities two additional activities are cited: fishing and brewing beverages. I will not elaborate the livelihood activities of livestock, hunting, wage labour, craft making and trading because their nature is comparable to that of Sabe. Instead, I will discuss agriculture, fishing and brewing as the Pinda example offers insights into these activities.

### **6.2.1 Agricultural Production**

Agricultural production in Pinda differs from that of Sabe in sense that people practice agriculture almost year round. In the dry season the Shire riverbank is used (locally called "Kugombe" ≈ close to the river). In the rainy season, the riverbank is flooded and production moves to the local highlands (locally known as "Kumphala" ≈ forest). On "Kugombe" , the interviewed farmers produce mostly maize, beans, vegetables, sugar cane, sweet potato and Paprika. "Kumphala" is reserved for crops resistant to drought such as millet, cassava and

drought resistant maize varieties. Access to land, seeds and other inputs are much the same pattern as in Sabe.

Not all of the households interviewed have fields in the highlands where they can produce during the rainy season. Five households do not produce in the highlands; they consider the rainy season to be the proper time for fishing; fish harvests are comparatively much higher during the rainy season. Consequently, much labour is directed to fishing, fish processing and trading. These households have fields on the riverbank and on small islands in the Shire River, allowing them to easily engage in both agricultural production and fishing. *"You just go from your boat to the field and from the field to the boat. When you are in the boat and want someone, you just call him"*.

The remaining ten households have fields in both regions, the highlands and on the river bank. They also engage in fishing, but agriculture is their major activity. Six of them have fishing nets which are old, having been sewed several times; four use fishhooks for fishing. The catch of fish is low. These help those with big nets for wages (see the Pinda fishing section in this report).

Agricultural practices have changed over time in Pinda. One interviewee recounted that when he was young, he and his parents produced sesame and cotton. These crops were sold to the colonial Portuguese. Now nobody produces cotton or sesame. According to this interviewee, the market price for these crops is now low. Other changes, reported by other households, include the agricultural sites and techniques of production. Three interviewed produce on Shire River islands. They believe the islands have both higher fertility and higher humidity levels. However, after two consecutive years of floods (2000 and 2001) they stopped producing on the islands, moving instead to the highlands and the Shire riverbank. One mentioned having reduced the field size on the Shire riverbank due to fear of loss through flooding. Three have changed the number of seeds per pit; before the floods 4-5 seeds of maize were put in each pit: now,

less than 3. This strategy is aiming to save seeds as insurance against future flooding.

All farmers reported labour to be the major constraint in agricultural production. To overcome the labour constraints, many different strategies have developed: four households hire labour; thirteen have more than one wife; six obliged their children to quit school; five reduced field size, and; eight fish at night. At the household level, intra-household labour arrangements are carefully planned as expressed in the following example.

**Box 4. Labour process in Mr. Joao's household**

Mr. Joao is a 46 years old farmer. He was born in Marromeu, Sofala Province and he has lived in Pinda since the peace agreement in 1993. He has one wife, 4 sons and one daughter. The first son is now (2001) 26 years old, the second is 20 years old, the third 16, the last 7. Mr. Joao's daughter is 12 years old. The two elder sons are married, living close to Mr. Joao, sharing both labour and food. The two older sons main task is to sell fish outside of Pinda. Mr. Joao and his 16 year old son fish. When the weather is bad for fishing or if there is labour pressure in the field, fishing becomes secondary to farming. The females are occupied with agriculture and household management. The couple have their own fields (three fields in total). The 7 year old boy is still in school. Money from fishing is used mostly for big expenses such as hiring the labour used in paprika production. Money required for small expenses (i.e. buying salt) comes from selling at the local market. This is the daughter's task. After paprika marketing, money is used to buy fishing accessories, like new nets or for boat repairs. When the boy who is at school now is between 10-12 years old, he will replace his older brother – fishing. The one who fishes now will join the group marketing fish outside Pinda. When the father gets older, he will join the females in agriculture and one of the elder sons will take over their father's fishing task. During the year 2000 and 2001 the Joaos' family had more labour than other years because of the floods. The relationship between the floods and labour will be detailed later in this report.



The emerging points from the description above lie in the dynamics of agricultural production: households strategies to overcome labour scarcity; responses to changes in the environment, and; the combination of activities households engage in so as to make a living over time.

Paprika production: households strategizing for more profits

Paprika production in Pinda started in 1997 when World Vision established an irrigation scheme in a Pinda areas, known as, Suzi, inviting farmers to participate in a paprika experiment. The test was meant to assess the adaptability of the paprika crop in the area. Interested farmers received a parcel of land (10\*10 metres) for paprika production which would be sold to World Vision. An extension agent was responsible for teach the farmers, step-by-step, the whole paprika production process.

Two farmer participants in the experiment confided in me that they took some of the paprika seeds for use in their own fields. This was a strategy to increase profits by producing on two fields.

In the following year the farmers were allowed to plant paprika on their own fields. However, World Vision requested that associations or groups be created with elected leaders, as a condition for paprika seed remission. According to World Vision, working with groups reduces the costs of extension service and improves planning. During my fieldwork there were 7 groups of 20-30 farmers.

According to the World Vision report from 2001, Pinda is the largest paprika producer of the Morrumbala District. The region produced in 2000/2001 4,448.5 kg - about 10% more relative to the last campaign (1999/2000) which produced 4010 kg. Poverty alleviation is considered an outcome as, according to the

World Vision report, housing and consumption have improved (i.e. people are buying bicycles).

Paprika is a vegetable requiring high humidity conditions, which are satisfied on the Shire riverbank in Pinda. This explains Pinda's higher production of paprika. Additionally, paprika receives the highest price on the market (1\$ USD/kg) relative to other crops (according to two farmers [see paragraph above]). These two reasons encourage many people to find fields and seeds for paprika production in Pinda. Unsurprisingly, the result is an increase in paprika production in Pinda.

#### The ways households get seeds and fields in Pinda

Households obtain seeds and fields in Pinda in many different ways, including:

- *Belonging to more than one group*

Five households have family members participating in several different groups. Therefore allowing more seeds to be received per family which in turn permits an increase in the size and number of fields possible for paprika production. The risk of non-producing paprika is also reduced. As already discussed, paprika is produced in high flood risk areas. Seven of the fifteen households reported that after transplanting, fields flooded, demanding that farmers start the production process once again.

- *Being a good friend of an extension agent*

Some households, those belonging to just one group (considered a risk as explained above), prefer to have strong links with an extension agent. Such close relations mean that when seeds are required or desired, the household can ask the extension agent directly. None of those interviewed would discuss this phenomenon, however, I could observe it, myself.

- *Working for whom has seed*

One of the households interviewed was new to the area. This household obtained seeds after working to transplant on another person's field. The explanation was that the lack of seeds was a result of not yet being a paprika group member.

- *Buying seeds or paprika plant starts from other farmers*

Three of the seven households whose fields were flooded (they were forced to restart), bought seeds (one) and starts (two) from other farmers. During my fieldwork a paprika nursery of 1m\*1m was about 2 \$USD.

For obtaining fields some interviewed used, amongst others, the following ways:

- *Starting as a good fish buyer*

One of the interviewed, started paprika production in 1999. He came from Morrumbala village and was given a field by his friend, who is a fisherman. The man from Morrumbala village was involved in fish trading many years: he used to buy fish from only one man – the fisherman described above. After a long time they become very good friends and would invite each other for visits. After hearing that paprika was a profitable crop the man from Morrumbala village asked his friend (the fisherman) for the piece of land where he is now producing paprika.

- *Hiring the field*

Mr. Rodrigues, came from Quelimane city to Pinda to assist floods' victims in 2001. He heard about paprika and was encouraged by some friends to produce it. He asked one of the flood victims for a piece of land to rent.

- *Marring in Pinda*

One of the interviewed is from Morrumbala village and received his field from his father-in-law.

