Economic Policy Reforms and Meso-Scale Rural Market Changes in Zimbabwe

The Case of Shamva District

Edited by
LOUIS MASUKO

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CONTENTS

Chapter 5

IMPACT OF THE ECONOMIC STRUCTURAL ADJUSTMENT PROGRAMME ON AGRICULTURAL MARKETING ACTIVITIES AND SYSTEMS IN A RURAL ECONOMY: THE CASE OF SHAMVA DISTRICT

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Section I

AIMS AND OUTLINE OF THE STUDY

1.1 INTRODUCTION

Most Sub-Sahara African countries are implementing economic structural adjustment programmes aimed at ensuring that price mechanisms accurately reflect supply and demand conditions and subsequently promote economic growth. These economic structural adjustment policies involve efforts to redefine the role of the state especially through the reduction of state involvement in marketing, through a series of macro-economic policies involving price liberalisation, enterprise reform, privatisation and commercialisation of state owned enterprises. From 1990, Zimbabwe has implemented economic structural adjustment policies focused on liberalising internal and external trade, by elimination of price control, reduction of state marketing activities, and restructuring of the banking and financial system. These policies have far reaching effects on agricultural marketing and subsequently on agricultural production and the rural economy.

1.2 PURPOSE OF THE STUDY

This study is part of a comprehensive study evaluating the impact of the economic structural adjustment programme (ESAP) on the rural economy in Zimbabwe.

This empirical study reviews micro level changes occurring in the rural marketing systems as a result of macro economic policy, by specifically investigating the changes of agricultural produce marketing within a rural economy resulting from the introduction of the economic structural adjustment programme. Efficient supply of agricultural inputs and easy market access are important components of the economic development process. The structural adjustment programme removed the responsibility of agricultural produce marketing from state owned enterprises to individual producers and organisations. There is therefore need to investigate how individual agricultural producers and enterprises are adjusting to these changes.

The specific questions the study attempts to answer are:

1. What has been the effect of the economic structural adjustment policies on the structure of agricultural marketing channels?
2. What are marketing channels used by the smallholder and the large scale commercial farmers?
3. Are there any changes in type and quantity of agricultural crops and livestock produced?
4. Has the type of agricultural products marketed changed as a result of the introduction of the economic structural adjustment policies?
5. How are factors of production distributed to the various farming households in the district?
6. Are the farmers aware of the policies and objectives of the economic structural adjustment programmes?
7. What do agricultural producers feel about the economic structural adjustment programme policies?
8. Are support institutions to the farmers in place to help them benefit from ESAP?

1.3 THE OBJECTIVES OF THE STUDY ARE

- To analyse the development of linkages in agricultural marketing within the agricultural sector in Shamva district.
- To investigate the type of input delivery and agricultural marketing linkages existing in the smallholder sector.
- To describe the variations in the different channels servicing agricultural producers.
- To assess the impact of macrolevel economic policies on farm level production and marketing activities.
- To discuss the implications of these developments on economic development.
- To recommend intervention strategies to improve agricultural marketing and production systems in Zimbabwe.

1.4 RATIONALE FOR INTRODUCING ESAP

The Zimbabwean Economy is highly vulnerable to weather conditions since any major decline in agricultural output automatically leads to very low economic growth. For instance, in 1987 when the agricultural sector experienced a negative growth rate of 18.1%, the economy also suffered and recorded a growth rate of 0.7% and in 1988 when agriculture grew by 25.5% the economy also grew by 6.3%. The weather conditions therefore have a major influence on the growth of the economy. Besides weather problems, agriculture has also been affected by the transport crisis as well as declining terms of trade. This points to the need for major structural changes to reduce the vulnerability of the economy to factors that cannot be changed.

Despite the control regulations, prices were increasing officially or otherwise and these increases were seriously squeezing the incomes of the workers. The prices and wages spiral was also contributing to high rates of inflation and if there was no policy changes the rate of inflation would more than double in the coming years and the effect of price and wage regulations on investment would continue to be in the negative which is detrimental to economic growth as evidenced by the falling per capita income. (Derived from a speech made to Parliament of Zimbabwe by the then Minister of Finance, Dr. Bernard Chidzero on July 26, 1990).

1.5 STUDY HYPOTHESES

The hypotheses underlying this study are governed by the above scenario derived from a policy statement made to the Parliament of Zimbabwe by the then Minister of Finance, Economic Planning and Development, Dr Bernard Chidzero on 26 July 1990. These hypotheses are:

1. Liberalisation of the agricultural marketing system through removal of parastatal monopolies leads to open markets with more buyers.
2. Competition resulting from removal of monopolies in agricultural marketing eventually benefits the farmers as buyers compete on the market and increase prices to attract farmers.
3. ESAP gives farmers chances to earn more income as they increase agricultural production, motivated by the high prices offered by buyers.
4. ESAP creates opportunities for farmers to switch from production of traditional crops to cash crops because of better prices for cash crops and contractual agreements.
5. The quality of life of rural communities improves as a result of structural adjustment as farmers exploit opportunities made available to them.
6. ESAP benefits all economic players and this includes all farmers i.e resettlement, communal and commercial farmers and the nation at large.

1.6 JUSTIFICATION OF THE STUDY

In the past, research on the performance of marketing systems at microlevel has received limited attention in Zimbabwe. This was due to the fact that most of the input supply systems and agricultural marketing systems were controlled and under state owned commodity boards. The performance of a private agricultural marketing system was discouraged and at times declared illegal. The introduction of the economic structural adjustment programme has resulted in the disbanding and commercialisation of commodity boards and the delegating of marketing activities to private marketing systems. It is therefore important to investigate the new developments and their impact on rural households. The impact of these developments on agricultural production is crucial as it will give policy makers and agricultural producers an indication of

the economic development trend. Contrary to economic thinking in the past decade, it is now an acceptable fact that developing countries with a high weight of agriculture in the total economy and employment will have retarded development if the agricultural sector is ignored (Alexandros, 1995).

Attempts by researchers to investigate the changes and performance of the micro and macro economy in sub-Sahara Africa should be encouraged and supported as it provides the much needed data for planning. Riley and Staatz (1993) have commented on the need for information generative research, even of a descriptive nature, to help policy-makers. Furthermore, the efficient functioning of agricultural marketing systems in developing countries is important for food security and economic development. It is assumed that efficient marketing systems would lead to agricultural production and subsequently to rural development. Agricultural systems vary as a result of cultural, social and political characteristics of each country and region. This makes focused studies like this one important in the identification of specific social and cultural relations of individual markets.

This study is therefore justified by a number of issues and some of these have been outlined above. There is clearly need to try and identify points of policy intervention, so as to help the promotion of factors and policies that will enhance economic and rural development.

1.7 OUTLINE OF THE STUDY

The first part of the report, Sections 1 and 2, are concerned with the major conceptual issues of structural adjustment, the importance of agricultural marketing to the development of developing countries and a review of the existing literature on the subject of study. In Section 3, background and historical information on the pre-reform structure and performance of the agricultural marketing systems in Zimbabwe is covered. Schematic models that explain the structures of specific sub-sectors of the agricultural marketing systems are shown. The methodological approach used and the research design, as well as the rationale for choosing the survey area are outlined in Section 4.

The research findings on socio-economic characteristics of the farmers' agricultural production characteristics, access to the factors of production as well as developments in the agricultural marketing system are covered in Section 5. In Section 6, the conclusion as well as the recommendations and areas for further research are outlined.

Section II

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

This section focusses on a review of the existing literature on the impact of ESAP on agriculture in Zimbabwe. It also presents some information on the use of channel analysis as a tool to analyse the impact of ESAP and the role of agriculture marketing and support institutions in economic development, with a special focus on rural development.

2.1 REVIEW OF LITERATURE

Studies on the impact of ESAP on communal agriculture in Zimbabwe are few. This is mainly because the implementation of ESAP started in 1991, and the impacts of the policy could not be assessed and evaluated until after a certain time period. In the first year of implementation there was some research interest on the subject resulting in the carrying out of some studies.

A study was carried out in 1992 by P. G. Kadenge, H. Ndoro and B. Zwizwai and this study was entitled 'Zimbabwe's Structural Adjustment Programme: The First Five-year Experience'. This study provided empirical data on Zimbabwe's macro-economic situation prior to ESAP. The macro-economic situation before ESAP included low investment, large budget deficit, low growth rates and other problems. Results of this survey revealed that only about 10% of the communal household population was aware of ESAP and its purpose. Decontrol of prices and removal of subsidies was found to be unpopular with the communal households.

Removal of subsidies and price decontrols gave rise to increased input costs and this did not benefit the farmers. The retrenchments also made rural families to be in a worse off position than before ESAP. This study however, had a sample size of 20 households and this makes it difficult to generalise about the impacts of ESAP given a small sample size like this.

The then Ministry of Lands, Agriculture and Rural Development, Farming Systems Research Unit and The Department of Research and Specialist Services (DRSS) carried out case studies of Chivi and Mangwende communal areas to assess the impact of structural adjustment in 1991. The survey was mainly a rapid appraisal but it brought out some interesting points. Most communal farmers welcomed the various changes in marketing systems. Communal farmers recognised the potential benefits of market liberalisation which included inter-district trade or trade between Zone A and Zone B, multi-market channels with the Grain Marketing Board (GMB) as a residual buyer offering reasonably competitive prices for maize.

The major problems faced by farmers in the areas were not availability but access to the desired inputs at reasonable prices. The removal of maize subsidies

and continued increases in input costs were expected to have adverse effects on maize production in the communal areas according to the farmers' predictions.

This study was however, a qualitative assessment and was also conducted in the first year of ESAP implementation when farmers had no quantitative data about the changes in their farm operations in response to policy changes under ESAP. This particular study was carried out after five years and hence has the advantage of being able to use quantitative data.

Another important study that investigated the changes in marketing systems under ESAP was done by Rubey in 1994. Rubey was able to show that most communal farmers welcomed the liberalisation of the maize marketing system. The relaxation of marketing restrictions permitted inter-district trade between Zone A and Zone B and this benefitted both zones. Direct maize sales to millers from communal farmers gave rise to a more diverse marketing channel. The decentralisation of milling operations also resulted in reduced prices of mealie-meal. The communal farmers also had an advantage selling to grain traders as the traders could accept bulk sales or in non-standard grain bags. This study thus established that the main effect of market reforms under ESAP is to give the farmers more marketing options.

A more recent study was carried out by S. A. Oni (1996). This study had the main aim of assessing the impacts of ESAP on the communal areas of Zimbabwe. The study established that the liberalisation of the marketing arrangements allowed for rapid growth of multi channels for various agricultural commodities. There is competition between private traders and marketing boards for the purchase of agricultural commodities. The increase in market competition in addition to the decontrol of the forex market and subsequent devaluation of the Zimbabwean dollar resulted in rapid increases in crop prices during ESAP. The study revealed that the price of maize rose from $250/tonne in 1990 to $ 950/tonne in 1995. The increase in producer prices for the various crops however, did not result in a positive change in crop output as was anticipated. There was a general decline in the output rate of about 2% per annum during ESAP as this study reveals. The only crops that experienced an increase in output are cotton and sunflower which had increased by 1.56% and 3.15% respectively. The study found out that the farmers had began to allocate more land to these crops during ESAP. There was sadly, however, a decline in yield per hectare for the crops and this was mainly due to the fact that farmers were using less fertilisers under ESAP. There were problems of accessibility of fertilisers at reasonable prices under ESAP.

2.2 THEORETICAL OVERVIEW

The use of marketing theory, especially channel analysis, as a tool to analyse the impact of the economic structural adjustment programme has been used to a limited extent in Zimbabwe. This is due to the fact that marketing was highly

regulated and controlled by the state and the performance of private marketing systems was of secondary importance. With the deregulation of most economies in sub-Sahara Africa, studies analysing marketing systems and market channels have become important. Riley and Staatz (1993) have pointed to the deficiency in marketing information even of a descriptive nature in developing countries. Research in marketing systems could help in providing guidelines to policy makers, agricultural producers, distributors and processors on the type of channels to use or promote.

