CHAPTER THREE

THE STUDY AREA

3.1 Introduction

The previous chapters dwelled a lot on poverty in Zimbabwe and the demographics associated with it. From these chapters it came out clearly that the poor and most food insecure groups of the population are in rural areas. It suffices to add that the poorest are mostly found in the marginal areas. Marginal means that the areas receive very low rainfalls, the soils are generally less fertile and in some instances infrastructure is poorly developed.

This chapter gives a description of the study area part of which falls in marginal areas. The chapter comprises five sections. The second and third sections describe the location of the study area and its physical features respectively. The last three sections look at the area's demographic aspects, climate and agricultural activities. These aspects are of major significancee in the feasibility analysis which comes in Chapter 5.

3.2 Location

The proposed cassava project will be confined to Mashonaland West and Central. These two provinces comprise about one quarter of the country starting from the north east to the north west. The map in Annex 1 gives the location of the study area on the Map of Zimbabwe. Mashonaland West has a total area of 57 441 square kilometres and Mashonaland Central has an area of 28 347 square

kilometres. Mashonaland West comprises 6 districts which are Kariba, Hurungwe, Makonde, Zvimba, Chegutu and Kadoma. In Mashonaland Central there are 7 districts and these are Guruve, Centenary, Mt Darwin, Rushinga, Mazoe, Shamva and Bindura. These areas are suitable for cassava production.

3.3 Physical features

The area is largely composed of flat and undulating terrain. However, some of the districts such as Mt Darwin, Kariba and Makonde are mountainous. In addition part of the Kariba District falls in the Zambezi valley. The soils in the area vary from sandy loams to clays. Similarly soil fertility varies from place to place. Lower lying areas such as the Zambezi valley tend to have deep clay soils whilst high areas such as Makonde usually have shallow sandy loams. In terms of cassava production the soils are not much of a limiting factor since the crop grows well both in heavy and light soils. However, heavy soils tend to present harvesting problems and encourage vegetative growth.

3.4 Demographic Aspects

According to the 1992 census Mashonaland West and Central have populations of 1 112 955 and 856 736 people respectively. In both provinces females slightly outnumber males. The population density is about 20 and 30 persons per square kilometre for Mashonaland West and Mashonaland Central provinces respectively. The sparse population offers opportunities for agriculture. In Mashonaland West about 76 per cent of the population is rural and in Mashonaland Central 92 per cent of the population is rural. The average household size is 5 persons with total number of households being 408 351. In Mashonaland West about 63 per cent of the

population above 15 years of age is economically active and in the other province 49 per cent of the total population is economically active. It is therefore envisaged that the project will not experience any labour problems.

In terms of wellbeing the "Poverty in Zimbabwe" study classifies about 80,4 per cent of the population of Mashonaland Central as poor and 46,1 as extremely poor. Similarly 66,7 per cent of the population of Mashonaland West is classified as poor with 40,4 being extremely poor. However, over 50 per cent of the population in each of the two provinces live in high potential areas. The main factor which accounts for the widespread poverty is therefore rurality rather than rainfall and land quality. Owing to lack of formal employment incomes are very low in these rural areas and as such the use of technical inputs is very low due to the fact that most farmers cannot afford them. This results in low yields hence poverty or high food insecurity. In addition, most households experience food stockouts before December. Cassava being less input intensive offers opportunities for redressing the food insecurity problem.

3.5 Climate

More than two thirds of the area falls in Region 2 and the other third falls in Regions 3, 4 and 5 in almost equal proportions. Box 1 below gives a brief overview of the five natural regions of Zimbabwe in order to provide a greater insight into what will be discussed in this section.

Box 1

Region 1: (Specialised and diversified farming areas) This constitutes less than 2 per cent of the total area of Zimbabwe. Rainfall is in excess of 1000mm per annum. The main farming activities include fruit, forest and intensive livestock farming.

Region 2: (Intensive farming) The region constitutes less than 15 per cent of total area. It receives between 750 and 1000mm of rainfall per annum. It specialises in crop production and intensive livestock farming.

Region 3: (Semi-intensive farming) The region constitutes about 19 per cent of total land area. The rainfall ranges from 650-800mm per annum. The main agricultural activities include livestock, fodder and cash crops - there is marginal production of maize, tobacco and cotton.

Region 4: (Semi-extensive farming) The region constitutes about 38 per cent of the total area. The annual rainfall ranges from 450-650mm. The region specialises in the extensive production of livestock and drought tolerant crops.

Region 5: (Extensive farming) This region constitutes about 27 per cent of total area. The average annual rainfalls are below 300mm. The main activities are cattle and game ranching, and production of very drought tolerant crops.

Generally annual rainfall declines as one moves from the South to the North East and West. The total annual rainfall for the area varies from slightly more than 800mm per annum in Region 2 to less

than 300mm per annum in Region 5. Most of the rains fall in summer i.e. from October to end of April. Annual rainfalls tend to decrease as one moves to the North-East and North-West. Droughts and dry spells are a common feature of the climate in Regions 3 to 5 and are less pronounced in Region 2. Temperatures vary according to area and in relation with the region. Generally average annual temperatures tend to rise with latitude and summer temperatures can rise to a high of 37 degrees celsius in the Zambezi valley. Winters are generally cool to warm and dry.

3.6 Agricultural Activities

The main economic activity in the study area is farming. The major crop is maize. Other crops of importance include millet, cotton, sorghum, and pulses. Grain production is the dominant activity in areas falling under Region 2 although market gardening is rife in higher rainfall areas. Part of the area falls within the maize belt of Zimbabwe so in terms of food security the majority of households in Region 2 are able to produce enough cereals for their requirements. Most of the cassava produced in the maize belt will therefore mostly be used for stockfeeds. Food production is generally inadequate to meet the annual requirements of the majority of households. However, for the marginal areas which fall in Regions 3 to 5 there is a high degree of food insecurity. Most households in these marginal areas depend on remittances, grain loans extended by government and food relief provided by NGOs to meet shortfalls. This group will benefit most from the proposed cassava option.

Livestock production is a major activity in the area. The main livestock enterprises include cattle, poultry, pigs and goats. The livestock industry has suffered major setbacks following a series

of droughts over the current decade. Generally cattle production is extensive although in most cases supported by supplementary feeding. Pen fattening is also a common practice. However, this is constrained by high feed costs. Poultry and pigs are produced under intensive systems. Production of cassava is expected to boost production of livestock and consumption of meat. This is further elaborated below.

Zimbabwean stockfeeds are mostly maize based. With the rapidly increasing costs of maize which are coupled with the depreciation of the local currency the prices of stockfeeds have skyrocketed. This has rendered dairy and livestock production less viable while milk and meat have become unaffordable to consumers. Cassava will therefore provide a cheaper substitute for maize in stockfeed production.

3.7 Conclusions

This Chapter gives an overview of the study area. It highlights that the two provinces of Mashonaland Central and Masholand West have 7 and 6 districts respectively. It goes on to describe the physical features of the two provinces and how they affect cassava production. From this analysis it emerges that physical features do not constrain cassava production. In order to evaluate the availabilty and adequacy of critical resources such as land and labour a demographic analysis is carried. Figures on population density and numbers of economically active persons in the two provinces indicate that there is adequate land and human resources. In view of the importance of climate to agricultural production an effort is made to assess the suitability of the study area to cassava production. Finally a review of the current agricultural

activities is presented. The purpose is to try and integrate cassava production into the current structures and systems.