MARKETING OF FARMERS' FOODSTUFF: A CASE STUDY OF THE ASUTIFI DISTRICT IN THE BRONG-AHAFO REGION

By

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DECLARATION

I hereby declare that this submission is my own work towards the MA and that, to the best of my knowledge, it contains no material previously published by another person nor material which has been accepted for the award of any other degree of the University, except where due acknowledgement has been made in the text.

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This thesis is dedicated to my wife and children.

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ABSTRACT

Despite the fact Ghana can be identified as an agricultural country, it has not been able to produce enough food for her people. This situation is manifested in the importation of food and also food aid she receives from donor countries. This state of affair resulted from the little attention which is usually given to the restraint imposed by simple techniques in production and over reliance on peasant farmers. The research identifies numerous constraints on farmers in the marketing of their produce. These include lack of market information, access to credit, risk and uncertainty, and moral suation. Other problems identified in the research is the issue of high cost in collection of small product quantities, huge transaction cost, missing markets and insufficient number of traders acting as middlemen. All these work to the disadvantage of the poor farmer. The writer argues in this study that production of food crops could go up sharply only if there were prospects of assured markets and distribution. Thus all talk of increasing food crop production would not yield any good results unless the problem of marketing and distribution has been satisfactorily considered. Attempt is therefore made to identify, analyse and suggest solutions to these pressing problems faced by farmers in marketing their foodstuffs.

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CHAPTER ONE

GENERAL INTRODUCTION

1.1 Background to the Study

Agriculture has been identified as the engine of growth and change for developing countries but general neglect by Third World Countries resulted in stagnation between 1960 – 1970 (IFAD, 2008). The neglect was due to the bias towards industrialisation. In most African countries even though agriculture accounts for more than 50% of the Gross Domestic Product and more than 60% of employment, 10% or less is voted towards agriculture by their domestic budgets (Omamo, 2001; IFAD, 2003). There is lack of incentives for food producers as governments have allocated larger share of the agricultural support to export crops in the desire to generate export taxes and foreign exchange. Sub-Saharan African countries face potentially serious dilemmas in supplying their population with food. Over the past two decades the continent's agricultural exports have declined while imports have risen sharply (World Bank, 2005).

The fact that Ghana is primarily an agricultural country cannot be disputed, but the irony of it is that, it has not been able to develop its agricultural resources to provide enough food and raw materials to feed its rapidly increasing population and industries. This situation has led to the importation of relatively large quantities of various food items leading to accompanying upward trend of prices.

The inadequate food supply with high prices of local foodstuffs, until recently has been blamed on the low productivity of the Ghanaian agriculture which has failed to cope with the rapid growth of population. With population increasing at a rate of about 2.6% per annum and the increasing rate of urbanisation, the need to increase food production is quite clear. The proportion of urban population to the total population has been increasing steadily from 23.0% in 1960 to 28.4% in 1970 and then to 31.3% in

1984 (Preliminary Reports, 1960, 1970, 1984). Majority of these new urban dwellers buy their food from the market which means food supply will have to increase correspondingly.

There are indications that the inadequacy of food items in the market and the consequent rise in prices cannot be explained solely in terms of the failure of production to meet demand. It is a common observation (reported frequently in Newspapers and concerned citizens) as stated by Zachariah (1989), that substantial quantities of foodstuffs produced in remote areas do not reach the market for, they are often left to rot on farms and in the villages. Professor S. La-Anyane commenting on foodstuff marketing contends: "some of us may be surprised to learn that we currently have in Ghana enough food to feed the people of this country adequately but that we are unable to realise the abundance that exists because of poor and inefficient marketing organisation" (La-Anyane, 1970:71; IFAD, 2004). The facilities needed to handle the increased quantity of foodstuffs have been woefully inadequate over the years. For instance, at Independence in 1957, Ghana had a well maintained road network. However, a few years later through poor maintenance, the roads and especially the feeder ones have deteriorated tremendously. As a result, transportation cost on some of these roads rose steeply – the prices of foodstuffs increased sharply. Because of the inadequate marketing facilities farmers tend to turn away from foodstuff production to that of cash or export crop production where they enjoy easy and ready market (La-Anyane, 1970:71; Hine *et al*, 1989; IFAD, 2004).

1.2 Problem Statement

As earlier stated, the need for effective and sustainable marketing of local foodstuffs in Ghana to improve the food situation has received attention of late. Clearly, it has been observed in the study area and most parts of Ghana that piles of foodstuffs

rot annually especially whenever there is a bumper harvest. Yet complains of food insufficiency and high food prices in Ghana and in the Asutifi district in particular, especially in the lean season has been an age-old problem. However, of late, the role of inefficient foodstuff marketing organisation (among other factors) in causing such food shortages and high prices have been recognised. Other pressing problems faced by the peasant farmer in the area are post-harvest losses, inadequate storage facilities, inadequate transport networks. All these work to the disadvantage of the farmers but to the advantage of unscrupulous middlemen who because of the situation the farmers find themselves virtually remove him of all profits that must be accrued to the farmer.

There is the need therefore, for an in-depth research and analysis of the bottlenecks in the marketing of foodstuffs by farmers in the Asutifi district as a whole and to determine where in the system the major problem lies, with the view to suggesting means of eliminating these bottlenecks to enhance production and also to ensure adequate food supply.

1.3 Foodcrop Marketing:- A Working Definition

A marketing guide of the F.A.O (cited in Abbot, 1958 :1) and Krishworld (2007) define foodstuff marketing to include all arrangements to transport produce from farm to local and urban centres and for subsequent distribution to consumers. Shepherd (1955) and Hine *et al*, (1989), argue that foodstuff marketing begins when the farm products are loaded at the farm gate and ends when the goods reach the consumers table.

In this research, "foodstuff or food crop marketing" includes all the operations involved in the movement of foodstuff from the farm to the wholesale or retail traders or local consumers. It include efforts by farmers to sell their produce themselves at the

local markets or urban centres as well as handling, grading and packing in order to maintain and enhance quality and avoid wastage.

1.4 Objectives

Viewing foodstuff marketing from farmers' perspective, the study has the following objectives:-

i. To investigate and analyse the problems faced by farmers in the marketing of their food crops
ii. To assess the effect of the present foodstuff marketing system on farmers' decision with respect to what to grow and the acreage of land to cultivate;
iii. To make some problem-solving suggestions as solutions to the marketing problems.