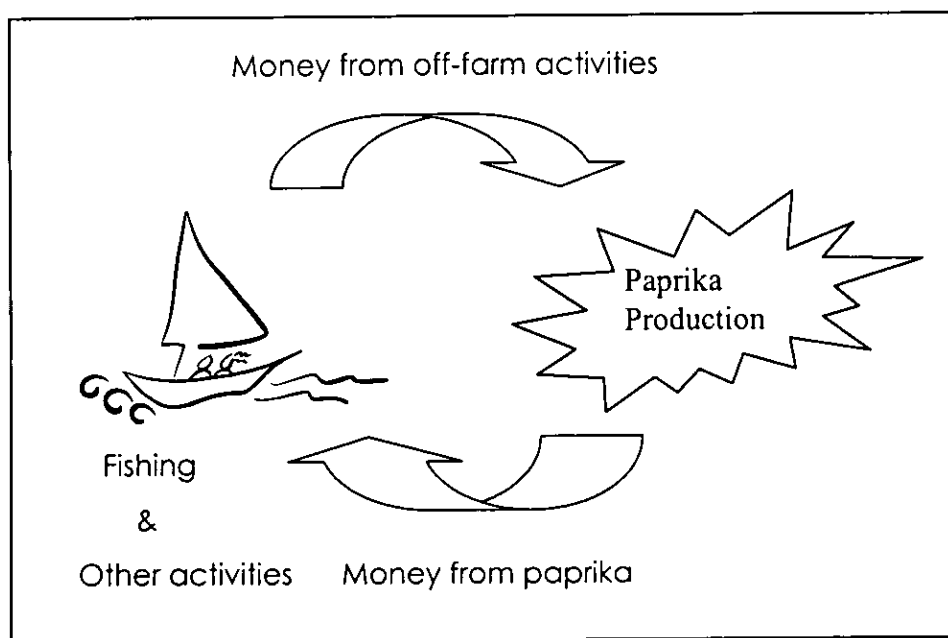
*Different patterns on paprika production*

During my fieldwork three (3) main patterns of paprika production emerged. In the following paragraph I will describe these patterns:

- *More than one paprika field*

The five households do not produce in the highlands, they instead have fields on the Shire riverbank and on the islands. They produce paprika in both regions because, according to them, the soil fertility on the islands is much higher compared with in the riverbank and the more fields you have, the more profit you get. All of them invest money from paprika commercialisation into fishing and other commercial activities. Re-investing money in this manner (see fig 1 below) allows them to hire labour when required and for other desired activities.

Fig 1: Relationships between Fishing, Paprika and Other Activities



- Only one field mixing paprika with other crops

This pattern is common for newcomers from other regions (i.e. flood victims), for widows and for single people. The majority of the land is reserved for food crops such as maize and sweet potato. Paprika enters the field as part of the vegetable crops, which include beans and tomatoes, amongst others. The income from paprika commercialisation normally is used to buy cooking oil, salt, fish and meat. A widow said that she used the money also to support her children's education: schooling, buying exercise books/pens etc. Three interviewed follow such a pattern. The main reason why they mix paprika with other vegetable crops is due to lack of labour and fears of production loss due to floods. Because of the likelihood of floods they told me that, for example, when planting maize, less seeds are used than in the past. Before the floods, farmers put 4-5 seeds per pit, now a maximum of three are used. This frugality is meant to save seeds for protection against potential losses by flooding.

- *One mono-cropping paprika field*

Two interviewed have one field for paprika and another field for other because paprika appears to be less productive when inter-cropped.

***Who knows the existence of the paprika programme but do not join***

In Pinda it is becoming difficult to find uncultivated land for agricultural production, particularly along the Shire riverbank. Many people from different sites want land and will even rent fields to produce paprika. Even so, some people still do not engage in paprika production. I interviewed two farmers who are not producing paprika. Both responded in a similar way in explaining their choices: *"I know that some people are becoming "bwanas" because of the paprika, but I cannot afford the lag time in between commercialisation and payment. I am squeezed dry. Let me give you an example. Last year the people, who produced, commercialised their paprika in August. Do you know when they received money? February the following year! Many of them were already indebted to many people. So, when they received payment it was spent paying back debts. Paprika is a nice crop for people who have other sources of income because they can use the other income while they are waiting for paprika payment"*.

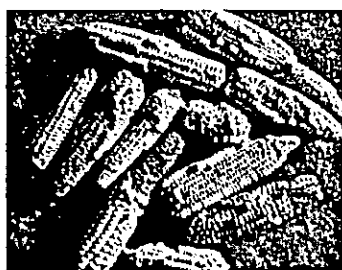
The question of delay on payment has to do with the buyer. The buyer is a Multi-national company: Cheetah Zambia Limited. The company has a branch in Malawi and in Nampula, Northern Mozambique. The process is such that after commercialisation the paprika is taken to the buyer in Nampula or Malawi. There, the paprika is weighed once again and finally, money is transferred to World Vision via the bank. The bank is in Quelimane City (about 200 km). At this point, World Vision takes the funds from the bank and goes to the community to pay the farmers. This process takes time but, according to the World Vision, is a necessary procedure.

Paprika on-Farm research in Pinda and livelihood strategies

During the year 2001, World Vision started a new programme (rat control on paprika fields). The Zambeze valley is known for rats, which destroy field production and stocking. In addition to this damage, rats are vectors of bubonic pest disease that brings death and destruction (see pictures below).



Picture 1: A girl with bubonic pest



Picture 2: Destroyed maize



Picture 3: paprika attacked

In response to the rat problem, World Vision started a pilot project for rat control in Pinda. They designed an experiment (see annex 1), which consisted of plots of paprika and other crops. In some plots with paprika, traps are placed to catch the rats. The main objective is to see the difference in paprika production between plots with traps and without traps. Between these two plots there will be plots with other crops as a way of separating the experimental paprika plots. Apart from the main objective World Vision also intends to rigidly control and measure the potential production of paprika/ha. The experiment is taking place on farmer's fields. These experiments create new arrangements in terms of local labour, community organisation and interaction with market, and the farmers' livelihood strategies. The whole process began as follow:

In April/May World Vision started looking for a site for their experiment. They found an area very close to a branch of the Shire River. An area capable of supporting an irrigation scheme was one criterion. An area was demarcated

and the owners were sought. Because the area was already in use (Maize and other crops were still in the fields), negotiations with the farmers were necessary. They found the owners and negotiated to compensate them for the existing production. After hard negotiations farmers accepted World Vision terms and the fields (with the production) were cleared by a tractor. According to the negotiations, World Vision would clear the area, demarcate the experimental plots and the owners would continue production on the land. However, production would be compulsory according to the experimental design, interspersing maize or other crops with paprika. During my fieldwork, demarcations were in place to redistribute fields to the participating farmers and decisions were made regarding which area would be for maize or paprika production according to the experimental design. Farmers no longer produced on their own part of the land used in the experiment, but rather a parcel designated by World Vision. Four of my interviewed households do have fields in that area.

*How livelihood strategies are being created, constrained and reformulated?*

The on-farm research taking place in the area is creating new dynamics and processes. Among other things the on-farm research is:

- ***Affecting farmers' crop diversity***

When asked about the negotiations for the experiments, one farmer told me: *"World Vision gave me two sacs of maize as payment for the destroyed production on my field. My production was not only maize. You cannot just convert all of a farmers efforts into a few sacs of maize! I do not harvest my production all at once. When I felt pressured, in the past, I would go to my farm and find something in the fields to feed my family. What are 2 sacs of maize? How long will I survive with such a small quantity?"*



I asked again: "If you are not happy why did you accept?" The response was: "I cannot rebel alone. If I do that I will be the black sheep of the area. My friends will crucify me! Apart from that I still want to receive the paprika seeds and this is the organisation, which brings the seeds. People expect more things from that organisation. They expect credit, tractors to help in the field's clearing and so on. What can you do in such a situation?"