2.2.1 Economic Structural Adjustment Programmes and the Rural Economy in Developing Countries

The issue of economic regulation has been a major issue since classical economists like Adam Smith developed arguments supporting the idea that market competition generates greater efficiency than state regulated trade and commerce. The outstanding question though is whether economic structural adjustment programmes and policies are beneficial to developing countries and specifically to rural economies. Opposing ideas and arguments dominate the debate on the impact of economic structural adjustment programmes in developing countries. The first position which is supported by international funding agencies ie. The International Monetary Fund and the World Bank argue that economic structural adjustment policies can be used to boost economic growth. These proponents argue that liberalisation will promote better price signals, stimulate competition and induce growth in the economy. Direct pronouncements by the World Bank articulate that market based development can reduce both inequality and poverty in developing countries (World Bank, 1995). Supporting this view Rausser (1992) contends that market oriented policies are sweeping the world because centralised economic policies have failed. He continues to say that there is a positive relationship between economic growth and markets. Economic structural adjustment policies are expected to lead to structural transformation which is regarded as a prerequisite for economic development. Structural adjustment *per se* is not viewed as a sufficient condition for economic development (World Bank, 1989). This implies that research on the impact of structural adjustment should focus on investigating whether structural transformation is taking place in the developing countries implementing structural adjustment programmes. According to Chenery (1979), structural transformation involves a combination of changes in demand, production and employment situations as well as an increase in domestic savings, investment, and the share of production devoted to exports as well as diversity in exportable commodities and services.

The critiques of economic structural adjustment contend that structural adjustment policies are inappropriate for inducing economic growth in

developing countries, as most economic structural adjustment policies concentrate on monetary instruments and economic indicators at the expense of micro level performance (Lele and Meyers, 1989). Streeten (1989) posited that economic structural adjustment policies encouraged the shift of resources from non-tradeables to tradeables. This move to tradeables is supposed to be more beneficial to the farmer as they can get higher prices pegged on world market prices for their produce. He further asserts that the removal of subsidies on agricultural inputs was an impediment to increased production of tradeables and productivity as a whole in some countries. In a later study, Streteen (*ibid.*) cautions that the virtue of markets lies in the existence of competition but have undesirable results in economies where there is unequal distribution of income, land and other assets. This view was also held by Mellor (1984) who argued that smallholder farmers are normally risk averse and will invest in food rather than export crops, as a result the focus on export crops was not to their advantage.

Other critiques of the economic structural adjustment programmes have pointed at the biased beneficial impact of the economic structural adjustment programme which resulted in the marginalisation of resource poor groups in the economy. Uma Lele (1991) pointed to the marginalisation of women by structural adjustment policies. Furthermore, Cornia *et al.* (1987) supported by Bienefeld (1988) also outlined the negative impact of ESAPs on the poor and vulnerable groups in society due to its focus on the short to medium term economic and financial impact. In support of this point of view, the United Nations Economic Commission for Africa (1989) criticised adjustment policies for concentrating on achieving external and internal balances as well as on getting the 'price right' which may not be possible due to the structure of the African political economy. This unfavourable impact of the Economic Structural Adjustment Programmes on the poor has also been documented in Zimbabwe by Mhone (1993) and Chipika (1995).

The need for equitable distribution of factors of production before or as part of the economic structural adjustment programmes has also been suggested by some researchers. The necessary support institutions such as extension services, research services and credit institutions are an important prerequisite for the success of structural adjustment programmes. These institutions are public services and are set up by the state and intended to benefit all.

Elson (1991) and Streeten (*ibid.*) have indicated that income and land redistribution are prerequisites for the success of structural adjustment programmes. Using Taiwan, Japan and South Korea as examples, Johnston (1988) asserts that land reform is a precondition for economic development. Stiglitz (1993) contends that adoption of a market system can have profoundly negative effects if there is imperfect land redistribution, incomplete market risk and imperfect information. The negative impact of the economic structural

adjustment policies within bimodal economies has been analysed by several researchers (Lele, 1991; Stiglitz 1993; De Janvry and Sadoulet, 1987). Due (1991) and Elabor-Idemuda (1991) focused on the negative impact of structural adjustment policies in female-headed households in Africa.

2.2.2 Agricultural Marketing and Economic Development of Developing Economies

The importance of marketing systems has been a topic for discussion for a long time. Drucker (1958) described an efficient marketing system as the most important multiplier of economic development. Abbot (1993) outlined the role of agricultural marketing systems in stimulating and extending development. The performing of specific tasks of production, storage, sorting, packaging, and processing, agricultural marketing can greatly contribute to economic development in the rural areas (Rhodes, 1994). The need to balance the creation of an enabling economic environment with sound sectoral policies and alleviation of micro economic constraints to development has been stressed by several writers (Lele, 1992; Killick, 1989). There is, however, need to realise that the efficient functioning of the rural economy is not only linked to changes in macro economic policies but to non-economic variables of the rural economy. For example, there is need to set up an entire set of interlinked infrastructural components of roads, rails, telecommunication networks, trucks, radios, electricity, market centers etc.

Timmer (1995) pointed to the importance of efficient marketing systems in raising the productivity of resource poor segments of the population. Ahmed and Rustigi (1981) attributed over half of the marketing costs in Africa to inadequate marketing infrastructure ie roads, storage facilities, communication etc. The major question is whether markets can, without the support of government, provide adequate stimuli for economic growth. The use of macro economic policy to control and modify agricultural markets is a controversial topic. Though the functioning of markets is generally perceived to be the best organisational structure to achieve decision making by producers, consumers and distributors, the right mix of market freedom and government intervention has been difficult to realise (Killick, 1989).

Section III

THE RESEARCH SETTING

3.1 INTRODUCTION

To understand the dynamics of the agricultural marketing systems in Zimbabwe, there is need to analyse the structure of the system before, and after the initiation

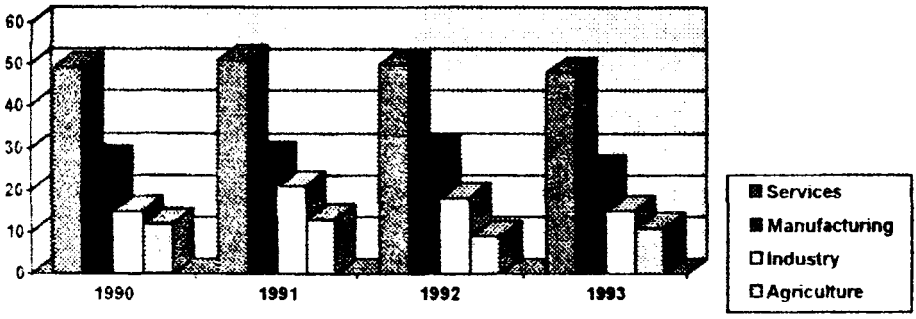
of the economic structural adjustment programme (ESAP), in 1990. The introduction of ESAP marked a distinct shift in the country's macro economic policies, when major moves were made to deregulate the economy. The protectionist policies that were pursued by the Zimbabwean government were a colonial legacy, dating back to the 1930s. During the world depression, in 1930, protectionist policies were implemented to protect the maize industry from the global economic recession. With time the marketing of other agricultural products also came under government control. As the government tried to protect the economy in the face of international economic sanctions imposed when the colonial government declared a unilateral declaration of independence (UDI), in 1965, a system of foreign exchange rationing, price control and import control was initiated. However, after independence (1980), government intervention in agricultural marketing continued for different reasons. The newly elected government was faced with an economy that was highly skewed in favour of a small settler population at the expense of the majority (80%) of the indigenous population. The country also had, and still has, a bimodal economy consisting of a well developed modern economic sector, dominated by the settler group and a large subsistence/communal sector. This is a result of the biased resource allocation policies of the colonial government, which concentrated resources in the 'European' areas at the expense of the 'African Tribal Trust Lands'/communal areas. The major imbalance that greatly influenced the food and agricultural sector was the highly skewed land distribution. Over a third of the land is in the hands of less than 5000 commercial farmers (mostly of settler descent) and over a million African smallholder families had only 40%. The imbalance was exacerbated by the fact that commercial farming is located in agro-ecological regions with higher rainfall and richer soils whilst most of the communal areas have marginal rainfall and low soil fertility.

3.2 ECONOMIC BACKGROUND

The country has a more diversified economy than most countries in the region but the agricultural sector still remains the cornerstone of the economy (World Bank, 1994). Over 70% of the population resides in rural areas and depends on agricultural production for their livelihood. Even though the agricultural sector contributes on average only 14% of the GDP, the manufacturing and industry sectors are highly dependent on the food and agricultural sector, both as a market for their products and as a source of most of the raw materials.

In 1993, 25% of the country's GDP totaling $4946 million was from the agricultural sector (See Figure 5.1). The value addition from agriculture was $757 million and 34% out of the $1377 million value addition from the manufacturing sector was from food, beverages and tobacco and a further 14% was from textiles and clothing activities (World Bank 1995). Over 60% of the industries in the country are agribusinesses involved in the provision of inputs

Fig. 5.1: Share of the GDP (at factor costs)



to, and processing food and fibre products from the agricultural sector (CSO, 1994).

Despite its lower contribution to the GDP, the agricultural sector is a major employer, providing jobs to over 25% of the labour force. For example, in 1993, the employment generation capacity of the agricultural sector was significantly higher than that of the manufacturing sector (see Table 5.1).

Table 5.1: Number of People Employed in the Agricultural and Manufacturing Sectors

	1984	1990
Agriculture	262 000	292 000
Manufacturing	167 000	190 000

The food and agricultural sector provides more than 90% of the country's food requirements and accounts for more than 48% of the foreign exchange earnings. The crucial role of the agricultural sector was evident when the 1992 drought crippled this sector. The ripple effects of the drought on the other sectors of the economy were devastating, resulting in the GDP growth rate falling from 5.8% to 3.2% in 1991 and 1992, respectively.

3.3 BASIC FEATURES OF THE AGRICULTURAL MARKETING CHANNELS BEFORE ESAP

3.3.1 Grain and Oilseeds Sub-Sectors

In order to meet some of the objectives out lined above the government mandated a variety of commodity marketing boards, through the Agricultural Marketing Authority, to purchase most agricultural produce and also regulated the

transportation and distribution of agricultural inputs. The marketing boards included the Grain Marketing Board, Cotton Marketing Board, Dairy Marketing Board and the Cold Storage Commission. These boards operated as monopolies within the various sub-sectors of the food and fibre sectors responsible for purchasing and selling specific agricultural produce. The Grain Marketing Board (GMB), with a highly centralised system, had the mandate to purchase grain (wheat, maize, sorghum and millet) as well as oilseeds (sunflower and soyabeans). Three channels of distribution linked the producers to the GMB. Producers could sell grain through GMB depots, located in urban areas and growth points, to GMB collection depots or to specific GMB approved grain buyers. Grain buyers were rural traders who had been granted permission to buy grain on behalf of the GMB. Both collection points and approved buyers were prohibited from selling grain to individuals, and had to forward the grain to the GMB depots. This resulted in backtracking of grain in times of food shortages, as the GMB had to transport grain back to the rural areas.

The movement of grain across the boundaries of urban and commercial farming areas was prohibited. Grain could not be moved privately from commercial farming to smallholder areas. Theoretically, individuals could purchase grain from the GMB depots. This however, was not the case as GMB depot managers at times refused to sell grain to individuals suspected of being illegal grain traders. This situation, therefore, restricted access to grain especially to the poor who could not organise their own transport to get grain from the depots and thwarted any entrepreneurial spirit of anyone who wanted to distribute grain. The backtracking of grain also occurred when grain which was processed in urban areas at times was transported back to rural areas for sale to grain deficit households.