1.5 Proposition

In this research it is proposed that:- improvements in transportation, storage, processing, credit can effect quick increases in available local food supplies. Also, lack of marketing facilities has negative effects on food availability.

1.6 Methodology

1.6.1 Types of Data Collected

In this research both quantitative and qualitative data were used. Questionnaires were administered to respondents to obtain the quantitative data on price change, loss of profits margins, while focus group discussions were also held with some sections of the respondents to obtain the qualitative data.

1.6.2 Data Sources

The sources of data for this research were from both primary and secondary sources. There was a field survey of settlements that are major producers and settlements that have major buyers of foodstuffs from farmers. Primary sources of data were from:

- Farmers Baseline survey
- Market survey of Buyers and Sellers.
- Interview of local or opinion leaders in the agricultural sector.
- Information from Agricultural Officers

Secondary sources of data were from records and publications from the District Assembly, Ministry of Food and Agriculture, the Internet and Libraries.

1.6.3 Sampling Technique

In all 240 questionnaires were administered to 160 farmers and 80 buyers since the producers are more than buyers. To ensure even geographical spread the district was divided into two areas: North and South.

Table 1.0 NUMBER OF PEOPLE INTERVIEWED

AREA	PRODUCING	NO. OF PRODUCERS	BUYING CENTRES	NO. OF TRADERS/ BUYERS
NORTH	1. KRAKYEKROM	40	GAMBIA 1	20
	2. KASAPIN	40	GAMBIA 2	20
	TOTAL	80		40
SOUTH	1. OBENGKROM	40	KENYASI	20
	2. AMANFROM	40	HWIDIEM	20
	TOTAL	80		40

In the various areas chosen, respondents were selected by random sampling, based on the following considerations.

(i) The most active producing centres.

(ii) The most active market centres.

(iii) Markets which do represent the broad spectrum of the population in the spatial context.

Regarding the farmers, the targets were Krakyekrom and Kasapin for the North, and Obengkrom and Amanfrom for the South. Forty farmers were interviewed from each of the four producing centres. A random sample of twenty buyers each from the four marketing centres of Gambia 1 and Gambia 2 for the North, and Kenyasi and Hwidiem for the South were selected.

1.7 Scope of the Research

The research is geographically limited to the Asutifi district in the Brong Ahafo region of Ghana. Those involved are the food crop producers and buyers from selected communities in the district and other stakeholders. The research is aimed at investigating and analysing the problems faced by farmers in the marketing of their food crops. It is also aimed at assessing the effects of the existing foodstuff marketing system on farmers' decision with respect to what to grow and the acreage of land to cultivate.

1.8 Justification of the Research

Given the importance of food sustainability and sufficiency coupled with the whole concept of poverty alleviation and rural development, it is very prudent both for research/academic and practical development purposes to undertake this study to investigate and analyse the problems faced by farmers in the marketing of their produce.

It has been confirmed by literature and other researches that there is a correlation between the poverty of majority of Ghanaians who are predominantly farmers and live in the rural areas and the way they market their produce (IFAD, 2003). They are most at times exploited by people whose major interest is to make abnormal profits at the expense of the poor farmers. This research has been undertaken to identify the problems that prevents the Ghanaian farmer from making the high income from their labour despite their hard work, and also to suggest solutions to the problems that have been identified. The findings will then go a long way to provide Government, policy makers, development agencies and other stakeholders a firm grasp of the issues and to be able to formulate the right policies in the development of agriculture and rural development as a whole.

1.9 Limitations of the study

The major limitation realised in this study was related to the sample size. The sample size determined for the respondents both producers and buyers was based on the knowledge and sense of judgment of the researcher using the intuitive method of sample determination. This may however affect the true picture of the results from the field survey since it may not represent the generic views of the entire population. Another limitation was the unavailability of farmers at the onset of the survey. This prolonged the time for data gathering. However, the little data gathered from the field survey was critically analysed to minimize errors that may be encountered in using the results to represent the views of the entire population.

1.10 Organisation of Research

The report is organised in five chapters. Chapter one deals with the introductory aspect including background to the study, statement of the problem, objectives, and

working definition of “foodstuffs marketing”, proposition, research methodology and sampling technique used. Chapter two is devoted a review of related literature and conceptual framework. Chapter three takes a look at the study area – location, major food crops grown in the area, existing foodstuff distribution channels as well as existing marketing facilities. Chapter four is devoted to the analysis of the marketing problems faced by the farmers, the interrelationship and interconnections between problems and also, the impact of marketing problems on farmers’ decision – the productive capacities of the farmers. Areas included are transportation, infrequent visit by buyers, pricing and condition of sale, credit facilities. Chapter five is the concluding chapter. It concerns itself with the summary of the research findings and recommendations for solution of the problems.

CHAPTER TWO

LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

2.1 Introduction

Marketing of foodstuffs is a subject-matter that has not attracted enough attention as a serious issue for research. Recognizing this fact, Moyer in 2002 noted: "Marketing has been almost totally neglected in the literature on economic development" (Moyer, 2002 :1). As a matter of fact, the concept of marketing is vital to economic growth and development. This is of recent realization among agricultural and development economists as well as geographers.

Notwithstanding these observations, some marketing economists have increasingly expressed dissatisfaction about the exclusion of marketing consideration in the development plans and strategies of most developing countries. Examining thirteen Development Plans for periods between 1962 and 1973, Abbot (1968) and Mwabu *et al* (2001) noted that the marketing content of most development plans is very low. Abbot (1968) in particular noted that none of the thirteen plans assigned a major role of the marketing of agricultural produce in their development strategies. He observed the interrelationship and interconnections between problems and also, the impact of marketing problems on farmers' decision and the productive capacities of the farmers. Bauer (1961) and Krishworld, (2007) observed that improvements in marketing would solve most of the problems in India and many other developing countries. Marketing could by itself go very far towards changing the entire tone of the existing economic systems. It was observed that improved transportation and marketing facilities should be the bed-fellow of technical improvement of production.