- **Constraining households livelihood**

According to the experimental design, a crop other than paprika must be planted on some plots. This means that some farmers are obliged to produce crops other than paprika. Three of the interviewed are among those who must produce crops other than paprika. However, these farmers are not interested in producing other crops. They want to use the area for paprika production only. For that reason one farmer said: "I will go to jail this year because I do not want to produce what they want me to produce".

Many reasons are behind the current situation described above. The experimental area has an irrigation scheme. Farmers do not pay for water use. The area will have a full-time extension agent to look after all production problems including, free-of-charge treatments. These conditions, brought about through the World Vision experiment, are expected to result in high production and correspondingly high incomes for participating farmers.

#### **Increasing household sources of income**

One of the farmers interviewed rented his land for the on-farm research project because he was able to produce paprika on the island, where the fertility is much higher. For him, the on-farm research gave rise to another income source-renting the land to someone else.

Paprika production and households investment

Because some people started paprika production more than one year ago, a preliminary perspective on ways farmers invest their income from paprika commercialisation can be drawn. This was not the case of Sabe, where during my fieldwork people were waiting for the first harvest. The ways in which farmers invest has to do with household livelihood strategies. The following examples come from in-deep interviews with family members of the fifteen interviewed households and also from participant observation.

**Box 5. Borge and marriage**

Borge is a 17 year old boy. He is not studying because he feels he must help his parents fishing and on the farm. There are only three people in this family. Last year, Borge's mother said that he should look for a girl to marry. Doing that they would have a larger labour force to help in the many tasks in which they were already engaged. Borge found a girl and went with his parents to the girl's house to learn the conditions for the marriage. The girl's family asked a payment of 400,000. meticais ( $\approx$  20 USD). His father had only 100,000.mt. To pay the other part, Borge started paprika production. From the paprika sales he earned 350.000.mt. With that income, he paid the required money required for marriage and was allowed to take his new wife, Rosa, a 15 year old girl.

**Box 6. Joao and father's new fishing net**

Joao is a 14 year old boy. He was studying in primary school at standard 4. Last year, after paprika commercialisation, his father bought a new fishing net. IN order to help with the fishing, Joao's father obliged him to stop studying. Now, Joao is a fisherboy and he has started saving money for marriage. "As soon as I save enough money to marry, I will do it; al l of my friends are married. I am staying behind".

**Box 7. Mr. Devane and the 2<sup>nd</sup> wife**

Mr. Devane is home keeper in Morrumbala village. As such, he cannot engage seriously in farming. In 1999, his wife received paprika seed. For paprika production, Mr. Devane used his wages to hire labour in order to help his wife. After paprika commercialisation he got enough money to buy a bicycle and marry a 2<sup>nd</sup> wife. *"Paprika is a very helpful crop. With paprika I bought this bicycle, which helps me to go to my job and I married a 2<sup>nd</sup> wife, who will help the other wife with farming".*

**Box 8. "I do not want bicycle I want a stereo"**

Rita is Mr. Fernando's wife. I found her transplanting paprika from the nursery to the production field. I asked if she worked this field with her husband and she replied that they work together only for other crops. For paprika each person has their own field. I asked why that was, she replied: *"no problem, it is just a way to produce more"*. After long time of jokes and helping her transplant, she said: *"you know, last year I had quarrel with my husband. He wanted to use the money from paprika to buy a bicycle. I wanted a stereo, because we can listen music and receive information from abroad. He insisted on buying bicycle. From that, I said to him I am going to produce my own paprika so I can buy the stereo"*.

The dynamics on paprika production in Pinda presented above illustrates that the crop is being adopted successfully. This indicates a step toward poverty alleviation since people involved with paprika production are earning a considerable income. From the examples we can see how people are moulding their livelihood strategies. Marrying to increase labour availability; buying a bicycle to allow more mobility; buying fishing net to have an additional source of income. We can also observe from the examples, that people have different goals (sometimes conflicting: box 8) and perceptions. Joao's father perceives fishing as more important than education; Mr. Devane perceives marrying a 2<sup>nd</sup> wife as a good way to increase paprika production. Others (box 5) force their children to marry. In the chapter "Discussion of the Findings", we will return to this information. In the following section I will look at fishing, another livelihood activity in Pinda.

### 6.2.2 Fishing

All households interviewed, fish. Five have big nets, quite new (to my own observation); six have old nets, sewed several times and four use fishhooks. Fishing is gender issue. Non of the females interviewed fish, but they play an important role in fish processing. In Mr. Joao's household I found a careful task division (see box 4) by gender, where the females are more engaged in agriculture, the males on fishing and trading. The task division also takes age into account. The young boy helps his father in fishing while the elder sons trade the fish. The young daughter sells the fish locally and also takes care of the house.

Fishing is dynamic over time. Years ago it was much easier to catch fish, but nowadays the fish populations have decreased obliging fishers to move farther afield for this activity. The number of fishermen has also increased, especially in the last two years, increasing pressure on fish populations. The increase in fishermen is explained by the high demand for fish in the market. In the last two years, many people have visited flood victim camps (see next section) and buy fish before leaving. In addition to the increase of fishermen, the number of crocodiles and hippos has also increased which makes fishing a more dangerous activity. During the colonial period, there were crocodiles hunters who kept in check the number of the crocodiles. There are now no crocodile hunters in the region.

#### • ***The Role of the Flood Victims' on Agricultural and Fishing Activities***

Because of the floods, which affected the Zambezi valley in 2000 and 2001, Pinda created a reception camp for flood victims. People from different flooded areas came to live and receive aid at the camp. Some of those people asked for money or goods from the local people in exchange for working in the fields or help with fishing. This allowed local farmers to: open up larger fields; to weed their fields on time and properly, and; to use the labour force for other

income generating activities such as fishing. Because the camp received many visitors who sometimes bought fish, another dimension was added to fishing (see section 6.2.2). Mr. Joao was one of the local farmer/fishermen who used flood victims labour.

### *6.2.3 Brewing beverages*

Six interviewed used to produce an alcoholic beverage. As I mentioned in 6.2.1, households in Pinda do produce in lowland crops such as maize, vegetables, and sugar cane. Sugar cane is used to make the beverage, which is sold locally or outside the community, bringing in an income.

## **6.3 The emergent groups of households: The "Bwanas" and the "Atcheregue"**

In the last section I went through the main activities taking place in Pinda. I described agricultural production looking to the differentiation, the strategies, and the households capabilities for agricultural production. I gave special attention to paprika production and the related dynamics. Fishing was also described and I concluded with the production of the local alcoholic beverage. In the following section I will describe the most emergent groups of farmers.

### **1. " Bwanas"/riches- Combining fishing with agricultural production and trading**

The label 'bwanas' , used in Sabe to describe the wealthier of the community is also used for the same group in Pinda. In Pinda, people having big and new nets; capabilities to hire labour to help with fishing or in agricultural production; having houses made of conventional materials are called " bwanas". Other characteristics of the "bwanas" which were mentioned include: one or more members of the "bwanas" household is very mobile, looking for market information and goods which can be sold locally; the "bwanas" have different fields for cash crops and food crops; they are not much interested on food crops

because they have the means to buy food or to exchange fish they catch for food; the most attention, including financial investment is given to cash crops. I asked Mr. Joao, considered to be a "bwanas" , his priorities: agricultural production versus fishing. He replied that both were important saying, for example, that he used money from fishing to hire labour for transplanting paprika. After commercialising paprika, he bought a fishing net: "you have to keep both agricultural production and fishing, otherwise both will collapse".

**2. "the Atcherenghe"- Combining agricultural production with wage labour**

"Atcherenghe" is the label for those farmers who are involved in fishing but at a very small scale. The ten farmers who do fishing using old nets or fishhooks label themselves "atcherenghe": "If I was "bwana" I would buy a new net and open a large field for paprika". The four who fish using hooks told me that they also "help" those who have nets with their fishing and sometimes work in fields for money. They do not accept anything other than money as payment. When I asked them which activity was the most important, they replied: agriculture. Maize and sweet potato are the most important crops. The "atcherenghe" do produce paprika. Two inter-crop paprika with maize and beans; one inter-crops paprika with other vegetables (onions, cassava, and tomato) and the other produces paprika separately. They said (laughing) that they never hire labour.