In 1980, only two percent of the GMB sales were to individual traders and consumers. Urban millers, breweries and stockfeed manufacturers were the Board's major customers purchasing 85% of the stock and the remainder of the stock was bought by individuals, except for 7% used for drought relief purposes (Jayne *et al.*,1991). Grain was purchased at a recommended price, set as a result of negotiations between the Ministry of Agriculture and farmers lobbying groups ie. the National Farmers Union and the Commercial Farmers Union, and approved by cabinet.

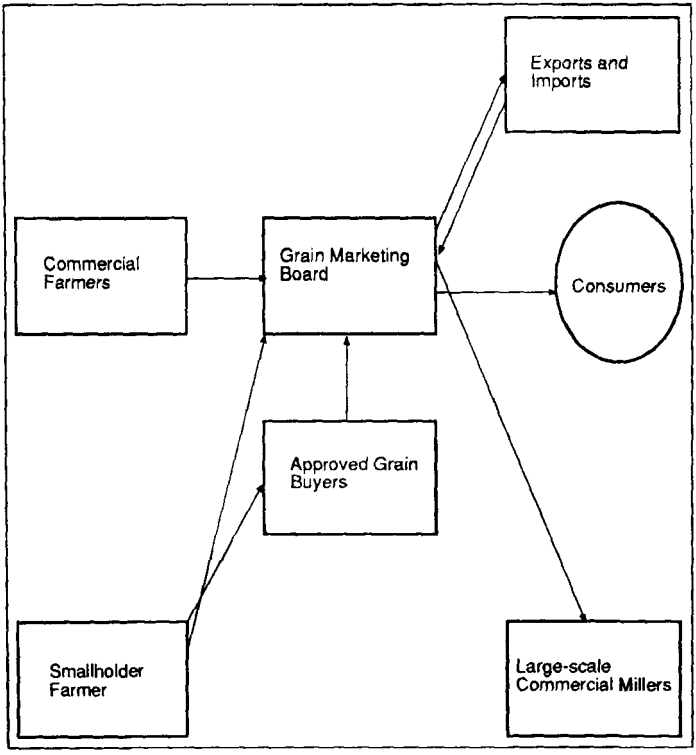
The companies involved in upstream activities, unless they obtained special clearance from the Ministry of Agriculture and at times from the Ministry of Trade and Commerce, could only buy grain from the Grain Marketing Board. As a result the grain processing industry became highly concentrated, and only four companies (Midlands Milling Company, National Foods, Premier Milling and Blue Ribbon Foods) were involved in commercial grain milling. Municipal regulations in various urban areas also prohibited hammer milling operations, thereby consolidating the oligopolistic structure outlined above.

The major players in the brewery industry were National Breweries and Chibuku Breweries. The other industries that utilise grain were the stockfeed and the cereal manufacturers and these industries were just as highly concentrated as the grain milling sub-sector.

The stockfeed sector was dominated by Agrifoods, National Foods and Blue Ribbon Foods. The breakfast cereal industry had a monopolistic structure, with Willards Foods (a subsidiary of a local conglomerate Cairns Holdings) and Nestle Zimbabwe Limited (a subsidiary of the multinational Nestle) being the major players. The market was, however, well defined, the latter concentrating on breakfast cereal whist the former focused on infant cereal, thereby leaving Willards Foods as the solo supplier.

The trend outlined above was repeated in the edible oils industry where two of the abovementioned millers and stockfeed manufacturers (National Foods and Blue Ribbon Foods), United Refineries (another local conglomerate) and a subsidiary of the multinational corporation Uni-lever, Lever Brothers Zimbabwe Limited, controlled the industry (See Figure 5.2).

Fig. 5.2: Structure of the Grain and oilseed Marketing



3.3.2 Livestock and Meat Sub-sector

The meat and livestock sub-sector had varied interaction with the government. The marketing, slaughtering, and processing of livestock for beef was regulated, with the first two functions being the responsibility of the Cold Storage Commission, and the latter involving the CSC and a few meat processing companies like Cairns Foods and Colcom. The marketing of livestock was regulated by a system of livestock ownership registration cards and any sales and movement of livestock had to be authorised by the district offices. All the meat sold in urban areas moved from the CSC abattoirs to either butcheries or meat retailers ie supermarket chains. The CSC inspected, graded and certified all beef and goat meat and had the mandate to export and oversee the importation of meat products. The private companies involved in meat processing had to use the CSC abattoirs for exports.

The poultry and pig industry on the other hand, operated without government regulatory controls. This, however, did not result in an industry structure very different from that of the beef industry. The pig industry emerged with one major meat processor and manufacturer, Colcom. The poultry industry had less concentration and had about four major players.

3.4 STATE EXTENSION SUPPORT INSTITUTIONS

The capacity of state support institutions to assist farmers has a great impact on their ability to adjust to structural adjustment within the wider economy. The Department of Research and Specialist Services (DRSS) in the Ministry of Agriculture responded to government's expectations in 1980 by introducing on-farm research programmes such as agro-forestry and research on small livestock. The greatest achievement of these new efforts is a better relationship between smallholder farmers and researchers.

Research has had a large impact on agricultural development in Zimbabwe. To achieve government's targets in agricultural and rural development in the 1990s, sustained government commitment to support agricultural research is crucial. There has been a decline of government support to public sector research which has rendered DRSS and the Department of Agricultural Technical and Extension Services (Agritex) almost unable to assist smallholder farmers.

Agritex was established in 1981. The purpose of its establishment was to provide the country's diversified agricultural sector with services to stimulate the adoption of proven agricultural practices, leading to increased sustained and profitable production. Funding for this department is wholly derived from government. The declining real operational budget is a major policy issue facing extension services. Extension officials become office bound most of the year because they will have exhausted their travel budgets.

3.5 REASONS FOR THE CHANGES IN THE MARKETING POLICIES

The oligopolistic and monopolistic industry structures resulted in a seller's market and the country was also faced with sluggish economic growth and rising unemployment rate. In addition, the structures described above were a burden on the fiscus as the parastatals could not finance their operations. For example in 1983, 20% of the budget went to finance the parastatals and subsidies to commercial farmers. To reduce economic decline, Zimbabwe, like most of the sub-Sahara Africa countries, initiated an economic structural adjustment programme (ESAP), supported by international funding agencies (International Monetary Fund and the World Bank). The ESAP policies included trade polices, monetary and fiscal policies and also addressed specific issues like the promotion of tradeables against non-tradeables, liberalisation of internal and external trade by eliminating price controls and state intervention in marketing, restructuring the banking and financial sector and promoting commercial banking.

The policy measures targeted at liberalisation of input supply and distribution, removal of subsidies on agricultural inputs and products, and of adopting a commercial orientation in the running of parastatals have major repercussions on the food and agricultural sector of the country.

3.6 CONCLUSION

The issue of the negative impact of structural adjustment programmes on poorer sections of the economy have received much political attention (Cornia, *et al.* 1987). However, few empirical studies have been carried out to investigate the impact of ESAP at the micro level. There are varied opinions on the impact of structural adjustment polices at micro level in Africa (Sahn, 1995). A study by Sahn and Sarris (1991) indicated that there was a negative impact on smallholder producers, whereas Collier and Gunning (1987) reported a positive impact on smallholder producers. Lele and Meyers (1989) have criticised the concentration of adjustment policies on monetary instruments and indicators, whilst neglecting household level performance. Greene (1989) also pointed out that macro level policies targeted short term gains at the expense of micro-level, and long-run goals. There is therefore need to monitor the performance of individual households' ability to acquire inputs and gain market access.

Section IV

RESEARCH METHODOLOGY

4.1 THE STUDY AREA

This survey was undertaken in Shamva district, in Zimbabwe, to assess how the agricultural producers were adjusting to the changes in the macroeconomic environment. Shamva district is in the north-eastern part of Zimbabwe and is located in agro-ecological region II, III and IV. The total population is 93938 and there are 11603 households in the smallholder farming sector (CSO,1992). The population density is 76 and 19 per kilometre in the smallholder and the commercial farming areas respectively. Shamva district provides a classical example of the farming systems existing in Zimbabwe, as there is a communal farming sector, a resettlement sector with the various resettlement systems which were introduced after independence, a large scale commercial sector and a safari area (see Appendix I).

4.2 RESEARCH PROCEDURE

4.2.1 Data Collection

(a) Rapid Rural Appraisal

A rapid rural appraisal was undertaken at the beginning of the study. This appraisal helped the research team in deciding on sampling techniques to use during the survey. The rapid rural appraisal was also used as a means of informing the participants of the broad aims of the study and to mobilise support for the survey.

(b) Key Informant Interviews

Key informant interviews were undertaken with various government, non-governmental organisations, representatives of farmer groups, rural district councillors, rural district council officials, village councillors, shop owners and school headmasters and extension workers. Discussions were also held with representatives of commodity brokers and milling companies and seed houses who were operating in the area. The researchers also attended meetings of the District Development Committee as part of the key informant survey technique and this highlighted some of the problems that were faced in marketing agricultural produce. These key informant interviews provided additional information used in writing this report.

(c) Secondary Data Sources

The Government of Zimbabwe's Central Statistical Office, the Ministry of Lands, Agriculture and Water Development, and the Ministry of Local Government were used as sources for secondary data used in the survey and in writing this report.

(d) Interviews in the Smallholder Sector

The data for this survey was collected between January and April (1996), after a reconnaissance survey of the area. A multistage sampling technique was used. The district has different farming systems, namely communal farmers, resettlement farmers with individual land holdings and lastly resettlement farmers on agricultural cooperatives. Firstly, the area was stratified into different farming systems, namely communal farming, resettlement farms based on individual land holding system and resettlement under co-operative type of production. The random sampling technique was used to select villages within which the survey was carried out. A total of 68 villages are within the smallholder sector in the district, based on population statistics (CSO, 1994). Ten percent of the households were randomly sampled from household lists. Household lists were made by the researchers with the assistance of the ward councillors and kraalheads. The household lists drawn were cross-checked with those used by the Ministry of Agriculture's rural extension officers based in the area and the Ministry of Local Government's district administrators for drought relief food distribution purposes. Researchers and a team of enumerators visited three or four villages a day and moved from one village to the next.

Interview Schedule

An interview schedule was developed and pre-tested in a pilot survey in the district in the villages which were out of the sampling frame. Included in this interview schedule were questions on demographic and socio-economic characteristics, agricultural production, input use and supply, agricultural marketing channels used, quantity of marketed output, and problems encountered in sourcing for inputs and marketing agricultural products. Also covered in the interviews were questions on type of financing available and used in financing different household and farming activities. In addition, the respondents were asked to comment on their own perception of the economic structural adjustment programmes.

Respondents were interviewed wherever they preferred, and interviews were therefore held at homesteads, in the fields, in cattle grazing areas etc. A total of 468 rural household heads or their spouses were interviewed. In cases where both lived away from the households an adult child or relative in charge of the household was interviewed.

(e) Research Procedure in Commercial Farming Area

Researchers and research assistants attended a meeting of the Commercial Farmers Association and informed the farmers of the objectives of the study. Several discussions were held with individual commercial farmers after this initial meeting. The aim of the discussions was to establish rapport between the farmers and the research team as well as to get background information to be used in drafting the interview schedules.

After some consultation with the district administrator's office and the Commercial Farmers Union (CFU) a total of 53 commercial farms and 42 farmers were however identified. The discrepancy in the number of farms and farmers is due to two factors. Some of the farmers owned more than one farm and also some farms were under dual tenancy. This was the case on farms that were on lease from the Ministry of Lands. Though the initial aim was to interview all the commercial farmers, the researchers only managed to identify 34 farmers and 19 completed questionnaires were collected. The identified farmers constitute 81% of the actual number of farmers in the district and the response rate of the sample is over 55.8% of the identified farmers. Some farmers refused to respond and others indicated that they were too busy to respond to questionnaires or returned the questionnaires uncompleted. Major problems were encountered on farms with absentee owners as the farm managers were wary to complete the questionnaires without authorisation from the farm owner.