The idea has been given a push to the forefront by writers on food production and marketing in Third World countries and Africa in particular. Slater (1976) and his Michigan team who studied food marketing process in a number of Latin American

countries called for the transfer of food marketing systems found in the developed countries to the less developed ones (Slater, 1976). La-Anyane (1970) observed that the whole problem of agricultural development in Ghana and Africa as a whole revolves round market opportunities either locally or abroad for farm produce. It was observed that inadequate supply of foodstuff in the urban centers in Ghana is due to inefficient organization of the marketing of these commodities rather than to inadequate production (La-Anyane, 1970)

Sarah Kuntu (2002, cited in World Bank, 2002) observed that in most parts of the continent the link between farm and market place is neither direct nor easily understood. Distribution systems are frequently obtuse and inefficient and are held together by personal relationship, private marketing networks and unregulated transactions. This is found to be rooted in tradition and controlled by cultural imperatives making existing marketing and distribution system often failing to protect the interest of either producers or consumers. Narrowing this to Ghana, she maintained that at the end of the day, neither the farmers who produced the food nor the people in the cities who buy it are getting a good deal.

It has also been observed that food crops farmers especially in the areas where cash crops are cultivated, sell their produce at very low prices because the production of food is not treated as a major industry. In that same document Kuntu (2002) maintained that at the big market centers in Accra, consumers pay many times more than what the farmers get. She therefore thinks that the change in price is too much to be accounted for by transport cost (Kuntu 2002 cited in World Bank, 2002). This reveals that other factors like inadequate storage facilities and cheating by traders also contributed to the situation. Moral (2002) says much selling is done by chance because it is not clear who is the wholesaler and who is the retailer. He observed that Africans prefer to deal between individuals and stay a little quiet about conditions of marketing and would not

let everybody know what type of things they sell and how many. This he maintained can be a problem when it comes to seeking finance since it is hard to ask for a loan when you do not know how the money is flowing.

Abbot (1986) observed that the share of the market price accrued to the producers is very small and most of the farmers live in remote areas far from major roads and can only be reached by middlemen usually women traders who buy the produce at prices that are highly dictated by these traders. Transport costs are high because of poor rural road networks and competitions are less or not there at all as only few traders do go to the remote areas. Also, the commodity chain is relatively long as the produce are handle by a lot of people before they finally reach the consumer. Since the farmers are mostly small holders, their transaction costs are higher than it would be for larger production units because the quantities of input they need and output they sell are smaller. They are also often less well informed and have less bargaining power. Abbot maintained that even the subsistent small holder must sell some produce if he is to have the cash to pay for inputs and services that will raise his output and his level of living. This means that given the risk and uncertainties of the market and the farming system available to them, these producers settle with low-risk and low output options. If the risks of market is reduced and produce can be assured dependable price, producers will tend to assume greater risks by expanding production (Abbot, 1986).

In spite of the large amount of literature on market performance following market reforms in sub-saharan Africa, relatively little attention has been given to the role of marketing institutions in supporting exchange. Bardhan (1989) maintained that less attention has been given to understanding how particular institutions effectively reduce transaction cost. Yet it is increasingly recognized that the formulation of market enhancing policy requires a clearer understanding of transaction costs, institutional marketing arrangements, and microeconomic trader behaviour.

It is recognized widely that market transactions, particularly in developing countries are often embedded in long-term personalized relationships (Ahmed and Rustagi, 1984). Personalized exchange emerges in response to commitment failure in which the risk of breach of contract or opportunities is high resulting from the lack of market information, inadequate regulation and the absence of legal enforcement mechanisms (Ngagi, 1995). This state of affairs at times lead to a situation where some traders credit farm produce from producers but do not pay back even after sales. This is a contributory factor that discourage foodcrop farmers.

Furthermore, Nyanteng and Van-Apeldoom (1971), have stressed that if farmers are to expand their farms or use modern inputs to expand output, then they should be able to market their increased output with minimum problems and at a profit. Dickson and Benneh (1980) have also stated among other things that, the farmer does not grow every crop for which the physical environment is suitable. His choice of crops might be influenced by the price which the crops fetch on the market.

Also Addo (1984), in considering the accessibility factor in the production and marketing of farm produce noted that acreage to foodcrop land decreases in proportion to increasing distance from the nearest bitumen surfaced road. He contended that the prevailing poor and inefficient marketing system, especially the foodstuffs produced for local consumption encourages a dictation of price by a team of well organized middlemen to producers. Ardayfio-Schandorf (1985), commented that the Patron-Client relationships as well as the perishable nature of the farmers commodities tend to render the small-scale farmers vulnerable. For farmers who cultivate perishable agricultural produce in inaccessible areas, the terms of trade appear to be deteriorating.

The trading system is run by associations of female traders (market queens) which is based on price fixing at local and regional market places. Since farmers are poorly organized at both geographical and production sector levels, they are dictated to

by the buyers. It must be recognized that food production is necessary since it provides the food needed to meet the needs of the rising population. Economic productivity in food production must increase so that there will be economic surplus which can be used as working capital for further production. Owusu (2005) noted that developing and progressive rural agriculture increases the purchasing power of rural people in Ghana who undertake food production. Studies done in rural agriculture so far only stress the importance of market as a moral booster to foodstuff production. This fact is not disputable to the writer. However, in the present study, the writer goes a step further with an attempt to analyse the factors which impede smooth marketing of foodstuff. Attention is focused on the problems inherent in farmers marketing of foodstuff based on the conditions of the study area, Asutifi District which may differ to a large extent from other areas.

2. 2 Importance of Agriculture to Economic Growth, Rural Development, and Poverty Alleviation

Agriculture constitutes the core of the economies of most low-income developing countries. In heavily indebted poor countries, the agricultural sector was found to have generated 33 percent of the Gross Domestic Product (GDP) and 52 percent of total merchandise exports in 2002 (World Bank, 2005). The agricultural sector accounted for about 60 percent of employment in low-income countries in 1995. Even in East Asia and the Pacific—which have experienced rapid economic growth—the agricultural sector accounted for 46 percent of employment, generated 16 percent of GDP, and was responsible for 10 percent of total merchandise exports in 2000 (World Bank, 2005). Such economic dominance of agriculture demonstrates the importance of developing agriculture for economic growth and poverty alleviation in developing countries. Although, the relative contribution of agriculture to the overall economic growth decreases as an economy develops; agricultural development provides a crucial

foundation for economic growth in both agricultural and non-agricultural sectors. Virtually every high- and middle-income country, with the exception of city nations such as Singapore and Dubai, has gone through a period of development when agricultural growth was essential to foster general economic growth and poverty alleviation. On the other hand, low-income countries with a stagnant agriculture usually have stagnant economy. Moreover, attempts to jump directly to modern industrialization without paying enough attention to agricultural development in the early stages of development have tended to result in a failure in economic growth and poverty alleviation (Gulati et al, 2005).