**Summarising the main differences between "Bwanas" and "atcherenghes" in Pinda**

In the following table I summarise the main differences between "bwanas" and "atcherenghe" in Pinda.

*Table 5. Differences between households in Pinda*

| Characteristic                | "Bwanas"  | "Atcherenghe"                                       |
|-------------------------------|---|---|
| Agriculture activity          | Very important for cash crops                       | Very important for food crops                       |
| Fields                        | More than one field in Riverbank or islands         | One field on the riverbank and one in the highlands |
| Crops                         | Cash and food crops. More concerned with cash crops | Mainly food crops                                   |
| Crop arrangement in the field | Mono-cropping                                       | Inter-cropping                                      |
| Market orientation            | Highly oriented                                     | Less oriented                                       |
| Fishing activity              | Very important as a cash earning activity           | Important for food security                         |
| Use of external labour        | Yes   | No  |
| Labour sale                   | No  | More frequent                                       |
| Strategies aims               | Maintain or increase income generation              | Feed and dress family members                       |

## **7 LIVELIHOOD STRATEGIES, PAPRIKA PRODUCTION AND POVERTY ALLEVIATION IN MEGAZA**

### **7.1 Brief Description of Megaza Region**

Megaza Administrative post is located 42 km Northwest of Morrumbala vilalage. Pinda. It borders Megaza in the South and in the West, the Shire River separates Megaza to Malawi. The Shire Administrative post in the North and Morrumbala villeges in the East are the other limits. In terms of infrastructure, during the fieldwork, Megaza had: 6 primary schools; 1 health post; 1 customs post; a flourmill, and; diverse small informal markets. According to the national census of 1997 there were 7,259 inhabitants living in the Megaza administrative post.

The local people are Sena speakers. However given the strong interaction with Malawi, the Sena spoken locally is mixed with Chichewa, a language spoken in Malawi. The close proximity to Malawi means that people from Megaza do shopping in Malawi and the Malawian currency "Kwacha" is widely used in Megaza. The interaction Megaza-Malawi is much higher than Megaza-Morrumbala vilage. As in Sabe and Pinda, Megaza has two administrative structures: the traditional/informal structure composed by regulo, sapanda and fumos, and; the formal/ governmental structure composed by chefe do posto and secretarios.

The society is a patriarchal one and many males have two houses: one in Megaza, the other in Malawi. Norms, beliefs and values in Megaza are influenced by those from Malawi. Not only is the Malawian currency used, but many households send their children to study in Malawi, believing there to be better schools and opportunities.



During the colonial period, Megaza was a big commercial centre. The boats navigating to Malawi passed through Megaza and local people traded with the colonizers. Many old buildings including stores and cotton factories can still be seen, bearing witness to the prosperity of Megaza in colonial times.

After independence much of this infrastructure, belonging to the colonisers, was nationalised and the owners were obliged to leave the country. This was the starting point towards deterioration of the prosperity in Megaza. The situation became worse with the military conflict, which took place from 1976 to 1992. After the civil war in 1992, many people that had lived in the refugee camps, mostly in Malawi, came back to Megaza. Nowadays the situation seems more dynamic. Trading with Malawi is one of the main elements for renewed dynamism.

## **7.2 Livelihood Activities in Megaza**

The livelihood activities mentioned for Sabe and Pinda are also common for Megaza: all interviewed practice agriculture production; seven practice hunting; all have livestock; five do trading; two make crafts and eight have worked for others (wage labour). As in Pinda, Megaza does not have clay land to make bricks nor does it have good wood to produce coal. Fishing is practised but not at the high levels seen in Pinda. In Megaza the Shire River passes at high speeds which make difficult the development of a fishing industry. In addition, according to the people interviewed, the fish cannot live in such an environment. Apart from the activities above described, nine have homes both in Mozambique and in Malawi - this being one of the livelihood strategies elaborated later in this report. In the following paragraphs I will develop three main livelihood strategies cited as most important for Megaza: agriculture; trading, and; double homes.

### 7.2.1 *Agricultural Production*

As in Pinda, agriculture in Megaza is practised in two seasons: the rainy season - mainly in the local highlands and in the dry season - normally on the Shire Riverbank. All interviewed have fields on the Shire Riverbank and six have fields also in the highlands. When I asked others why they do not have fields in the highlands, the response was a lack of land in the highlands. The crops produced do not differ from Pinda: maize, vegetables, beans, sweet potato, sugar cane on the Shire riverbank, and: maize, sorghum and cassava in the highlands. The instruments are also the same: the hoe and axe. The labour force is predominantly family and production, mainly for subsistence. The production patterns are, however, different: seven interviewed use inter-cropping (see picture 6). The main reason reported for using inter-cropping was the lack of land; none are producing paprika. Five divide the field into parcels - one parcel for cash crops and another for food crops (picture 4 & 5). The lack of land was the main reason for that pattern and also the fact that the cash crop (paprika) has different requirements to those of maize. Three households have separate fields for cash crops and food crops (picture 7).

- ***Land scarcity and households strategies***

During the civil war Megaza was the point from which the Renamo<sup>10</sup> troops attacked Zambezia province, coming from Malawi. In that time, Malawi was accused several times by Frelimo<sup>11</sup> of helping the Renamo. Consequently, the region was intensively mined in order to avoid Renamo's entrance. Even after the peace agreement, many areas still are mined and people cannot use them for agriculture one reason to account for land scarcity. Another reason is the reduction of productive areas by the floods. The effect of the floods on agriculture vary from area to area. In some areas, they increase the productivity of the existing land and can change the unproductive into productive by

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<sup>10</sup> The Party which was fighting against Frelimo in power

<sup>11</sup> Frelimo is the party, which has been in power since the independence from the Portuguese colonialism in 1975 up to now.

bringing humus and other organic matter to the soil. In other areas, floods reduce the fertility of the land by eroding the organic matter and transporting it elsewhere. In Megaza the Shire River passes at a very high speed. This causes erosion of the land, reducing soil fertility and further reducing the areas under production.

The third contributor to land scarcity in Megaza was the increase in population after the civil war when many native people came back to the region. As people returned, they need land. In addition to the natives of the area, many Malawians are also seeking land in Megaza. The demand for land is quite high given that in South Malawi the region closest to Megaza, the land is very poor and people in that area are mainly dependent on agricultural production from Megaza or elsewhere in Mozambique. According to House and Zimilirana (1992), in south Malawi population densities are very high and some customary land heritage has been taken into private hands for the production of export crops on estates. By the end of 1980s, 56% of rural households on customary land were working less than one hectare of land and their holdings were insufficient to meet basic food needs. To overcome the problem of land scarcity the households responded in the following manners:

1. Reduction of the fallow period: three households told me that in the past, they would leave the field for two years after three years of production. Now farmers leave fields for one year (one household) or not at all (two households);
2. Hiring land from others: two households told me that they hired fields from others after the floods of 2000;
3. Buying the fields: one interviewed told me that a neighbouring household was desperate after the floods of 2002. The family lost everything and planned to leave Megaza to another place. The family sold their land which the interviewed farmer bought;

3. Receiving fields in exchange of service (the Rafaels' example- below)

**Box 9. Rafael and traditional ceremony**

Rafael is a farmer born in Megaza. He has two wives and during the civil war he fled to Malawi. He came back three years ago. When he came back he found his family farm occupied by other farmers. Given the situation, he asked for a piece of land from his neighbour. He was indeed granted the land, however, it was not fertile. Last year a community member died and according to the local beliefs, after a death, some ceremonies must take to ensure better rest for the deceased and to put an end to bad luck for the family. The ceremony consists of making love for several days (3-6 days). The love-making ritual can occur between family members or someone else from outside the family can carry out the responsibility. Rafael, an outsider to the family, took this responsibility. The family of the dead person guaranteed payment for this important job. Rafael asked for land as payment for the service. The family, which resolved to move from that area gave to Rafael a very big well-located field for his services-he said.