4.3 LIMITATIONS OF THE STUDY

This section does not seek to make a comparison of smallholder and commercial farmers. It describes the scenario in each of the farming sectors and seeks to answer the research questions from data collected in each farming sector without comparing responses from these sectors. The reason this section does not make comparisons is because there is no basis for comparing the smallholder and the commercial farmers' responses to ESAP as the resources they had at hand were different and the survey methods used in the two farming sectors are also different. Due to the difficulty in acquiring data on actual quantities of crops marketed and their prices, there is no marginal analysis of the various crops marketed that is carried out in this chapter.

Section V

RESEARCH FINDINGS

5.1 SOCIO-ECONOMIC AND DEMOGRAPHIC CHARACTERISTICS

5.1.1 Characteristics of Households in the Smallholder Sector

Most of the respondents in the sample (81%) were household heads, a further (9%) were *de facto* household heads and (6%) were spouses of the household heads, only 2% were children or grand children of the household head. A large proportion of the household heads were male. The average age of the household heads was 49 years. Over 60% of the household heads had been born in the district.

Eighty two percent of the households were in the communal area, and the remainder were in resettlement areas. Most (97.6%) of the household heads were married, 11.5% were widowed, and the remaining 3.9% had never married or were divorced. Most of the respondents (85%) were primarily farmers and the remainder were employed elsewhere as miners, civil servants, domestic workers, teachers and shopkeepers (see Table 5.2).

Over forty six percent (46.4%) of the household heads in the smallholder sector had never been to school, 56.1% had primary level education (up to grade 7) and 26.4% had secondary school education. On average female household heads had lower educational levels than male ones. For example, 36% of the female household heads had never been to school, whereas the proportion was 18% for the male household heads. A paper written by Wekwete (this volume) gives a breakdown of the socio-economic and demographic characteristics of the resettlement and communal populations separately and in more detail.

Table 5.2 Occupation of Household Heads in the Smallholder Sector (n = 468)

Occupation of household head	%
Farmer	85.5
Civil servant	3.8
Shopkeeper	4.3
Teacher	2.4
Miner	0.6
Domestic servant	0.4
Other	3.0

Source: IDS and Ford Foundation Survey, 1996.

5.1.2 Socio-economic Characteristics of Commercial Farmers

All respondents except 10.5% were male. All respondents except in 10% of the cases were the farm owners. Sixty percent (60%) of the farm owners were over forty years of age, 5.3% were under 25, and 26% were over sixty.

About 42% of the farmers had acquired their farms before independence, an additional 42% acquired farms between 1980 and 1990. Only 16% had acquired farms after 1991. The majority of the commercial farmers (over 80%) indicated that they had bought land from individuals, only 10.5% had inherited land and 15.3% were leasing land from government as well as from individuals.

5.2 CHARACTERISTICS OF AGRICULTURAL PRODUCTION

5.2.1 Agricultural Production in the Smallholder Sector

A wide range of crops were produced in the district. The most planted crops were maize, cotton, tobacco, green vegetables, tomatoes, sunflower, millet, and red sorghum. Maize was the most produced agricultural crop, with 96.2% of the households in the resettlement areas and 98.7% of communal households having planted maize in the 1994/95 season. Cotton was the second most popular crop and was produced by 56% of the households. There was a marked difference in the production of cotton in resettlement areas as compared to communal areas. About 70.9% of resettlement farmers planted cotton whereas only 53.5% of communal farmers said they had planted cotton in the 1994/95 season. The situation was similar with tobacco where 12.7% of resettlement farmers planted tobacco as compared to only 3.0% in the communal areas. The details of the other crops are shown in Figure 5.3 and in Appendix II. In general resettlement farmers grew a wider variety of crops than communal farmers.

On average smallholder households planted three hectares of maize, two hectares of cotton whilst tobacco, white sorghum, sunflower and red sorghum hectarages were limited to one for each crop. The rest of the crops were produced on less than one hectare of land.

5.2.2 Agricultural Production in the Commercial Farming Sector

Commercial farmers had grown a wider range of agricultural products than smallholder farmers. Figure 5.3 and Appendix II show the details of agricultural crops produced by commercial farmers in Shamva district.

There was a marked difference in the type of crops produced in the smallholder and the commercial farming sectors and between the resettlement and communal farmers. Whilst smallholder farmers concentrated on food crops like maize, commercial farmers were involved in the production of tradeable agricultural products like soyabeans, cotton and export horticultural crops which are sold on the world markets. Although over 89% of the commercial farmers produced maize, 60% retained the maize grain as livestock feed and as food for the farm workers. Resettlement farmers however seemed to be involved in more cash

cropping than communal farmers. Over a third of the commercial farmers produced seed maize on contract for seed companies like Cargill, Pioneer Hybrid and Seed Co. The area planted under maize ranged from 20 to 100 hectares. The total maize output ranged from 55 to 500 tonnes. Maize production was mostly under non irrigation conditions, whereas all seed maize producers irrigated their crop. It is important however to note that in the season of 1994/95 for which crop production data is used in this survey, the country received below normal rainfall and this contributed to poor yields.

Over 58% of the commercial farmers interviewed produced wheat and wheat seed for the seed companies. Wheat production was all as a winter crop under irrigation. The area cropped with wheat ranged from 30 to 110 hectares, with total yields ranging from 150 to 500 tonnes per farmer. Only 5% of the farmers in the sample produced tobacco; this could be due to the fact that Shamva area is not traditionally regarded as a tobacco growing area. The other crops grown to a limited extent were sorghum, groundnuts, barley and soyabeans. The barley and sorghum (as well as the seeds) were each grown by 21% of the commercial farmers and all the production was on contract for the seed companies and breweries. Soyabeans was produced by 21% of the farmers on contract with food and animal feed processors and only 5.3% of the producers marketed the soyabeans through a commodity broker.

Cotton and cotton seed were produced by 94.7% of the commercial farmers. The hectarage of cotton ranged from 20 to 380 and the total harvest ranged from 16 to 750 tons with an average of 200 tons per farm. Over fifty percent (52.6%) of the farmers irrigated the cotton crop. The yield of the crops varied from farm to farm as well as type of crop and details on yields are given in Appendix III.

5.2.3 Horticultural Production Characteristics

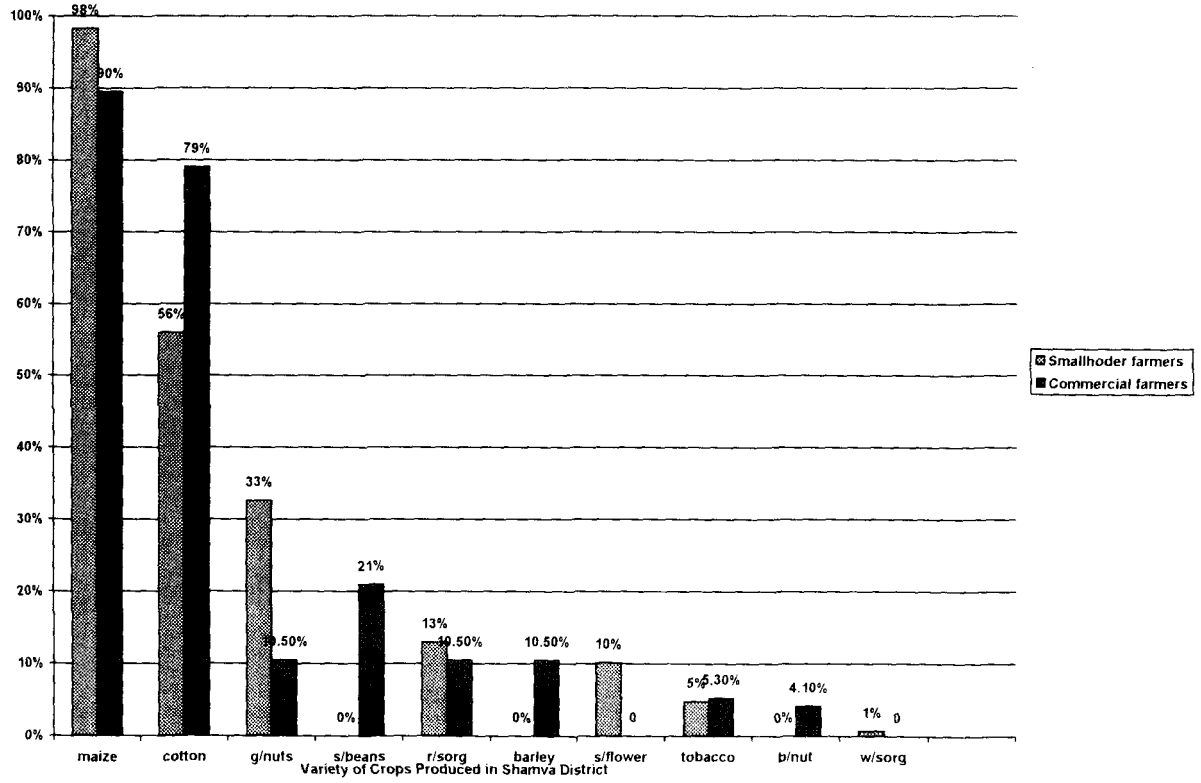
(a) Production in the Commercial Farming Sector

The introduction of ESAP is expected to promote the production of tradeables. The changes in horticultural cropping patterns were therefore important in indicating the trends in the production of tradeables. A wide range of horticultural crops were produced by the commercial farming sector in Shamva district.

Over 74% of the farmers were involved in horticultural crop production and 80% of them indicated that they had only started horticultural crop production after 1990. Traditional horticultural products like tomatoes, cabbages, rape, and bananas as well as exotics like mange tout, baby corn, sugar cane, snap peas, and baby carrots were produced. Twenty six percent (26%) of the farmers produced citrus fruit, whilst 26% of the farmers produced tomatoes. The proportion of farmers producing sugar cane and cabbages was 10.5% for both crops and over 15% produced baby corn. The area under baby corn ranged from one to 100 hectares. Mange tout and fine beans were produced by 21% of the

Fig. 5.3: Proportion of Commercial and Smallholder Farmers Growing Various Agricultural Crops in the 1995/96 Season

Figure 5. 1 Proportion of Commercial and Smallholder Farmers Growing Various Agricultural Crops in the 1995/96 Season



farmers. All the farmers producing mange tout and fine beans indicated that these were new crops which they had only started producing in 1994.

(b) Smallholder Horticultural Production

The range of horticultural crops grown by the smallholder farmers was smaller than that of commercial farmers. Less than ten horticultural crops were produced by smallholder farmers. The most grown horticultural crop was green vegetables which was produced by over 17.8% of the communal farmers and 22.8% of the resettlement farmers. Over 75% of farmers produced the green vegetables in individual gardens, 13% in fields and only 7% planted the crop in communal gardens. Tomatoes were the second most popular crop which was grown by 11% of the 20.3% of the resettlement farmers and 9.3% of the communal farmers, whilst 20.3 % resettlement farmers and 2.7% communal farmers produced green beans.

The main reason why there are more resettlement farmers than communal farmers producing horticultural crops in resettlement farms is because there are some farmers who were resettled on irrigation schemes, who grow mostly horticultural crops with no dryland cropping. The resettlement farmers on dryland plots do horticultural farming on a subsistence level just like communal farmers. Most of these horticultural crops were cultivated in individual gardens. A paper in the same research project written by Moyo, Matondi and Marongwe (this volume) deals with this shift to horticultural farming in greater detail.

5.3 ACCESS TO FACTORS OF PRODUCTION

The various literature on the impact of economic structural adjustment programmes in developing countries point to the need to have equitable distribution of factors of production so as to have positive effects on most of the population. The survey therefore focused on access to factors of production by various producers interviewed in the survey. Availability of land, agricultural machinery and implements, commercial vehicles as well as radios, telephones, and televisions were all regarded as important factors in boosting agricultural production. The availability of information is taken to be a crucial factor in price stabilisation as well as in providing information on markets and agricultural inputs to producers that can influence agricultural marketing and production activities.