2.3 Agriculture as the Driver of Economic Growth

Although early development literature considered the role of agriculture in economic development to be a supportive one for industrial sectors such as ensuring a supply of cheap food for workers in industrial sectors (see, for example, Lewis 1954), a more active role of agriculture as the driving force of overall economic growth has been recognized and emphasized since the 1960s (see, for example, Mellor 1966; Schultz 1964; Johnston and Mellor 1961). A large share of subsistence and semi-subsistence agriculture has been transformed through the adoption of new technology, investments in rural infrastructure and markets, and the design and implementation of appropriate policies. This transformation leads to an increase in productivity of land and labour and results in increasing incomes for farmers and farm workers and enhanced purchasing power for consumers. Low food prices achieved by reduced unit-costs of production contribute to lower wages in non-agricultural sectors and thus facilitate industrial growth. Furthermore, agricultural growth contributes to economic activity in input, processing, distribution, and storage industries, generating multiplier effects beyond

agriculture. In addition, increasing agricultural incomes induce a rise in demand for goods and services produced in other sectors (Hazell and Röell 1983).

A number of empirical studies (e.g., Hazell and Röell 1983; Haggblade et al., 1991; Delgado *et al* 1998; Fan et al., 2000; and Fan et al., 2002) conclude that the multiplier effects of agricultural growth on total development is usually greater than two. The size of the multiplier effects varies spatially and over time, reflecting differences in consumption, investment, and saving patterns. In general, Mellor (1976), argue that the multiplier effects tend to be high when agricultural growth is driven by broad-based productivity increases in a rural economy dominated by small farms, as in much of Asia. Also, Hazell and Röell (1983) noted that small- to medium-sized farm households typically have more favourable expenditure patterns for promoting growth of the local nonfarm economy, including rural towns, since they spend higher shares of income on rural nontraded goods and services, which are also generally more labour intensive.

In a study of four African countries, Delgado *et al* (1998) estimated the income multipliers to be around 2.5, meaning that each additional dollar of income from agriculture generates about $2.50 of economic growth in the economy as a whole. In the more open economies of Asia, where rice was more tradable than most African staple foods and local prices more easily reflected boarder prices, the multiplier effects were close to 2 in the early stages of agricultural modernization when productivity gains were the fastest. In addition, Gollin et al., (2002), using data for 62 developing countries during 1960-1990, found that agricultural growth, nonagricultural growth, and sectoral labour shifts explain 54 %, 17 %, and 29 % of the growth of GDP per worker, respectively.

2.4 Agricultural Development and Pro-Poor Growth

Agricultural development has a significant potential to contribute to nation-wide poverty reduction through direct effects on farm incomes and employment and indirect effects on overall economic growth, as well as its impact on food prices. A number of studies have found a positive correlation between agricultural growth and poverty alleviation. It is empirically shown that poor people tend to benefit more from economic growth originating in agricultural sectors than from that originating in industrial or service sectors (Ravallion and Datt 1996; Ravallion and Chen 2004; and Timmer, 2005). In addition, Ravallion and Datt (1996), using data for India over 1951-1990, show that rural growth through agricultural development reduces poverty not only in rural areas but also in urban areas and hence has a significant and positive effect on national poverty reduction.

Several studies have found that the elasticity of poverty reduction with respect to agricultural productivity is significant, positive and higher than the elasticity with respect to other sectors' productivity, especially in the early stages of development. For example, Thirtle et al., (2003) estimate the elasticity of the reduction in the number of people living on less than $1 per day with respect to agricultural productivity growth using data from 59 countries over 1985-1995. According to their estimates, the elasticity was 0.72 and 0.48 (73% and 67% of the total impact of increases in per capita GDP) in Africa and Asia, respectively. Datt and Ravallion (1996) estimated the elasticity of the reduction in three FGT-type poverty indicators (Headcount (HC), Poverty Gap (PG), and Squared Poverty Gap (SPG)) with respect to agricultural value added per hectare using state-level data in India during 1957-91. The elasticity for HC, PG and SPG was 0.38, 0.55, and 0.70, respectively. On the other hand, an increasing number of studies have questioned the effect of agricultural growth on poverty reduction following several failures of earlier investments in agriculture-led

development, increased recognition of the importance of non-farm activities in rural livelihoods, and increased difficulties in the global environment for sustaining pro-poor agricultural growth (e.g., decreasing agricultural prices, trade liberalization, and the spread of HIV/AIDS) (Dorward *et al* 2004). Despite the significant potential contribution of agricultural growth to overall economic development through its direct and multiplier effects, a combination of market failures and poor policy environments in many developing countries have led to failures of agriculture-led development. Moreover, a failure to liberalize agricultural trade and the continuation of domestic agricultural subsidies in the OECD countries resulted in low world market prices of agricultural commodities and thus made agriculture less profitable for developing countries, causing reduced private and public investments in agriculture. Thus, the question is not whether agricultural growth is essential to generate rapid economic growth and poverty alleviation in poor countries, but whether these countries and the international policy and trade environment surrounding them create the enabling environment, including trade liberalization, appropriate economic policies, investments in research and technology, and the building of the necessary rural infrastructure and well functioning domestic markets (Dorward *et al* 2004).

In fact, there are few, if any, other candidates with the same potential for supporting broad based pro-poor growth, and thus agriculture remains a critical element in efforts to promote broad based economic growth and poverty alleviation despite the policy failures mentioned above. For a successful agricultural development and transition, a recent study (Dorward *et al* 2004), emphasizes the importance of institutional development (both the institutional environment and arrangement) to overcome these difficulties. Thus, key functions of governments and of other actors promoting development (e.g. the World Bank) are then to support institutional development and rural infrastructure that will reduce transactions costs.