4. Using authority to get land: Rafael did not stay long with his new land. He received the field in 2000. In 2001 he started to clear the land for the second season. When he was ready to plant the seeds, the "fumo" came to Rafael, claiming the land belonged to him: *"he told me that when someone leaves the community his land automatically goes to the authority. He said that nobody can use the land without authorisation from the authority. I explained to him what I did but he did not listen to me. Now he is using the land; I saw his second wife and two daughters there"*.

Paprika Production: lack of interest or do not fit into livelihood strategies?

As World Vision does in other areas, the organisation asked farmers to organise themselves into groups of 20-30 farmers in order to receive seeds for paprika production. In return, World Vision promised extension service provision and markets for paprika production. Paprika was introduced in Megaza at same time as in Pinda (1997). However, during my fieldwork (2001) less than 10 farmers were

producing paprika. When asked why the number of farmers was so much reduced, the following reasons surfaced:

1. Pressure to produce food crops: ten of the fifteen interviewed have homes in Malawi. Three farmers told me that the land in Malawi, at least that which is occupied by their families, is not as fertile as that of Megaza. So farmers must produce in Megaza, taking into account that they must feed their families in Malawi. Producing paprika mean, from their point of view, making efforts for a crop, which cannot feed anyone. Maize is regarded as a good crop as it can be used not only for feeding the family but also for income generation. Many Malawians come each year looking for maize in Megaza.

2. Delays in payment: two farmers stopped paprika production because payment takes too long. "I prefer to produce maize because I know that there will always be Malawians to buy it and they give me money right away."

3. Extension agent absence: According to the farmers, the extension agent appeared in Megaza for the first time in April 2000. During that visit he asked if it would be possible to produce paprika in Megaza in 2000. The farmers, especially the local leaders, replied positively and the extension agent promised to bring paprika seed the following week. A month passed before he returned. The agent said that his motorbike had had a problem. He brought the seeds and explained to the farmers the sowing procedure. The extension agent told the farmers to sow after 3 weeks from that day. After 3 weeks he came back and told the farmers that it was then time to sow. He promised to visit during the transplanting period, usually at the beginning of July. By the 9<sup>th</sup> of September when I last visited the area, there were no visits from the extension agent. This situation, according to the farmers is a clear demonstration of the lack of importance of the crop: "Where is the extension agent? If he do not show up now in the production' period, imagine during the commercialisation' period! Only he knows the buyers. I cannot spend effort on a crop that in the end, no one will buy. Absence of the

*extension agent is a clear demonstration that the crop is not important anymore. If it were important, the extension agent would never do something like that". To reinforce their explanation they recounted an episode of misunderstanding between them and the extension agent. During the last visit the extension agent made an appointment with the farmers; on that day all, farmers went to the meeting place and waited for the extension agent. They told me that they spent all morning waiting, but the extension agent did not show up.*

I was with the extension agent in Morrumbala village on 10<sup>th</sup> of September and I asked about his relationship with the farmers. He said he was just back from holidays and his motorbike was still not in good enough condition to go to Megaza. He acknowledged that he spent less time there than was desirable. The reasons, he related had many factors. In addition to his motorbike always being a problem, he was involved in rescue and food distribution to the flood victims.

#### *Extension Agent Absence and Paprika Production*

In last section I mentioned the absence of the extension agent as one of the elements influencing farmers on paprika production. However, the farmers who are engaged on paprika production use their own knowledge to produce paprika. Some examples of farmers using their own knowledge are as follows:

- *Crop spacing*

According to the extension agent the space between lines and between plants should be 20\*20cm. "Meaning more or less a "palm" in both directions". But the farmers changed this spacing. "According to my experience, as the crop develops it becomes crowded, reducing the production. So, I decided to use two palms, which I think is enough". This situation varies from one farmer to another. Another farmer is using the same spacing that he uses for tomatoes. "According to my experience in Malawi, where I worked for white farmer, the spacing between vegetables can be the same. There is no need to change the

spacing". This farmer is using a stick of more or less 35-cm to measure the distance between plants and between lines.

- *Number of plants per pit*

The recommendation from the extension agent was that for each pit should contain just one plant. However, four farmers are putting more than one plant in each pit. Their justification has to do with local conditions. They said that the number of pests and diseases in the area, increased after the floods. They are obliged to plant for the 2<sup>nd</sup> time because these pests spoil the first plantings. To reduce the impact of this situation, they decide to put more than one plant in each pit. According to them, if one is destroyed, you still have the second for harvesting.

From the interaction with the farmers it is clear that the extension service was working deficiently in Megaza, which affected the adoption of paprika. In order to understand the perspective of the extension service, I examined the service as a whole. In the following section I introduce material concerning the WV extension service.

#### Overview of the functioning of World Vision extension service

Many people have referenced the World Vision Extension Service in Zambezia and Nampula provinces as a model to be followed. *"World Vision's service with the farmers is praiseworthy. They do a complete job. They help the farmers to improve harvesting; help them find buyers and also help in rehabilitating the roads to access, allowing contact between buyers and farmers. This model should be followed by other organisations"*- Abdul Razak, governor of Nampula province in local radio, 18/07/2001-19.00h

The governmental extension service in Zambezia does not cover all districts. It is limited to 6 districts out of a total of 11. There are 60 extension agents working in the whole province, which represent just a drop in ocean (DPPFZ, 2001). Italic added.

The World Vision extension service has in Morrumbala alone, 20 extension agents working on agrarian production and commercialisation. The extension agents are obliged to live in the communities where they work. Each district co-ordinator must visit extension agents in his region regularly. Because World Vision is a Christian organisation, once or twice a week, all district workers meet to pray. The session takes approximately fifteen minutes and is a good opportunity to for extension agents to meet and share experiences.

Hierarchically the World Vision extension service in Zambezia has a provincial co-ordinator, followed by District co-ordinator, Extension Agent Supervisor and finally, the extension agents. At provincial level the co-ordinator has consultants for different areas such as administration, finances, experiments and forth (see fig 2).

Fig.2: World Vision Extension service hierarchy



How these different levels interact will be the focus of the next section. I will use different narratives to show how each body see the other. It's not my intention to judge who is right. As I already mentioned above, there are no right or wrong views; there are only differing views representing different interest groups, status, personalities, tribe, etc.



- **Narratives from the extension agents**

As I presented in the methodology I interacted quite a lot with the extension agents. They felt free to talk to me about their feelings, ideas and so forth. From these interactions I highlight the following narratives:

**Using bible to explain "superiors" behaviour**

*"The behaviour of our superiors is the same as that mentioned by Jesus in Matthew 23: 1-7". In Matthew 23: 1-7 there is the following information:*

*Then Jesus said to the crowds and to his disciples: "the teachers of the law and the Pharisees sit in Moses' seat. So, you must obey them and do everything they tell you. But do not do what they do, for they do not practise what they preach. They tie up heavy loads and put them on men's shoulders, but they themselves are not willing to lift a finger to move them. Everything they do is done for men to see. They make their phylacteries wide and the tassels of their garments long. They love the place of honour at banquets and the most important seats in the synagogues. They love to be greeted in the marketplaces and to have men call them "Rabbi" ".*

*According to some extension agents their superiors hardly ever visit them in their work areas. "Imagine that they hardly ever visit us in our working areas. Nevertheless, at the end of the year, they evaluate our performance. Actually I wonder where they get information to evaluate us. If you do a hard job and your evaluation note does not recognise it then it does not make sense to work in the same way. They just like to be in office and to be called chief or engineer. If you do not do so, you are in trouble. But they forget that World Vision is a religious organisation and we are all brothers according to the bible".*

- **Narrative from the "superiors"**

*"They are younger and just want to have money from doing nothing".*

Once with the so-called superiors (the district co-ordinator, the supervisors and other members) they related that they feel happy with the work done by the extension agents in the field. The main problem is that most of the extension agents are younger and they do not want to stay or live in the countryside. Extension agents are seen as wanting to go to the city every weekend and to go off riding motorbikes. It is difficult for many of them to stay close to the farmers, which is their job. *"Once I distributed to of the agents, seeds to give to the farmers. Two weeks after I asked how people are evaluating the germination, some of them told me that did not give seeds to the farmers because of various reasons. It is disgusting when this happens. You have to be rude with extension agents most of the time; otherwise they will not work properly".*

Many aspects surface in this last section: physical conditions affecting peoples' engagement in agriculture; extension services; social relations, and; markets affecting the paprika production. People strategize in different ways to respond to the existing conditions. That is what agricultural based livelihood in Megaza is about. Now I invite the reader to follow me and to see other livelihood activities taking place. In the next paragraph I will look at trading activity.