5.3.1 Land

The farm sizes within the commercial farming sector varied from 600 to 4000 hectares (see Table 5.3). The land used for agricultural production ranged from nine to 2000 hectares (see Appendix IV). In the smallholder sector, 6.3 acres, i.e about 2.5 hectares of arable land, were available to smallholder farmers.

The average was lower in the communal areas at 5.6 acres, whilst resettlement farmers on average had access to 9.8 hectares of arable land (see Table 5.4)

Table 5.3: Farm Sizes in the Commercial Farming Sector (n = 19)

Size of Farm in hectares	% of Respondents
< 100	5.3
101–500	—
501–1 000	42.0
1001–1 500	21.0
1501–2 000	5.3
2001–2500	5.3
2501–3000	5.3
>3000	5.3
Don't know	10.5

Source: IDS and Ford Foundation Survey, 1996.

Table 5.4: Size of Arable Land in the Smallholder Sector

Size of Arable Land in acres	% of Respondents	
	Resettlement	Communal
<3	13.2	30.4
3.1–6	11.8	20.6
6.1–9	—	24.0
9.1–12	67.1	10.0
>12.1	7.7	2.5

Source: IDS and Ford Foundation Survey, 1996.

In respect to grazing, over 73% of the respondents in the communal sector indicated that they had problems with grazing land for livestock. The problem, though, was less pronounced in resettlement areas, where only 32.9% perceived shortage of grazing land as a problem. Further, disparities in asset distribution were also based on gender. For example, female-headed households in the smallholder sector on average had smaller arable land than male-headed ones (see Table 5.5).

Table 5.5: Differences in Size of Arable Land Between Male and Female-headed Households in the Smallholder Sector

Land size (in acres)	% Response male-headed hh	% Response female-headed hh
<2.1	10.2	24.7
2.1-5	35.7	37.1
5.1-9	26.1	19.1
>9.1	21.7	19.1

Source: IDS and Ford Foundation Survey, 1996.

5.3.2 Agricultural Machinery, Equipment and Commercial Vehicles

All commercial farmers except 5.3% had tractors and tractor drawn equipment like harrows, planters and ridgers. On average, farmers had four tractors per farm and some had as many as seven tractors. All commercial farmers interviewed had a truck or a lorry, and on average farmers had four commercial vehicles. The commercial farmers also had an average of four irrigation units per farm. Several farmers had maize grinding units used to grind stock feed and maize meal for sale to the farm workers. Other machinery owned by the commercial farmers included a combine harvester, a caterpillar and a borehole drilling rig. The farmers who owned the last three types of machinery hired out the machinery to other commercial farmers in and out of the district.

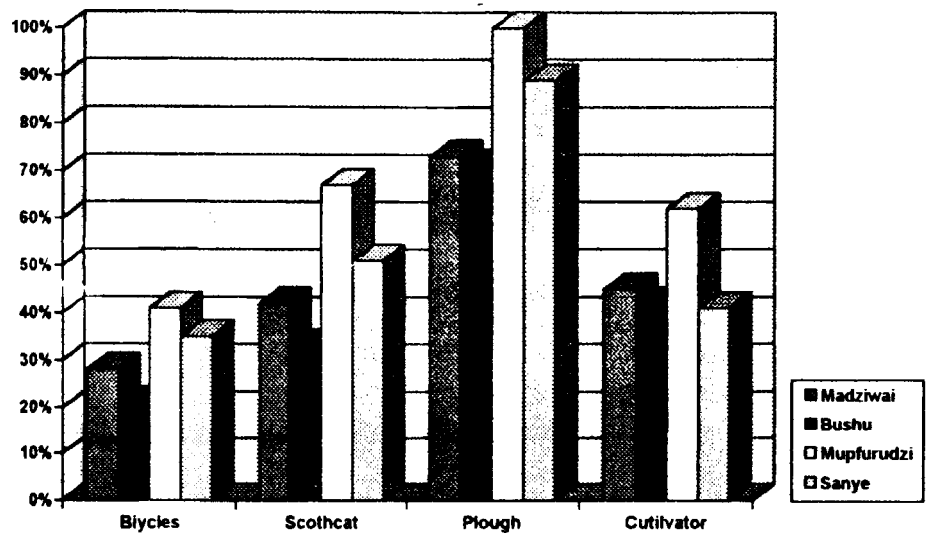
In the smallholder sector, 0.6% of the surveyed households owned a vehicle. In general the range of agricultural machinery and equipment within the smallholder sector was narrow and of poorer quality than that in the commercial farming areas. Only 3.2% had used a tractor for ploughing in the 1995/96 season. The equipment most smallholder households owned were small agricultural equipment like hoes, axes, ploughs, cultivators and scotchcarts. Even this level of equipment was only available to a limited proportion of the smallholder households. For example, 26.3% of the households did not own a plough, 97% did not have a planter and more than half (58.1%) did not have scotchcarts and only one percent owned a tractor.

Figure 5.4 shows the distribution of agricultural equipment and implements within the smallholder sector. In some areas more than half of the farmers did not have the basic agricultural equipment used by smallholder farmers, the plough. The farmers in the resettlement area (Mupfurudzi) on average had more agricultural equipment than those in the communal areas. Nearly half (42.7%) of the respondents in the smallholder sector indicated that they had borrowed agricultural implements in the 1995/96 season. The major source of borrowed implements were relatives (58.2%) neighbours (38.7%) and parents (3.1%).

5.3.2 Ownership of Livestock

The ownership of livestock (especially cattle) is a critical issue in agricultural production within the smallholder sector in Zimbabwe. Cattle are used as the major source of draught power in smallholder agricultural production. The ownership of livestock also increases smallholder producers' access to disposable income as some of the livestock can be sold and the money can be used to hire tractors and purchase agricultural inputs. Over sixty percent (68.6%) of the households in the smallholder sector did not own cattle (see Table 5.6) The income from livestock sales ranged from Z$50 to Z$4200. In 1995, cattle sales ranged form Z$600 to Z$8200, whereas those from goats and sheep ranged from Z$50 to Z$3325. Livestock also provide manure which is utilised by smallholder households in agricultural production.

Fig. 5.4.: Availability of Agricultural Equipment and Implements in the Smallholder Farming Sector in Shamva (n = 468)



The above factors indicate that (68.6%) of the households that did not own cattle had limited access to one of the most crucial agricultural inputs.

Table 5.6: Livestock (Cattle) Ownership by Households in the Smallholder Sector

No. of Cattle	% of Responses Resettlement	Communal
0	55.6	71.1
1-5	10.2	7.8
6-10	15.2	11.8
11-15	8.9	5.1
16-20	5.1	1.4
21-25	1.3	1.1
>25	3.8	1.7

Source: IDS and Ford Foundation Survey, 1996.

5.3.3 Access to Credit Facilities

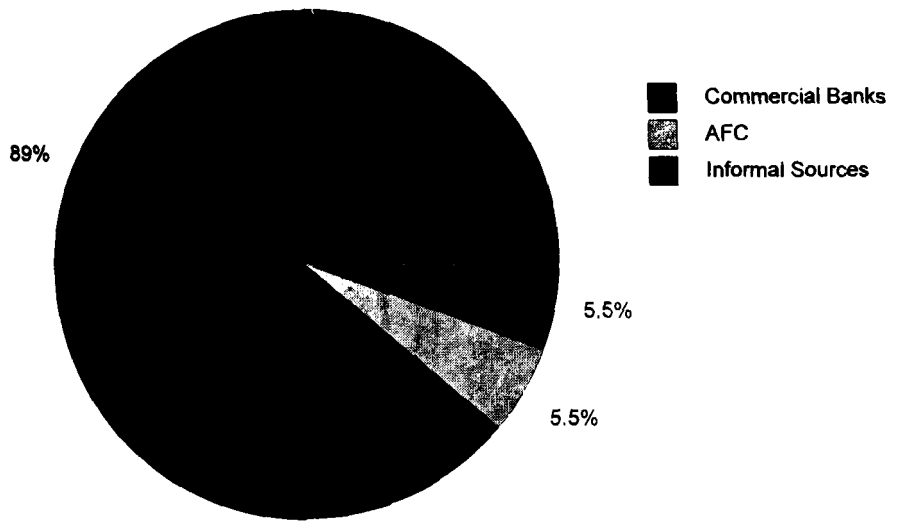
There was a marked difference in access to formal credit facilities between smallholder and commercial farmers. Most commercial farmers (89%) had used

formal credit facilities in the 1995/96 season. The major source for formal credit were commercial banks which provided credit to 89% of the farmers (see Figure 5.5).

In addition to the formal credit some farmers indicated that they had access to input from the various contractual agreements they had with horticultural exporting agents and processors. Other farmers indicated that they had used various lines of credit to purchase fertilizers and other agricultural inputs. On the other hand, the situation in the smallholder sector was significantly different as only 31% had used credit financing in the 1995/96 season. Also only 35% had access to remittances from employed members of the family.

The smallholder farmers indicated that they did want credit from the AFC, but it was not available to them as most of them had previously defaulted in repaying their loans to the AFC. The chapters by A. Sibanda and by E. Arnaiz (this volume) have more detail on this.

Fig. 5.5: Source of Credit Financing Used by Commercial Farmers in the 1995/96 Season (n = 19)



5.3.4 Extension Support Institutions

There are some Agritex staff in the district. In both the communal and resettlement areas, there is one Agritex officer per ward. On the irrigation schemes there is a resident Agritex officer covering only the irrigation scheme. The farmers said they received some assistance from Agritex staff, although there has been a significant decrease in the amount of visits Agritex staff make to their plots since 1990. This is mainly because, since 1990 the budget allocation to this Government/department, like most other such departments, has been reduced and the Agritex staff has not been able to conduct extensive assistance programmes and organise field days which were an incentive for farmers to work hard. Sibanda and Arnaiz (this volume) cover in more detail the assistance given to farmers by support institutions in the district.

5.3.5 Access of Smallholder Producers to Fertilizers, Agrochemicals and Seeds

The survey also investigated the availability of agricultural inputs like seed, fertilisers and agrochemicals to the farmers in the district. The availability of ammonium nitrate and compound D was used to assess access to fertilisers because these are the most used fertilizers by smallholder producers. Less than half (47.6%) for ammonium nitrate and 41.9% (compound D) of the interviewed farming households had used fertilisers in the 1995/96 planting season. This figure included farmers who had received fertiliser as aid from government and non-governmental organisations. Various reasons were mentioned for not utilising fertiliser. The farmers who used fertiliser indicated that the major limitation to accessing fertiliser was the cost and transportation perceived as the second major problem (see Table 5.7) below.

Table 5.7: Factors Limiting Access to Fertilisers as Perceived by Smallholder Farmers (Res. n = 79) Communal n = 372)

	Ammonium Nitrate		Compound D	
	Resettlement	Communal	Resettlement	Communal
None	24.4	25.6	26.2	28.0
Availability of input	7.3	11.3	9.5	13.8
Cost of input	34.1	40.0	35.7	38.2
Transportation	29.3	22.6	21.4	19.6
Both cost and transportation	4.9	0.5	7.1	0.4

Source: IDS and Ford Foundation Survey, 1996.

Farmers were also asked to indicate the source of the fertiliser they had used in 1995/1996. Over 60% of the farmers indicated that they had bought the fertilisers from retail shops, whilst a substantial number (14.4%) had obtained

fertiliser from relatives. Over 70% of the farmers had to pay cash on the spot for the fertiliser and only 18.8% could get fertiliser on credit (see Table 5.8).