2.5 Agricultural Input and Output Markets and Links to Infrastructure

Market integration over space and time requires good infrastructure and effective market institutions. Where spatial market integration is poor, favorable local growing conditions, improved production practices, or adoption of modern technologies that result in increasing marketable surpluses may result in drastic drops in local prices, while other areas may suffer from deficits and rapidly increasing prices. Such large spatial price differences and abrupt inter-temporal price changes are common in low-income countries with poor infrastructure and/or poorly functioning markets. For example, maize prices in Ethiopia tripled from 1997-98 to 1999-2000 followed by an 80 % drop from 1999-2000 to 2000-2001. In Malawi, the price of maize quadrupled between April 2001 and April 2002 (Pinstrup-Andersen, 2002).

The supply response by small farmers is also seriously affected by the state of infrastructure and market. Chhibber (1988) found that a one percent increase in output prices could result in a supply response of 0.3-0.5 percent in areas with poor infrastructure and 0.7-0.9 in areas with good infrastructure. The farmers' willingness to adopt productivity-enhancing technology depends very significantly on the infrastructure and market situation with which they are faced.

In most low-income developing countries, market integration is limited by poor transport, storage and communication infrastructure, lack of effective competition among market agents, limited rule of law, and restricted access to commercial finance. The price transmission may be low and price changes in urban or world market are not fully transmitted to producers and traders. Worse still, without effective competition, economic agents with larger market power may exercise control over pricing strategies that result in a slow and incomplete pass-through of price increases and a fast and complete transmission of price decreases (Pinstrup-Andersen, 2002).

While privatizing agricultural marketing has benefited farmers and/or consumers in many countries, it is important to recognize the role of the state in facilitating private transactions. A number of public interventions such as standardization, grading, enforcement of contracts and regulations to pursue effective competition are needed to make the private markets work.

2.6 The Importance of Markets For Rural Poor People

Rural households have diverse livelihood strategies, encompassing a range of activities. For most, agriculture is a key element of their strategy; however, many are also engaged in non-agricultural activities, including micro enterprises (agro-processing, trading and other off-farm occupations) (IFAD, 2003). Through these various activities, households seek both to ensure their food requirements and to generate the income they require to satisfy their immediate consumption needs, social purposes and investments.

Interacting with agricultural markets is thus an important aspect of the livelihood strategies of many rural households, rich and poor alike. Markets are where, as producers, they buy their agricultural inputs and sell their products; and where, as consumers, they use their income from the sale of crops, or from their non-agricultural activities, to buy their food requirements and consumption goods. Virtually all households in rural areas are, by preference, both producers and consumers, buyers and sellers; and many sell agricultural produce and buy their food at different times of year. However, rural household that, for one reason or another, was unable to interact with these markets was prevented from adopting these diverse livelihood strategies; and indeed, in many parts of the world, rural poor people often say that one reason they cannot improve their living standards was that they faced difficulties in accessing markets (IFAD, 2001).

For these reasons, improved market access is not an issue of consequence only to better-off producers, and it is *not* relevant only to cash crop, rather than food crop production. IFAD (2001) in a study noted that, to assist rural poor to enhance their food security and increase their incomes, there was the need to improve their access to market.

If it is true that markets, and improved market access, are of critical and immediate importance to rural poor households, it is also evident that they are a prerequisite for enhancing agriculture-based economic growth and increasing rural incomes in the medium term (IMF and World Bank, 2002). According to Lankes (2002), rural incomes will not be substantially increased by exclusive emphasis on subsistence food crop production; rather, more market-oriented production systems are needed. These require the intensification of agricultural production systems, increased commercialization and specialization in higher-value crops. These must be built upon the establishment of efficient and well-functioning markets and trade systems – ones that keep transaction costs low, minimize risk and extend information to all players, and that do not either exclude, or work contrary to the interests of the poor – particularly those living in areas of marginal productivity and weak infrastructure.

2.7 The Context of Market Linkages For Poor Rural Producers

The economic environment within which rural poor households operate is characterized by unpredictability, uncertainty and risk; and agricultural markets in particular – for input supplies and agricultural produce – have become increasingly difficult for them to access (IFAD, 2003). To the extent that rural poor households are able to participate in these markets at all, they do so on terms that are generally inequitable: the poor are often obliged to sell low and buy high, with little choice regarding where they conduct transactions, with whom, and at what price. It is an

environment that is almost unrecognizable from the one that existed 10 or 15 years ago. Among the main factors behind this metamorphosis had been the various processes of liberalization at both national and international levels.

2.8 The Changing Context At The National Level

Two decades ago, major markets in many developing countries were controlled by governments. Monopolistic parastatal marketing agencies were typically responsible for both the delivery of agri-inputs and the marketing of agricultural produce, through a network of distribution outlets and marketing depots, and at prices (usually pan-territorial) that were determined in advance. Yet in many countries, inputs were delivered to the rural areas too late to be used effectively, they were limited in the variety available, and frequently they were sold in quantities inappropriate for small farmers. Prices offered to farmers were low – representing only a relatively small proportion of the real value of the crop, and actual payment was often made several months after delivery of the crop. Further, the system of pan-territorial prices for a narrow range of crops promoted inappropriate production systems – limited in scope and ill suited to the agro-ecological and socio-economic conditions faced by many rural households. Finally, in many countries, the parastatal agencies lost large amounts of money and drained resources from national budgets (IFAD, 2003).

Nearly everywhere the situation has changed radically. Starting in the early 1980s, a series of agricultural marketing reforms were introduced in most countries in the developing world, with the aim both of reducing the level of public expenditure incurred by the state agencies, and of promoting a more productive, commercially oriented and diverse agricultural sector. Crucially, they sought to limit, or completely eliminate, the role of the parastatal institutions in agricultural marketing, and so provide the space for private-sector involvement (IFAD, 2003).

In practice, and in retrospect not surprisingly, the emergence of private-sector market intermediaries (ranging from small-scale informal traders to large, often foreign owned, agro-processors) to fill the vacuum left by the withdrawal of the state has generally been less smooth and less rapid than expected. However, there has also been enormous variation in the composition of this intermediary sector and in the speed of its emergence (Lankes, 2002).