### *7.2.2 Trading*

The demand for many products, especially agricultural, is very high in Megaza because of the fact that in Malawi produces almost nothing. Six interviewed told me that they spend most of their time looking for products to sell in Malawi and products to bring from Malawi which are lacking in Mozambique. When farmers do not have their own agricultural products to trade in Malawi, they look in other regions in Mozambique to buy and re-sell in Malawi.

Because of being busy with trading farmers recounted that the agricultural production had become a female domain. The men give money to their wives in order to pay labour from outside the family. When trading the men normally take a son with them to help them with the sales.

When I asked how they manage to live in Mozambique while trading in Malawi, nine of them said that they also have homes in Malawi and that family members in Malawi help them find buyers.

*Double home: strategy aiming to avoid risk and to help trading*

During the Civil war in Mozambique (1976-1992), many people from Megaza fled to Malawi. After peace agreement in 1992, not all members of a household came back to Megaza. Many reasons are behind this. Some were "well" established in Malawi. But the main reason according to Mr. Chicote<sup>12</sup> is that people were not sure about the country's stability. Given such reasons, part of the family remained in Malawi, for protection in the likelihood of another war. Nine of the fifteen households have another home in Malawi. For them agricultural production must take into account the double home; they have to share their production with the family in Malawi because in Malawi their families produce almost nothing. However, the family in Malawi has its own functions: the children are sent from Megaza to Malawi for studying, as better schooling conditions are perceived to be in Malawi. An important role for the Malawi family is that of linking Mozambican farmers with the Malawian markets. One interviewed told me that he is going to produce only maize this year (2001) because he received information from Malawi that there will be drought.

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<sup>12</sup> In Megaza I stayed in Mr. Chicote's house; he is a fumo/ traditional authority

### **7.3 The emergent groups of households: The "Bwanas", the petty traders and the "Atcheregue"**

Above I described the activities which the households said to be the most important ones. In doing so, I looked to differentiation between households, their capabilities and strategies. I paid special attention to paprika production trying to find out why less people are producing as compared to other regions where it is an important step towards poverty alleviation. I looked to the physical, social, and economic environments surrounding the farmers; I collected points of view from different perspectives and actors. From that exploration, three main groups emerged: the "bwanas", the petty traders and the "atcherengue".

1. **"Bwanas/rich"- Combining two homes with agricultural production and trading:** " bwanas" in Megaza are those people who hardly spend a week in the community. They are travelling all the time searching for commodities to be sold in Malawi and from Malawi they bring commodities which have a higher demand in Mozambique. Having double homes helps them to find buyers and commodities in both countries. Agriculture is mainly the women's domain and the "Bwanas" can afford to hire labour to help their wives in agriculture. Three of those interviewed were considered by other community members as "bwanas". People travelling all the time is a clear sign of wealth: *"if someone is poor, he cannot travel all the time"*. The fact that "bwanas" can afford to hire labour reinforces the perception that they have money and are, indeed, rich.

2. **Agriculturist and petty traders** - another way to make a living (for two interviewees) is to intermediate between traders in both Malawi and Mozambique. These households have links with Malawian traders looking for products in Megaza. With these links, the Malawian traders leave money with the intermediaries for a couple of days or weeks and the intermediaries look for products, buying them in Mozambique. In same way if someone in Morrumbala village, for example, has something which he would like to sell in Malawi or something he wants to buy in Malawi the intermediaries play a role.

Intermediaries take the money or the product and go to Malawi. This is not full time work; it happens only with certain traders. Their main activity continues to be agriculture.

3. **"Atcherenghe"- Combining agriculture and wage labour:** Because "bwanas" hardly engage in agricultural production, the main labour source for their fields is coming from the "atcherenghe". The "atcherenghe" in Megaza are normally the elders and the widows who have little mobility. Mr. Chicote told me also that someone can become "atcherengue" if he spends his money on drinking or with women. The main characteristic of the "atcherengue" is that they cannot feed their family members throughout the year based on their own production. Consequently, they sell their labour force to the "bwanas" , those without time to engage themselves in agricultural production. When the "atcherenghe" eventually produce more from their fields and have surplus, the immediate buyers are the "bwanas" or the petty traders.

We see that households engage in activities differently and use different strategies. The full-time traders develop the strategy of having two homes and agricultural production becomes mainly a task for women. The petty traders try to capture trading opportunities offered by the other traders and finally we have those "atcherengue" whose capacity to engage in trading is lower.

## **8 ANALYSIS: INTEGRATING THE FINDINGS**

### **8.1 Activities, capabilities, strategies and differentiation**

In studying livelihood strategies, I was able to disentangle the Morrumbala district into particular settings and observe differences between the settings. In doing so, the study demonstrates that farmers are not homogeneous; there are numerous variations in livelihood strategies emerging. From this study I can conclude that the way in which farmers engage in agriculture and other livelihood activities is shaped by their own perceptions about their capabilities and their perceptions about the surrounding environment. Farmers are part of an environment which they both influence and are influenced by. The particular livelihood strategy of each household is shaped in a series of social interaction between different people at various points in time and space. To make a living, farmers in the study regions adopt a range of activities which are strategically chosen, taking into account these perceptions and capabilities.

From Sabe, the example of a man whose ancestors did not allow him to open a new field it is a good example of how people's beliefs and perceptions shape a particular livelihood activity and decision-making. In Pinda some households do not produce paprika because they perceive themselves as not being "rich" enough to support themselves in the lag time between commercialisation and payment.

Labour was mentioned in all areas as one of the main constraints for agricultural production. Land sizes and production patterns differ between farmers because of this labour constraint, amongst other reasons. From Sabe and Pinda, examples were given to show different strategies used to overcome the labour problem: children are obliged to quit school; adolescents are obliged to marry earlier; the elders are marrying more women, and; in many situations labour arrangements,

distribution and re-distribution at household level are required (see example box 4).

The report also illuminates how households strategize to get both paprika seeds and fields, and; how households strategize in Sabe to maintain the hunting activity (by changing hunting time and by negotiating with the guards).

"I am squeezed" expresses a lot. We see that in order to produce paprika, households must also be capable of mobilising resources (i.e. money) from other activities, outside of the agricultural sector. Therefore paprika production cannot be isolated from other activities in which farmers are engaged; they fish to pay for labour; they produce paprika to buy new nets, food etc.; they marry another wife to have more labour and then increase field size and so forth.

The report brings also differences between the three study sites and tries to explain those differences. Pinda and Megaza are both located in lowland areas, wet by the Shire River. Both Pinda and Megaza have Sena speaking inhabitants and started paprika production at same time. However, the differences between these two communities are enormous. In Megaza, people have double homes, their lives are divided between two countries, their norms, values and beliefs are being shaped with these from Malawi. People perceptions of their environment (i.e. better schools in Malawi, probable return to civil war in Mozambique, better business opportunities in Malawi, non-existence of paprika buyers), are shaping also their family organisation and agricultural practices. The non-existence of extension services, the erosion of soils and the existence of mines are also important elements to understanding farmer practices in Megaza.