Table 5.8: Source of Fertilisers Used by Smallholder Farmers in the 1995/96 Season

	Ammonium Nitrate		Compound D	
	Resettlement	Communal	Resettlement	Communal
Borrowed	0	1.0	0	2.2
Hired	6.3	1.6	2.4	0.9
Retail shop	53.7	65.2	64.3	60.2
Relatives	2.4	0	0	2.2
Bought directly from ZFC/Windmill	14.6	12.1	0	11.9
Commercial farmer	0	0.5	11.9	0.0
Other	4.9	1.5	0	1.3
NGOs	0	2.5	2.4	3.1
Government	12.2	10.3	19.0	18.1

Source: IDS and Ford Foundation Survey,1996.

5.3.6. Access to Markets

The mean distance to market was 34.8 kilometres for maize, 89.8 for tobacco and 34.4 for cotton, 39 for sunflower and 100 to 115 kilometres for onions and tomatoes, respectively. Only 3.6% of the producers used their own vehicles to transport crops to the market. The majority of the farmers hired vehicles to carry produce to the market (Table 5.9).

Table 5.9: Source Vehicles Used by Smallholder Farmers to Transport Agricultural Produce in the 1994/95 Season

Type of Vehicle Used	Cotton	Maize	Tobacco
Used hired vehicle	90.4	93.6	94.4
Scotchcarts	6.0	2.0	5.6
*Own vehicle	2.0	1.6	—
Wheelbarrows	1.2	1.2	—
Other	0.4	0.6	—

Only 0.6% of the farmers owned vehicles. The increase in the percentage here could be due to the fact that cars owned by the farmers' children or relatives can be referred to as 'our car'.

Source: IDS and Ford Foundation Survey, 1996.

5.4 DEVELOPMENTS IN AGRICULTURAL MARKETING CHANNELS

A variety of agricultural products were marketed by both smallholder and commercial farmers. There were, however, differences in marketing channels used. Table 6.0 indicates the crops that were marketed in the 1994/1995 season.

Table 6.0: Crops Marketed by Smallholder Producers in the 1994/95 Season (n= 468)

Crop	% of Respondents
Maize	53.3
Cotton	53.2
Tobacco	4.3
Groundnuts	0.4
Red Sorghum	2.4
Sunflower	3.8

Source: IDS and Ford Foundation Survey, 1996

The various marketing activities and channels used by both commercial and smallholder farmers will be discussed below.

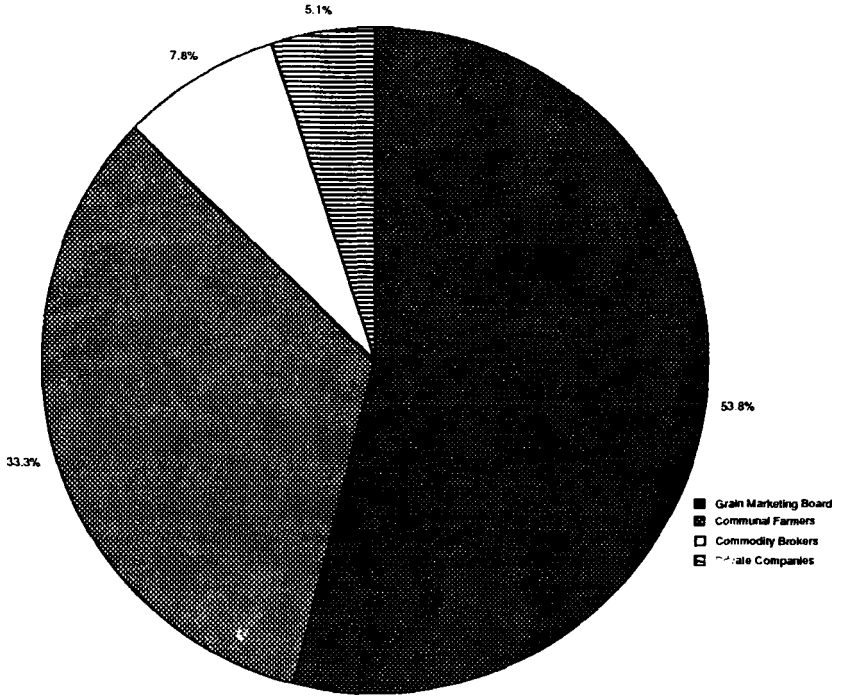
5.4.1 Marketing of Grains

The commercialisation of the GMB opened up the market and a new structure had evolved. Though the government still published a recommended producer price the 1995/96 maize prices were mostly market determined. The recommended price was Z$1400/ton but grain prices ranged from Z$700 to Z$2400 per ton as company buyers, individuals and commercial farmers purchased maize grain from the smallholder farmers. Grain was also sold at the market place in nearby urban areas (Shamva and Bindura). The upstream section of the grain industry also had some upheaval and also influenced the linkages at the household level. The five large scale commercial millers were buying grain directly from the producers and they had been joined by several smallscale commercial millers. Some of the private companies identified as maize grain purchasers were smallscale commercial millers, ie. Bindura Milling Company, Purity Milling Company and Gallathians Milling Company located in the district and nearby towns. These millers provided a more accessible market and reduced transport costs, for the smallholder producers (see Appendix V).

The marketing channels used in marketing grain by the smallholder and commercial farming sectors were very different. Most of the commercial farmers were producing maize seed and this was on contract for the seed houses. Most of the commercial farmers who produced maize grain retained it as stockfeed and possibly for maize meal for the farm workers. Fewer marketing channels were utilised by the commercial farmers. Most commercial farmers sold the maize grain directly to the Grain Marketing Board and to milling companies.

In contrast to the above situation all the sorghum and barley produced in the commercial farming sector was on contract to the breweries and to the seed houses. Fifty percent (50%) of the commercial farmers were involved in wheat production and half of the producers were producing wheat seed for the seed companies. Nearly all the farmers (90%) sold the wheat grain to the Grain

Fig.5.6: Marketing Channels Used by Smallholder Farmers in Grain Marketing



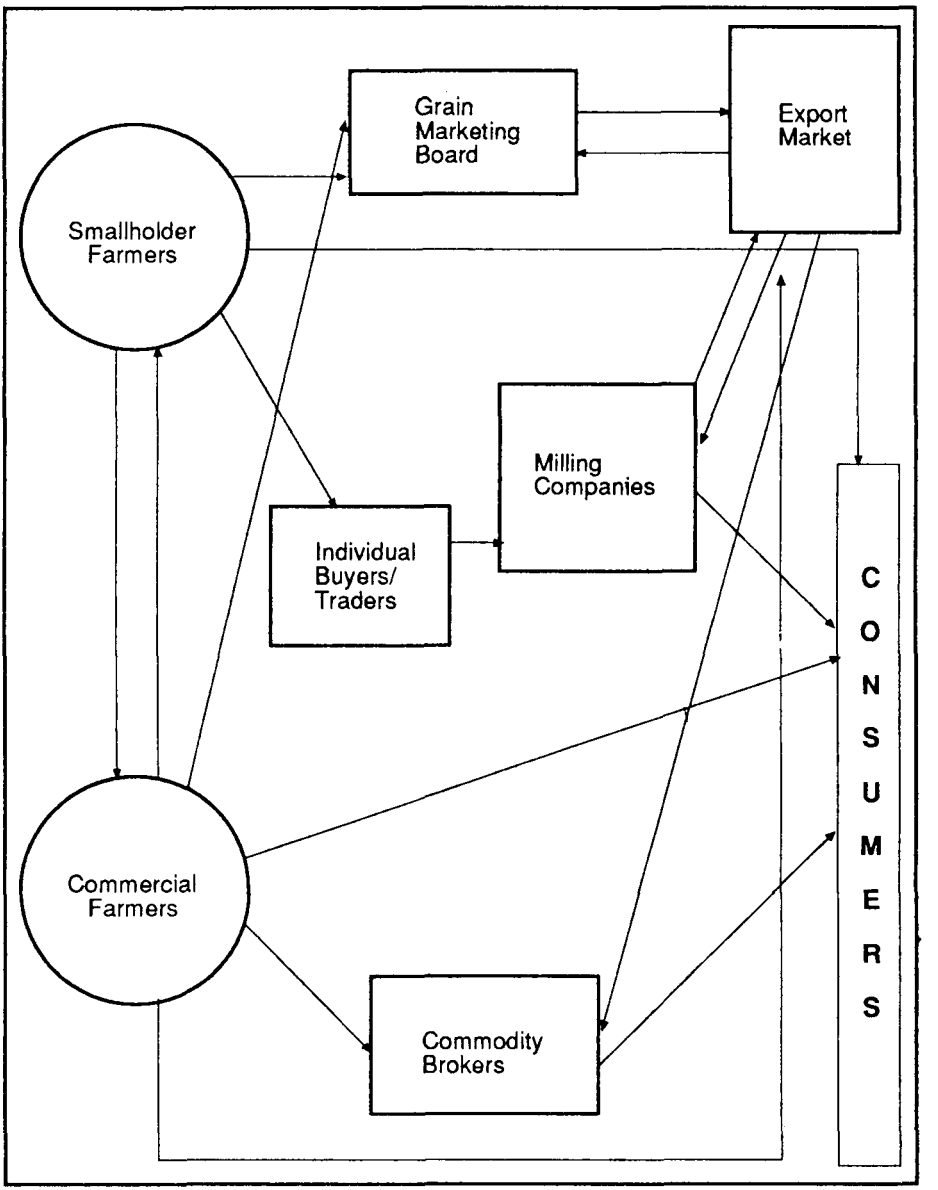
Source: IDS and Ford Foundation Survey, 1996

Marketing Board and the remainder to commodity brokers and grain milling companies. International commodity brokers ie. grain buyers were also part to the marketing outlets used by the commercial farmers.

The model above indicates that a more dynamic grain marketing channel has emerged with the introduction of the economic structural adjustment programme. New linkages have been developed, for example, the link between the smallscale commercial millers and the large scale stockfeed manufacturers. Smallscale millers sell the by-products of their operations ie. maize bran to stockfeed manufacturers, as well as commercial and other samllholder farmers. Some smallholder farmers exchanged their grain for maize meal with the smallscale millers and other traders. Other goods traded for maize were clothing and groceries (sugar, tea leaves, soap, powdered milk) and this exchange was also with vendors from urban areas and commodity brokers.

The proliferation of marketing channels in the smallholder sector was not replicated in the commercial farming sector. Commercial farmers were involved more in direct marketing or contract growing.

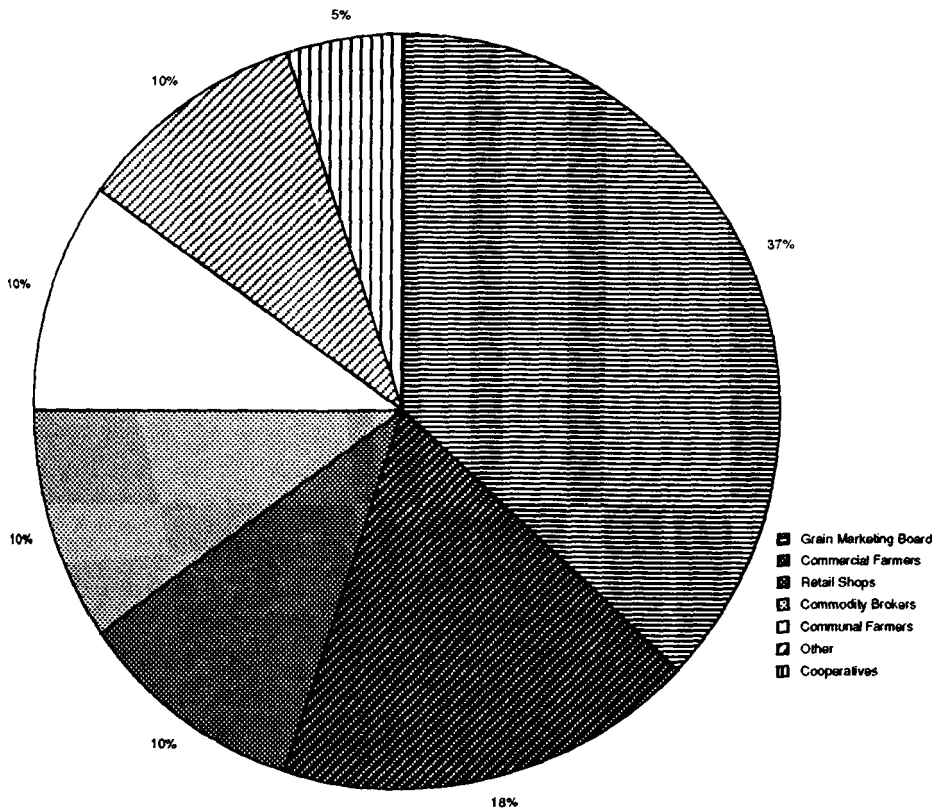
Fig. 5:7: Structure of the Grain Marketing Channel After the Economic Liberalisation Programme