First, this process is most advanced in those countries that were the first to introduce market reforms. In some countries, the situation is enormously dynamic, changing yearly as increasing numbers of players enter the markets and as marketing operations become more efficient and varied. Second, this process has also made rapid progress in countries with relatively sophisticated and diverse economies, a well-established private sector and an entrepreneurial culture, and a relatively developed rural infrastructure. Within countries, markets have grown more rapidly in areas close to urban centres, with relatively dense populations, and in higher-potential areas where levels of agricultural production and surpluses are greater. By contrast, in areas that are remote, have weak infrastructure, are scarcely populated and have low agricultural potential, the process of market development has been far slower. Furthermore, Legrain (2002), asserts that different types of market relations have developed for different types of crops: food crop markets being typically characterized by informal arrangements between producers and small-scale intermediaries, and export crop markets by 'formal' relations between producers and agro-processing firms – which in case also supply inputs and provide production support services. In many countries, export crop markets have emerged faster and more smoothly than food crop markets.

In this rapidly evolving context, the policy and institutional frameworks established by the governments of developing countries have not been consistently supportive of private-sector-led market development (Legrain, 2002). At the national

level, improved farmer-to-market linkages have been typically constrained by, for example, an overly restrictive legal framework for farmer group registration, the lack of an effective legal framework for contract enforcement, or by excessive licensing requirements for traders. The policy environment has also constrained the development of intraregional markets. It is true that many developing countries have been keen to promote intraregional trade, and that – particularly during the 1990s – a substantial number of regional trading agreements were established. Yet despite the provisions of these agreements, the level of intraregional agricultural trade generally remains low. All such trading efforts have come up against structural and policy obstacles, including tariff barriers and trade restrictions; non-tariff barriers, such as differing standards and inspection systems; and bureaucratic bottlenecks (Adubi, 1996).

2.9 The Changing Context at the International Level

At an international level, globalization – of capital flows, access to technology, and trade – is leading to important changes in economic and social relations across the world; and in theory at least, it promises new opportunities for growth and income generating activities for households in developing countries. In practice, however, the road to globalization is beset with difficulties – particularly for those least able to participate effectively in the global marketplace (IFAD, 2003).

The agricultural sector is not only the most important for rural poverty reduction; it is also of critical importance to the economies of many developing countries, which depend above all on agricultural commodities as the main source of export earnings.

According to the World Bank (2005), agricultural and other labour-intensive products represent more than half of low-income countries' exports and about 70% of the least developed countries' export revenues. Yet, ironically, over the last two decades

the market prices of most primary commodities have declined substantially: in 2000, prices for 18 major export commodities were 25% or more lower in real terms than in 1980.

Two factors can be identified as being responsible for the decline in prices. The first is a long-term and structural one, resulting from the slow growth in demand for primary food commodities as incomes grow, contrasted with a more rapidly expanding supply of traditional commodity products from an increasing number of developing countries. Coffee is a classic example: not only has the world price declined and the value of coffee exports fallen, but also the proportion of the value of the coffee market captured by producer countries has dropped, from 33% ten years earlier to less than 10% as at the year 2002. Other crops such as cocoa and rubber have been adversely affected in similar ways (Stiglitz, 2002).

The second factor, accounting for the decline in commodity prices according to Stiglitz is that of subsidies and related support paid to farmers in the developed world. In member countries of the Organisation for Economic Co-operation and Development (OECD), total public support for agriculture amounted to USD 311 billion in 2001 (fully *six* times the total amount of official development assistance), while producer support as a whole– domestic subsidies, import tariffs and export subsidies – was estimated to equal nearly one third of total farm receipts. Prices received by OECD farmers were, on average, 31% above world prices. A large share of that support is directed at temperate- zone agriculture, but support for products of interest to producers in the tropics is often especially high – crops particularly affected include cotton, maize, wheat, rice, sugar and oil seeds. These subsidies lead directly to increased output and to surpluses that are then transferred onto international markets, with the effect of increasing price volatility and depressing the prices received by farmers in developing countries. In a study of the impact of subsidies on cotton production in the United

States, Oxfam found that in 2001/2002 American farmers received subsidies of USD 3.9 billion (double the level in 1992); the cost to Africa alone of those subsidies were losses amounting to USD 301 million. Eight cotton-producing countries in West Africa accounted for about two thirds of that.

Again, according to Stiglitz (2002), there are other trade barriers, both direct and indirect, that undermine the ability of developing countries to export agricultural products to the developed world. Stiglitz (2002) noted that from 1996 to 1999 low and middle income countries were unable to meet sanitary and phytosanitary requirements on more than 50% of their potential exports of fresh and processed fish, meat, fruit and vegetables into the European Union. They viewed these measures as more important barriers than the tariffs and quotas. In addition to these factors, other practices undermined the efforts of producers in developing countries to access both local and international markets. Food aid and agricultural input supplies programmes have on occasions been used by developed countries to dispose off surpluses, and these too have had the effect of depressing local prices and undermining markets in developing countries. Yet if liberalization – or rather, the only-partial liberalization of agricultural trade – has created enormous difficulties for many developing countries, at the same time new opportunities have emerged for some rural producers in some developing countries.

This is particularly true for countries that have a well-established comparative advantage for specific products and that have already gained a foothold in international markets. In addition, new consumer habits and concerns in the developed world (which include concerns precisely about the effect of globalization on developing countries) have led to new opportunities for producers in those developing countries. Markets are emerging in the developed world for 'new' tropical fruits and vegetables; for organically grown agricultural products; for products bearing a Fair Trade label, which

guarantees fair trading relations and production conditions; for natural products (such as honey and non-timber forest products); and for rural crafts. Regional trade opportunities too are opening up, and for many developing countries there is significant potential to increase their participation in intraregional markets (Stiglitz, 2002).

2.10 Constraints on Poor Farmers

IFAD (2003) concluded that as a result of these national and international trends, smallholder producers find themselves in a world entirely unlike the one they faced two decades ago. Markets no longer have fixed nominal prices. Instead, new commercial relations must be struck with a myriad of suppliers and buyers, and prices, whether for selling produce or purchasing inputs, are now largely negotiated. For some farmers – particularly those producing export crops in areas enjoying good communications – this has created new opportunities. For many others – especially those trying to produce market staples in remote areas of low agro-ecological potential – it has created major problems. The issue of market access may usefully be considered according to three dimensions: physical access to markets; structure of the markets; and producers' lack of skills, information and organization.