Given the landscape in Megaza I see non-paprika production not as a result of lack of extension service, but as a result of paprika not fitting into the household livelihood strategies. If I use the five basic assets from the livelihood framework, the situation in Megaza can be represented as the following:

- Natural capital: land scarcity ( mines, erosion, floods, population increase)
- Physical capital: lack of almost all kinds of infrastructure; people do shopping and send kids to study in Malawi (see description of Megaza);
- Social capital: households pressured to produce food crops because they must feed their family members in Malawi; relations with traders who are interested in maize, not in paprika.
- Human capital: paprika is a new crop in Megaza. Skills and knowledge are necessary to allow people to engage in paprika production. The skills and knowledge should be delivered by World Vision extension services; however, the World Vision extension service is not working properly in Megaza.
- Financial capital- lack of credit schemes; the "atcherengue" depend mainly on "bwanas" and the "bwanas" depend mainly on trading specially with Malawi.

Pinda on the other side seems more dynamic regarding paprika production: full time extension agents, an irrigation scheme etc. Fishing and paprika production seem to match and interweave. Both activities are interlinked (river and riverbank) facilitating the labour arrangement for both activities. In addition, many households are pressured to produce paprika because they see and believe that others are buying i.e. new nets and/or bicycles, building new houses with money earned in paprika commercialisation.



The differences between regions in terms of livelihood activity's importance is presented in the following section.

Table 7: Different livelihood activities and their importance per region

| Livelihood activity | Regions |       |        |
|---------------------|---------|-------|--------|
|                     | Sabe    | Pinda | Megaza |
| Agriculture         | ***     | ***   | ***    |
| Livestock           | ***     | **    | **     |
| Fishing             | *       | ***   | *      |
| Hunting             | **      | *     | *      |
| Wage labour         | ***     | ***   | ***    |
| Trading             | **      | ***   | ***    |
| Remittance          | **      | **    | ***    |
| making bricks       | **      | *     | *      |
| Producing coal      | **      | *     | *      |
| Craft making        | **      | **    | **     |
| Brewing beverage    | *       | **    | **     |

Legend:

\*\*\* = Very important \*\* = Important \* = Less important

More than simply the differences between regions, the report brings to the surface, the differences between households. Households' dependency on and access to different livelihood activities varies. Information from this report argues that the more squeezed "atcherenghe" have fewer alternatives and depend more on agriculture and wage labour, while the better-off "bwanas" have more alternatives. Interestingly though, the survival of the "bwanas" seems to be dependent on the existence of the "atcherenghe" as the main power force in the bwana livelihood strategy. In the following table I try to summarise the dependence on each activities by each group.

Table 8. Households' dependency on livelihood activities

| Livelihood practices | Groups   |               |
|----------------------|----------|---------------|
|                      | "bwanas" | "atcherenghe" |
| Agriculture          | **       | ***           |
| Livestock            | ***      | *             |
| Fishing              | ***      | *             |
| Hunting              | *        | ***           |
| Wage labour          | *        | ***           |
| Trading              | ***      | *             |
| Remittance           | **       | **            |
| Making blicks        | *        | ***           |
| Producing coal       | *        | ***           |
| Craft making         | *        | ***           |
| Brewing beverage     | **       | **            |

Legend:

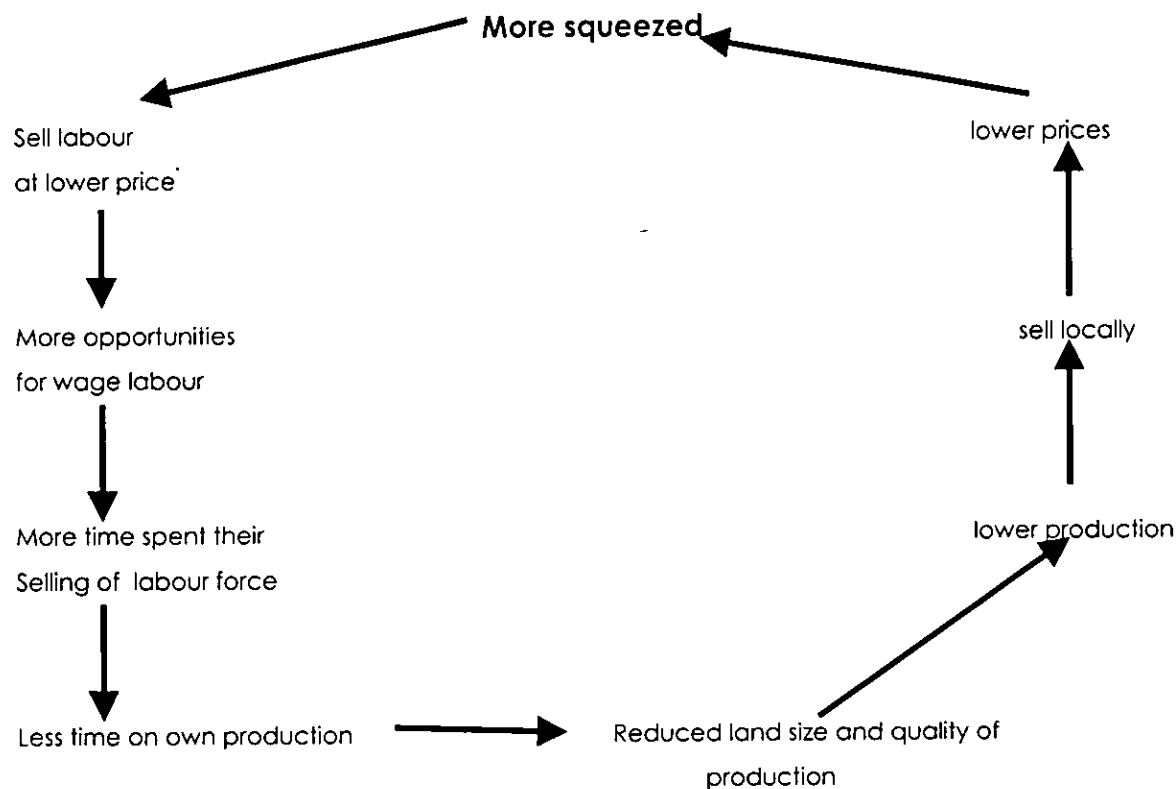
\*\*\* = Very important

\*\* = Important

\* = Less important

Access to different livelihood activities also varies from one household to another. Those with more livestock, have double homes, have a means of transportation, are literate, are market-oriented. They have wider access to other livelihood activities such as paprika production. However, those lacking these skills and resources are caught in a cycle, as the one developed by myself and illustrated below.

Fig 3: Vicious circle: Interactions between labour, market and livelihood for the more squeezed the "atcherenghe"



## **8.2 Paprika production and poverty alleviation**

From this report, it is clear that paprika is one step towards poverty alleviation. The dynamic in the areas where it is being produced suggest that people perceive paprika as a crop which can help them improve their well-being. Some farmers are shifting from cotton to paprika. The demand for paprika seeds and fields has increased and for some, paprika production has increased their investment in other activities. However, I also see that people are benefiting from paprika to different degrees and some do not benefit at all. The "Bwanas", as reported in this report, are those who have benefited most as compared with the "atcherengue".

As the farmer suggested in Pinda *"you have to keep both otherwise both will collapse"*, meaning that paprika can not be dissociated from other activities. In same line of reasoning I see poverty alleviation not as a result of producing paprika, but as an outcome of the interweaving of different activities carried out by a household. If asked whether or not paprika is reducing poverty, my response would be, as stated above, that paprika is creating a good step in the direction of poverty alleviation.

## **9 CONCLUSIONS AND SUGGESTIONS**

### **9.1 Conclusions**

#### ***Livelihood activities***

The study shows that to make a living, households in Morrumbala engage in a wide range of activities. The activities mentioned are: agricultural production, livestock, hunting, fishing, trading, wage labour, making bricks, producing an alcoholic beverage and coal production.