5.4.2 Marketing of Oilseed Sector

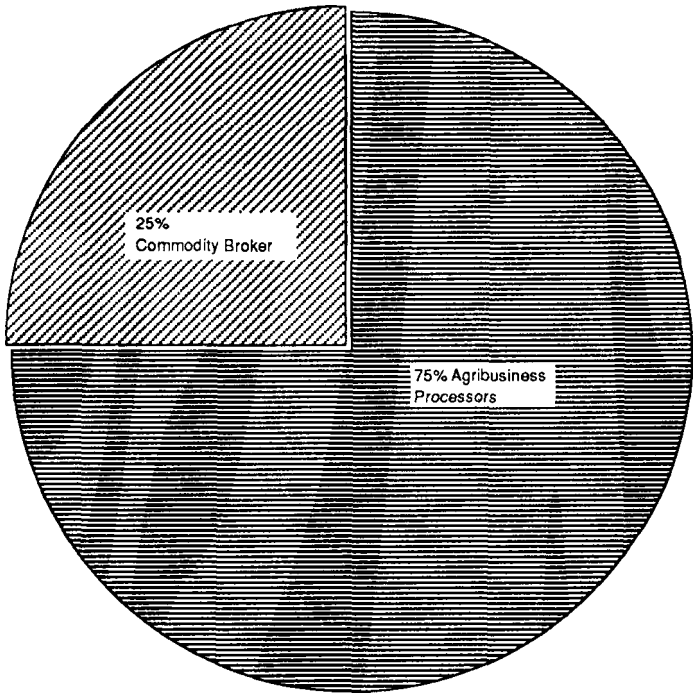
Multi-channels had replaced the monopoly of the GMB in the oilseed channel. Over 21% of the smallholder farmers in the survey produced sunflower seeds, and only 32% still used the traditional channel, the GMB. Twenty four percent marketed the seeds through retail shops, 16% to other communal farmers and the remainder used commodity brokers, farmers' cooperatives, and private companies (see Figure 5.8). None of the commercial farmers interviewed produced sunflower seed. However, 20% of the farmers produced soyabeans on contract for specific agribusiness companies involved in edible oil and animal feed production. Only 5.3% of the producers marketed soyabeans through a commodity broker.

Fig. 5.8: Marketing Channels Used by Smallholder Farmers in Marketing of Oilseeds in 1994/95 Season



Source: IDS and Ford Foundation Survey, 1996

Fig. 5.9: Marketing Channels Used by Commercial Farmers in Marketing Oilseed



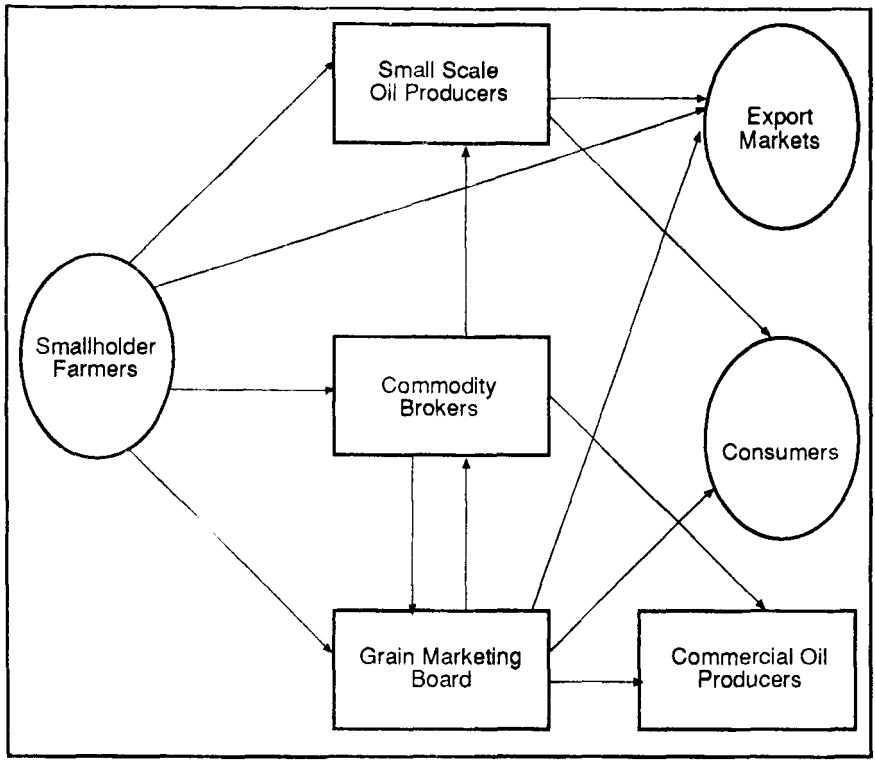
Source: IDS and Ford Foundation Survey, 1996

There are some sub-sectors where the commercial boards are still the major suppliers as well as distributors as was the case with tobacco and cotton. All the commercial farmers except 5.3% produced cotton which was marketed to the Cotton Company of Zimbabwe. Approximately, 50% of the cotton producers produced cotton seed on contract for the seed companies. Appendix VI shows the marketing outlets used for tobacco.

5.4.3 Horticultural Marketing

The export earning potential of the horticultural sector is due to the tradeable commodities as horticultural crops are among the tradeables. The assumption was that the involvement in horticultural crop production would indicate how different farmers were adapting to the structural adjustment policies. Over thirty-five percent (35.8%) of smallholder farmers were involved in the production of vegetables and had indicated they had fruit trees at their homes. The pilot survey found out that there was limited commercial horticultural production in the

Figure 6.0: Smallholder Farmers Oilseed Marketing Channels



Source: IDS and Ford Foundation Survey, 1996

smallholder sector. Only 7.8% of the smallholder farmers indicated they were involved in commercial horticultural crop production. Within the smallholder sector horticultural crop production was mostly on irrigation schemes. There were also linkages in horticultural crop production between commercial producers and smallholder producers. For example, commercial farmers were involved in assisting the smallholder growers in horticultural crop production. Some smallholder producers were also outgrowers of horticultural agents ie. Selby and Hotico and these are the farmers at Principe Irrigation Scheme.

5:4 CONTRACTUAL LINKAGES IN AGRICULTURAL PRODUCTION AND MARKETING

A large proportion of the commercial farmers had long term contracts with the buyers of their products. The details of contractual production and marketing within the commercial farming sector are given in the table below.

Table 6.1: Percentage of Farmers with Contracts for the Various Crops

	Commerical Farmers	Smallholder Farmers	
		Resettlement	Communal
Wheat and Wheat Seed	42	0	0
Maize	21	0	0
Maize Seed	21	0	0
Soyabeans/Soya Seed	21	0	0
Cotton	56.8	5.8	0
Barley/Barley Seed	10.5	0	0
Sorghum/Sorghum Seed	10.5	0	0.8
Groundnuts	nil	0.4	0
Horticultural Products	89.9	2.4	0

Compared to the commercial farmers, only 3.8% of the resettlement farmers and 3.4% of communal farmers interviewed were involved in marketing and input supply contracts. Most of the contracts in the smallholder sector were for the production of cotton and these were with private cotton marketing companies, COTPRO and COTTCO and on irrigation schemes with horticultural companies. Other farmers mentioned contractual agreements with commercial farmers and export agencies.

The payment systems were also varied, with some farmers being paid on delivery and others after delivery. A smaller proportion of the farmers (27.3%) had prices for contract crops before planting was done. Cotton prices were determined for 45% of the contracted households after delivery, 24% had pre-planting price agreements. For 18% of the producers prices were determined on delivery and for 9% after delivery. Payment for all the sorghum contracts was done after delivery.

However, both smallholder and commercial farmers viewed contractual agreement as having the disadvantage of being locked in low price agreements. The lack of flexibility in marketing and getting of other inputs which could be cheaper was also indicated as a disadvantage. Smallholder and commercial farmers involved in contractual production cited different advantages of contracts. Most smallholder farmers indicated that contracts were an advantage because they made some inputs readily available (80%), twenty three percent indicated that contracts assured them of buyers. Commercial farmers viewed the major advantages of contracts to be that they helped them to plan and schedule production.

Linkages with Agribusiness Processors and Distributors

Appendix VII shows the various agribusiness enterprises that had linkages with agricultural producers in Shamva district. These enterprises included fruit processors, grain processors, horticultural exporters, breweries, seed houses and fruit and vegetable retailers, local and international commodity brokers.

5.5 GENERAL COMMENTS

5.5.1 Comments in Changes in Agricultural Production

Farmers were asked to comment on any changes they had made in cropping patterns in the past two or three years as well as to indicate the reasons for these changes.The reasons given for changes between the commercial and smallholder sectors were very different. Most farmers (83.2% smallholder and 84.2% commercial farmers) had changed their cropping patterns. Changes in the cropping pattern of the smallholder sector had been mainly influenced by the drought and the next major reason was the cost of inputs. Farmers were moving away from crops which needed more agrochemicals and fertilisers because they could not afford the inputs. Other farmers had changed cropping patterns to take advantage of favourable prices offered for some crops (see Table 6.2).

Table 6.2: Reasons Given by Smallholder Farmers for Changes in Cropping Patterns (n = 468)

Reason	% of Responses
Drought	31.9
Inputs too expensive	26.5
Take advantage of favourable prices	19.5
To meet home consumption	5.3
No change/ response	16.8

Source: IDS and Ford Foundation Survey, 1996.

Within the commercial farming sector changes in cropping patterns had been mainly promoted by changes in world prices, availability of contract, change to crops with lower managerial and labour input (see Table 6.3).

Table 6.3: Reasons Given for Changes in Cropping Pattern in Commercial Farming Sector (n = 19)

Reason	% of Responses
Changes in world prices	36.8
Changed to crops with contracts	21.1
Changed to crops that require less labour input	21.1
Changed to crops that require less managerial input	10.3
Have new facilities ie dam, coldrooms etc	10.3
Drought	5.3
*Don't know	10.3

This response was mostly in cases where the non-farm owners were respondents.

Source: IDS and Ford Foundation Survey, 1996

5.6 OTHER PROBLEMS

The smallholder farmers were also asked what other farming problems they were facing and they gave a variety of responses. In the resettlement areas 44.3% of the farmers said they were not facing any problems, whilst 32.9% said they were facing problems of shortage and unaffordability of inputs. About 8.9% said they had problems of draught power; 5.1% cited the army worm and land shortage was given as a problem by 3.8%. About 5.8% of the farmers cited other problems.

In the communal areas the greatest problem was the shortage and cost of inputs and this was given by 53% of the farmers. Draught power was a problem to 10.6% of the farmers and the armyworm to 8.7% of the farmers. Land was also cited as a problem by 4.1% of the communal population and 1.6% cited other problems. Only 22% of the communal farmers said they had no other problems related to farming.

The major problem cited by these farmers i.e. shortage and cost of inputs became more pronounced in the post-SAP period when prices started escalating when the AFC which used to give farmers loans to purchase inputs reduced the number of loans they give to farmers.

Section VI

CONCLUSIONS AND RECOMMENDATIONS

6.1 SUMMARY OF FINDINGS

The survey indicated that the economic structural adjustment programme had impacts on agricultural production, marketing activities and agricultural input supplies to the various farmers in Shamva district.