2.11 Physical Access To Markets

Distance to markets – and lack of roads to get to them (or roads that are impassable at certain times of the year) – is a central concern for rural communities throughout the developing world. It undermines the ability of producers to buy their inputs and sell their crops; it results in high transportation costs and high transaction costs, both to buyers and sellers; and it leads to uncompetitive, monopolistic markets. In many countries, the closure of the former parastatal market chain has exacerbated this problem, leaving large numbers of farmers far from any markets. Transport costs –

combined with storage constraints – are particularly important for women, who tend to trade locally in vegetables and other perishables (Hine, 1993).

Hine (1993), asserts that difficult market access restricts opportunities for income-generation. Remoteness increases uncertainty and reduces choice: it results in more limited marketing opportunities, reduced farm-gate prices and increased input costs. It also exacerbates the problem of post-harvest losses, which can reach as high as 50% in some areas. In doing so, it weakens incentives to participate in the monetized economy, and results in subsistence rather than market-oriented production systems. By contrast, improved infrastructure leads to increased market integration and more commercially oriented production systems. Market access is thus a key determinant of household production systems.

2.12 Market Structure

Rural markets are characterized by extreme asymmetry of relations between, on the one hand, large numbers of small producers/consumers, and on the other, a few market intermediaries. Such market relations are characteristically uncompetitive, unpredictable and highly inequitable. Rural producers who face difficulties in reaching markets often become dependent on traders coming to the village to buy their agricultural produce and to sell them inputs and consumer goods. However, especially in remote areas, a trader may not arrive reliably or at all, and producers are often faced with little choice but to accept the first offer of the first trader who shows up, however unfavourable it might be. Such a situation is exacerbated when the trader is also the only source of information on prices and other relevant market information (IFAD, 2003).

In many countries, there has been rapid growth in smallholder-based contract farming; and through this, many poor producers have established an important, assured commercial relationship. However, in the context of monopolization of processing,

credit, marketing and technical capabilities by agribusiness companies, smallholders have been entering a commercial relationship that has been fundamentally inequitable. Although experiences have varied, and there are clear examples of companies acting with enlightened self-interest, smallholder producers have in some cases found themselves effectively operating as employees rather than as partners; and ultimately, they have derived very low net returns as the large-scale private sector exercises its economic power to take the lion's share of value added. This offers a scenario of growth of smallholder production without smallholder development (IFAD, 2003; Stiglitz, 2002).

Input markets have been even more problematic. In many countries the commercial firms that have replaced the parastatal input distribution companies have only a limited retail network in the interior and are only starting to develop their networks of agents. To the extent that the inputs get to the rural communities – and in many developing countries fertilizer use has fallen off dramatically in recent years – the range is often still limited, and the costs are considerably higher than formerly. This is the result of the removal of the subsidies on agri-inputs, high transport costs, lack of competition among distributors, and farmers' lack of ability to negotiate favourable terms (IFAD, 2003).

2.13 Lack of Skills, Organization and Information

In their participation in agricultural markets, poor producers find themselves at a major disadvantage. Many have a poor understanding of the market, how it works and why prices fluctuate; they have little or no information on market conditions, prices and the quality of goods; they lack the collective organization that can give them the power they require to interact on equal terms with other, generally larger and stronger, market intermediaries; and they have no experience of market negotiation and little

appreciation of their own capacity to influence the terms and conditions upon which they trade (IFAD, 2003). With little experience, no information and no organization, they have no basis upon which either to plan a market-oriented production system or to negotiate market prices and conditions. Ultimately, their lack of knowledge means that they are passive, rather than active, players in the market; that they can be exploited by those with whom they have market relations; and that they fail to realize the full value of their production (Hine, 1993; IFAD, 2003).

The provision of market and price information can assist producers with farm-gate marketing decisions: linked to training both to help them interpret and act upon that information, and to organize collectively, it can also help them to understand marketing processes more fully and to develop strategies to achieve better and more stable prices for their agricultural produce. However, such information must be location- specific, timely and accurate, dynamic, and locally available and in a language understood by all of the rural population. Few government-run market information systems have adequately met the challenge of all of these requirements. In many countries, however, improved communications – radios and, more recently, mobile telephones – play an important part in reducing informational asymmetries (IFAD, 2003).

2.14 Marketing and the Rural Poor

Accessible, transparent and remunerative markets are necessary to raise incomes and improve livelihoods of the rural poor. In developing countries, agricultural markets rarely meet these needs. The direct state involvement in marketing has seldom brought improvements and proved costly, prompting changes in the marketing systems from parastatals to the private sector. But the response of the private sector has been slow and the challenge to provide stable and remunerative prices to small producers remains.

Although the consensus still favours a stronger role of the private sector in marketing, the core issues have not been resolved (Mazoyer, 2001; IFAD 2008).

Government policies are at times governed by a need to keep urban prices low. Policies on food aid, imports of subsidized foods or trade further expose small farmers to unfair market competition and undermine local markets to the detriment of the small producers. This issue of leveling the playing field for the smallholders remains.

Despite the transition to a greater role of the private sector in marketing, there is no clear consensus on the appropriate role of the government and the private sector in providing remunerative prices to the small farmers*:* The real purchasing power of rural producers has fallen due to the removal of subsidies and declines in farm-gate prices of food crops and basic commodities, either through rising technical efficiency of production, or because of uncontrolled competition from subsidised sources in developed countries. The marketing institutions and marketing frameworks in most countries have not yet adequately addressed this issue (Oxfam, 2006).

Poor access to markets: Lack of competition among traders in rural areas contributes to monopolistic trading practices to the detriment of the poor and small producers. The development of micro-, small- and medium- enterprises (MSMEs) to facilitate the access of the poor to markets and enhance competition in rural areas is further constrained by a number of factors, which, *inter alia*, include lack of finance or the adequate availability of Business Development Services (BDS) to facilitate and guide the development of MSMEs. Moreover, such services are proving hard to sustain in rural areas and the ability of the poor to pay for them remains suspect (Oxfam, 2006).