#### ***Livelihood strategies***

The report shows that to engage in these activities households in Morrumbala develop different strategies: creation of associations in order to receive external aid; production at different sites in order to avoid risks or to have more profit; altering hunting times to avoid guards; early marriage or more than one wife; the sale/rental/exchange of fields to maintain or increase income generation; reduction of the fallow period; reduction of the number of seeds applied in agricultural production as a response to changes in the physical environment, and; settling in two homes to help the trading and spread risks between two communities (and countries).

#### ***Differentiation***

The study shows that there are differences between households in accessing and exploiting livelihood activities. The "atcherenghe" – the poor, are more dependent on wage labour and agricultural production and are less market-oriented, while the "bwanas" – the rich, have more alternatives in addition to agriculture and are more market-oriented. The report shows that the "bwanas" are the major paprika adopters, producing in large fields and by mono-cropping while the "atcherenghe" produce paprika mainly using inter-cropping and in small fields. In addition, the "atcherengue" produce mainly for subsistence giving more attention to food crops while the "bwanas" are more interested in profit, engaging therefore in cash crops.

The report shows that there are many differences between regions in the district. In Sabe households are more dependent on agriculture and livestock while in Pinda fishing and trading are very important activities. In Megaza trading with Malawi and having two homes (one in each Mozambique and Malawi) helps households to make a living.

### ***Changes over time***

The main cash crop has shifted from cotton to paprika. As result of recent increase in demand, fishing has become an important livelihood activity attraction. Because of the civil war, people lost livestock, reducing, this important livelihood. Pressure on labour and lack of capacity to support family members induces some households nowadays, to marry their children at earlier ages.

### ***Paprika production***

Households benefit from paprika to different degrees. This, has to do with their personal capabilities but also with the local cultural, physical, social, financial environment. Local organisation, beliefs, norms, values affect the way people perceive and engage in livelihood activities in the studied area.

### ***Poverty alleviation***

Paprika production has given a dynamic which can help poverty alleviation in Morrumbala. However, poverty alleviation can not be explained by one single activity. Poverty alleviation is an outcome of an involvement in a whole range of activities.

## **9.2 Suggestions**

1. Dealing with different groups in a community requires different strategies. Therefore I suggest to WV a closer look at the needs of the different groups presented in the report;

2. WV needs to review the procedures regarding payment for paprika after commercialisation;

3. Many advantages come from working with groups or associations. However, a closer look at groups dynamics is required in order to adjust the intervention plan when needed. In addition, exploring group dynamics also helps to avoid WV being blinded i.e. thinking they are working with a community while in fact, working with a family.

4. On-farm research is more in the interests of the WV as opposed to the farmers. I say that because there are so many artificial conditions such as the irrigation scheme, pest and disease control etc.. which are not real or reflective of the farmer's normal conditions. I therefore suggest to WV to do experiments whose results will be useful and in the interests of the farmers; the experiment must use the farmer's reality of conditions;

5. The WV should look at the other activities presented in this report which help households make a living. Fishing is shown to be a very important activity, for example, in Pinda. Therefore credit schemes to help people engage in fishing may be worth exploring.

6. Given the landscape in Megaza, I would encourage WV to concentrate more on food crops than on cash crops;

7. I suggest further quantitative study on livelihoods in the research areas as this report is mainly based on qualitative data.



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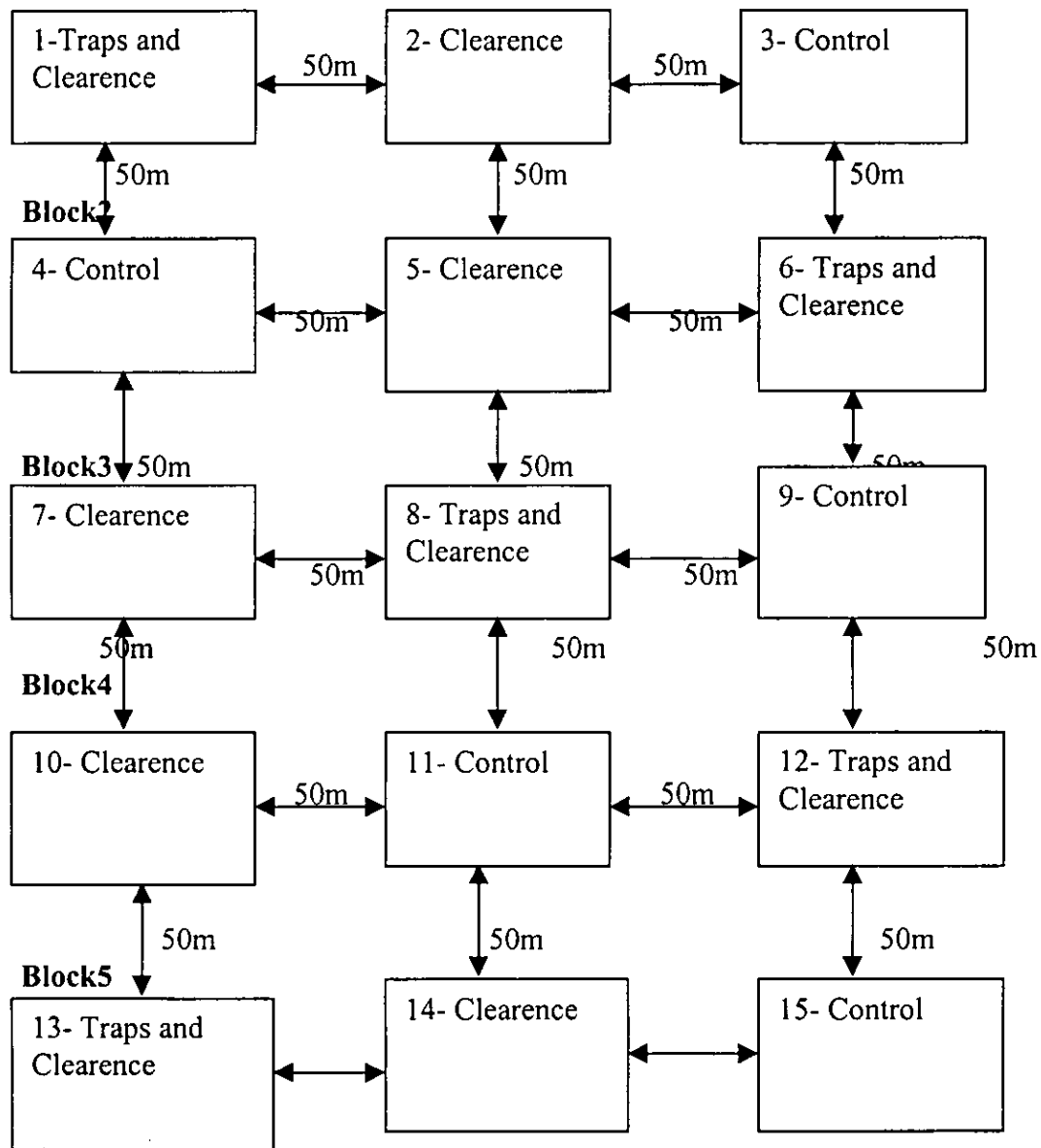
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## ANNEXES

ANNEX 1

Annex 2: PAPRIKA RATS CONTROL EXPERIMENTAL FIELD DESIGN

Block1



## Annex 2

### Different paprika production patterns



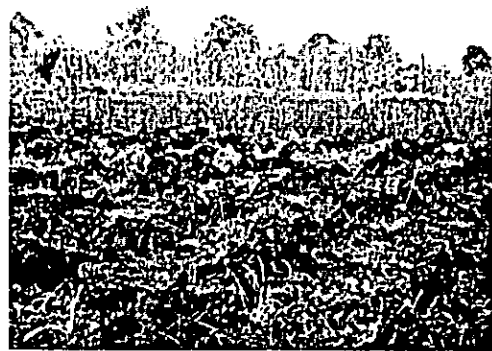
Picture 4: *paprika mono cropping*



Picture 5. *Paprika with maize but in different blocks*



Picture 6. *Inter cropping*



Picture 7. *Paprika with other vegetables*