6.1.1 Impact of ESAP on Agricultural Production and Marketing

In general the commercial farming sector appeared to have responded favourably to the changes in the macro-environment. There was a significant shift from non-tradeables to tradeables within the commercial farming sector. This sector was also participating on global commodity and futures markets like the Chicago Commodity Market. Experts hired by the Commercial Farmers Union (CFU) addressed the farmers periodically, on the trends on the commodities markets and on international financing issues. Another indication of the positive response of the commercial farming sector was the shift in agricultural production from traditional products to exotic products which were in demand in European markets.

The smallholder sector showed limited response to changes in the global markets. A few smallholder farmers (7.8%) were involved in commercial horticultural production (mostly on irrigation schemes ie Principe) but only as outgrowers of commercial farmers and of horticultural export agents. Smallholder farmers were still concentrated in the production of the staple food crop, maize. There was no significant difference in the change in agricultural production activities of the dryland resettlement farmers and the communal farmers. The resettlement farmers with irrigation infrastructure at their disposal concentrated mainly on horticultural farming.

6.1.2 Access to Factors of Production

The high involvement of the commercial farming sector in contractual arrangements with food and processors indicated that there was more strategic planning in the commercial sector, resulting in some farmers planting citrus fruit targeted for the European market in four or five years time. The ability to make large capital investments were, however, dependent on the availability of capital. The survey found out that most commercial producers had access to formal financing and were even involved in off-shore borrowing, whereas smallholder producers had limited formal finance. The limited access to factors of production, therefore, resulted in smallholder farmers being unable to benefit from the economic structural adjustment programme. Even though agricultural chemicals and fertilisers were more readily available than before the introduction

of the ESAP, most smallholder producers indicated that agricultural inputs were too expensive for them. This issue was also echoed by some commercial farmers, especially those who did not have credit arrangements with the fertiliser suppliers.

The fertiliser industry was viewed as too sluggish and was failing to respond to the farmers' demand and to changes that had emanated from the economic structural adjustment programme. Some farmers indicated that the fertiliser industry was still a sellers' market.

The involvement of the smallholder sector in the production of tradeables was hindered by the limited access to some factors of production needed to produce tradeables ie. irrigation facilities, agricultural inputs, deficit transportation, access to information, and financing. There was also little assistance received by the smallholder farmers from support institutions such as Agritex, due to lack of finance in these institutions to conduct extension activities.

6.1.3 Impact on Agricultural Marketing Input Supply Systems

Different marketing channels had emerged in both the commercial and the smallholder sectors as a result of market liberalisation. Private market systems had emerged, replacing and supplementing disbanded and commercialised state owned commodity boards. These new systems had both negative and positive impacts on agricultural production and marketing activities. Farmers had access to new markets and more input supply sources than those that were available before the implementation of the economic structural adjustment programme.

The marketing and input supply channels for the smallholder sector had lengthened as middlemen had moved in to market and provide inputs. Smallholder farmers at times appeared to make irrational choices on market outlets. For example, during the 1995/96 season some farmers sold produce to middlemen far below the recommended prices. However, this decision, which looked irrational to researcher and policymakers, was based on some rational decisions. The middlemen normally visit villages buying grain and offering cash on the spot.

Smallholder farmers therefore did not have to transport grain and to wait for the cheque to come back as was the case in the past. Some of the farmers indicated that in the past they were at times cheated by transporters and the experiences of disappearances of cheques from the Grain Marketing Board resulted in some risk averse smallholder producers choosing channels they identified as having minimal risk.

6.2 CONCLUSION

The findings of this study support and refute the hypotheses earlier made in the chapter.

- Liberalization of agricultural market systems did bring about more players on the market for different agricultural commodities as predicted, but this did not necessarily result in higher prices.
- In cases where the farmers were offered high prices, the farmers did not always market to the buyers offering higher prices. There were other factors to be considered such as the method of payment offered by the buyer and whether the buyer was providing transport or not.
- The farmers, mostly smallholder farmers, were unable to take advantage of opportunities created by ESAP, because they had limited access to factors of production which are needed for one to use these opportunities.
- The introduction of ESAP did not improve the lives of rural households as anticipated. Some farmers (those with better access to factors of production) did benefit from ESAP in some ways and were able to improve their lives, whereas others were actually in a worse off position than before the introduction of ESAP. The contributory effect to the seemingly negative impacts of ESAP could also be because the onset of ESAP coincided with a drought in the country.

This study, therefore, confirms the findings of other studies on the impact of the economic structural adjustment programme in developing countries, that resource poor households and producers had limited benefits. The ability to respond to market incentives depends on availability of inputs due to limited access to agricultural inputs and other factors of production.

The production of marketable surplus is an important factor in the agricultural industry and also for the success of the economic structural adjustment programme. Smallholder farmers and resource poor households in Shamva district, therefore, had so far only marginally benefitted from the economic structural adjustment programme policies at macro level. In some cases the impact was negative as household members who were employed in urban and mining towns were laid off as a result of the deregulation of the economy. On the other hand, the commercial farmers who had access to factors of production also experienced negative impacts of ESAP in terms of increased input prices.

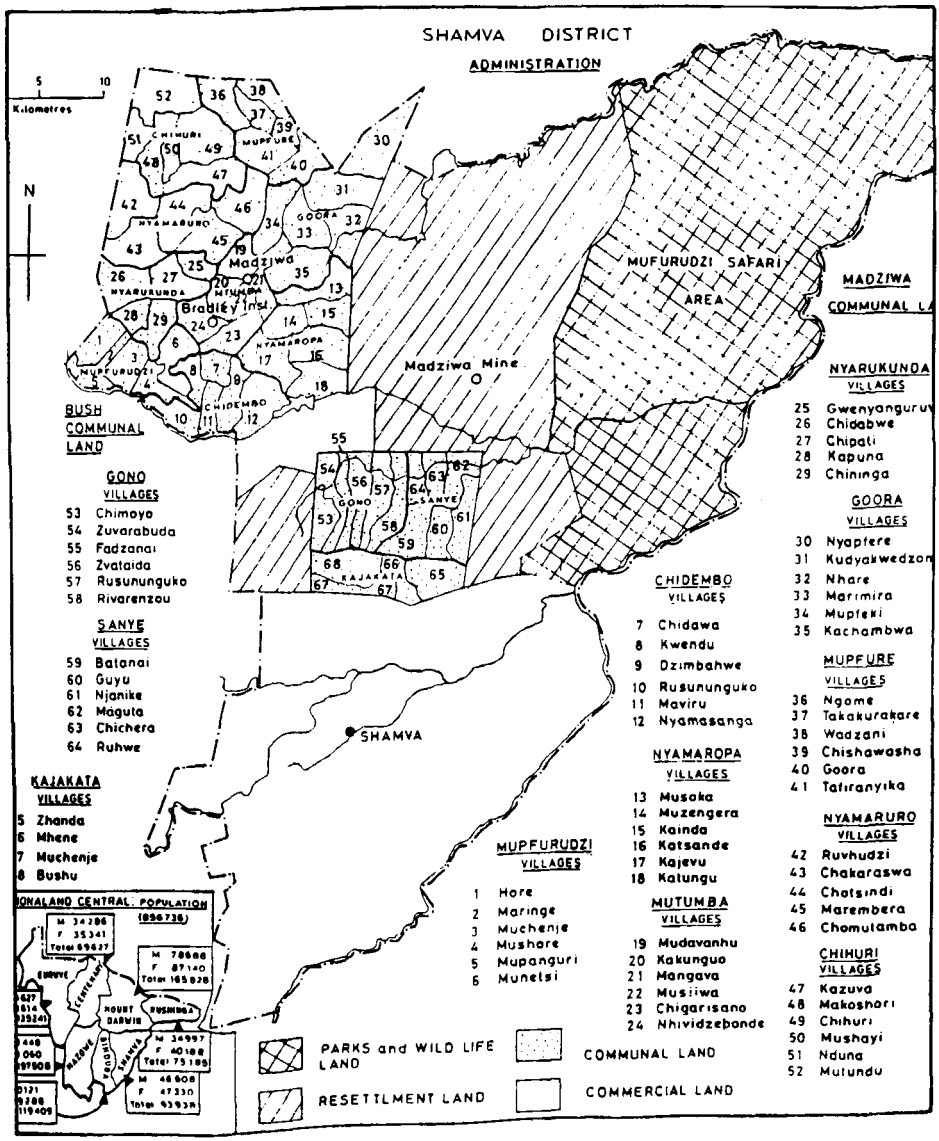
6.3 RECOMMENDATIONS

This study to some extent confirms the findings of similar studies carried out in other sub-Sahara African countries. Resource poor households are more negatively affected by economic structural adjustment programmes than richer ones. There is therefore need to reduce the skewed distribution of factors of production if ESAP is going to benefit the majority of the population in rural Zimbabwe. There is also need for special targeted programmes that support

private marketing and input supply channels that service resource poor households. Effort should be focused on the promotion of alliances between smallholder farmers so that they can create a critical mass and benefit from pooling of resources and information sharing. Relationships should also be encouraged between the commercial farming sector and the smallholder sector so that the different sectors can learn from each other. The gaining of a competitive edge on global markets lies in the ability of all agricultural producers in the country working together than as individuals. International trends indicate that outsourcing, relationship marketing and strategic partnerships are the order of the day within the food and agribusiness sector. To gain competitiveness in this arena, Zimbabwean agribusiness have to learn to play the game the way agribusiness organisations in other parts of the world are doing.

Appendices

Appendix I: Shamva District: Administrative Boundaries of the Surveyed Area



Appendix II: Crops Planted in the Smallholder and the Commercial Farming Sectors in Shamva in the 1994/95 Season

Crop	% of Smallholders (n = 468)	% of Commercial Farmers (n = 19)
Maize	98.3	89.5
Cotton	56.0	79.0
Tobacco	4.8	5.3
Sunflower	10.2	nil
Groundnuts	32.6	10.5
Red Sorghum	13.0	10.5
White Sorghum	0.7	nil
Wheat	nil	58.0
Millet	10.9	nil
Bambara Nuts	4.1	nil
Soyabeans	nil	21.0
Barley	nil	10.5

Appendix III: Range of Total Crop Yields in the Commercial Farming Sector

Crop	Yield per Farm (in tons)
Cotton	16 to 750
Maize	250 to 700
Wheat	150 to 500
Sorghum	30 to 60
Groundnuts	270 to 500
Barley	120 to 160
Soyabeans	1.6 to 5

Appendix IV: Sizes of Land Used for Crop Production in the Commercial Farming Sector (in the 1995/96 Season)

Size of Land	% of Respondents
< 200	1
200-400	7
401-600	3
601-800	3
801-1000	1
>1000	2
Don't Know	2

Appendix V: Marketing Channels Used for Grain Marketing in the Smallholder Sector in the 1994/95 Season (N = 439)

Buyer of Produce	% of Responses
Grain Marketing Board	53.2
Communal Farmers	27.7
Commercial Farmers	4.3
Commodity Brokers	6.4
Other	8.4

Appendix VI: Channels Used in Tobacco Marketing in the 1994/95 Season

Buyer	% of Responses
Commodity Broker	43.8
Private Contractor	6.3
Export Agency	6.3
Other	43.8

Appendix VII: Channels Used in Marketing Horticultural Crops by Smallholder Farmers

Crop	Buyer	% of Responses
Tomatoes	Other communal Farmers	69.2
	Commodity Brokers	7.7
	Wholesale Markets	23.1
Potatoes	Shamva Market/people	66.7
	Boarding Schools	33.3
Green Vegetables	Communal Farmers	28.6
	Shamva market/people	42.9
	Harare	28.6
Onion	Communal Farmers	20.0
	Shamva market/people	80.0
	Harare	20.0
Beans	Communal Farmers	39.7
	Shamva market/people	37.4
	Private Companies	21.4
	Harare	1.6

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