Inadequately structured farmers associations: or other similar forms of jointly-owned organizations that could interface with traders or could undertake marketing. IFAD (2008) believes that these institutions either do not exist, or where they do, the organizations remain handicapped by: (a) low quality of and inexperienced,

management; (b) undercapitalised financial base; (c) limited access to capital; and (d) poorly paid staff. These constraints inhibit their ability to compete in the open market or adapt to changes in the marketing environment.

Stringent quality demands that add to costs of small producers without additional remuneration: These are demanded by private sector buyers and are often backed by increased state regulation of food safety, origin, and trading standards. High transaction costs that affect the viability of the supply chains: Restricted physical access, transport services and market infrastructure in many rural areas, coupled with low volume of production that is often scattered, adds to the already high collection and transport costs, especially in remote areas. The supply chains in these areas are long with many intermediaries, which, of necessity, limit the amount that can be paid to smallholders (IFAD, 2008).

Limited bargaining power of the producers and the lack of marketing credit often forces smallholders to sell produce just after harvest when the prices are low. This linked to asymmetric market and price information also hinders smallholders from realising remunerative prices for their produce (IFAD, 2008).

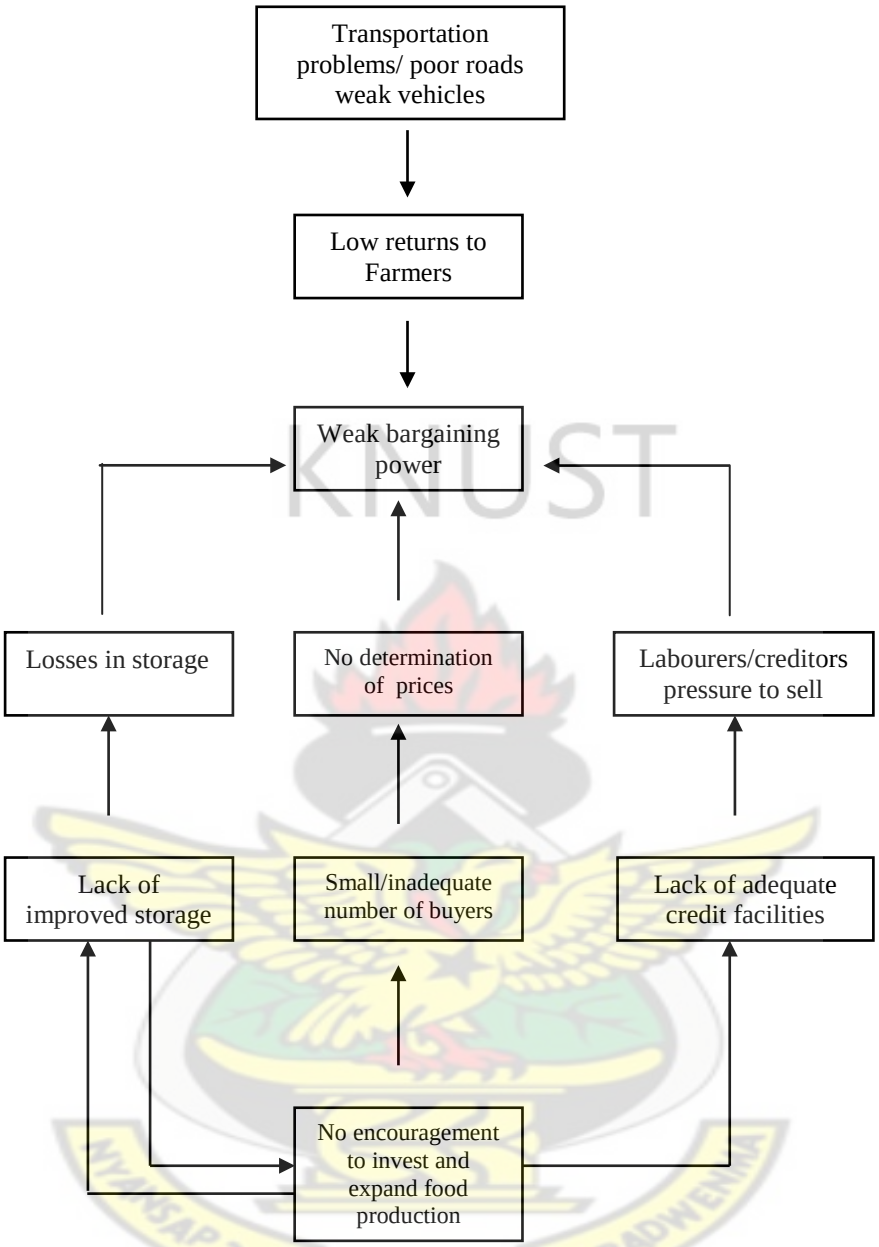
2.15 Summary

The literature available discussed among other problems the importance of agriculture to economic growth and development. Attention was given to how agricultural input and output are linked to infrastructure.

The literature also identified some constraints to farmers in general with regards to market structure, how marketing is organized and access to information. These were done with reference to developing countries, Africa and other places in Ghana.

The literature made suggestions as to the solutions to the problems identified.

Fig. 2.1 CONCEPTUAL FRAMEWORK SHOWING THE LINKAGES OF FARMERS' PROBLEMS



Source: Adopted from F.A.O. (2001)

2.16 Conceptual framework

The interrelatedness and interconnections of the farmers marketing problems cumulatively explains the weak bargaining power of the farmer. This interlinkage is presented in figure 2.1. Farmers who do not have access to credit and who would not go in for any loan are put under pressure from labourers who were hired on goodwill bases.

These were labourers who were hired with the promise to honour payment after harvest. This situation makes the farmers sell their produce very cheaply to buyers immediately after harvest so as to defray the cost. Others who receive credits from traders also had to pay them immediately after harvest in order to retain the confidence of the creditors.

This highlights the issue of moral suation, where the farmers' chances of getting better prices offered by other buyers often reduced drastically. Thus, the farmers have to accept the prevailing prices dictated by the buyers (which are comparatively low) immediately after harvest (they become 'price takers'). There can only be effective bargaining and haggling during the lean season, which is three or four months after harvest, in the case of maize.

The F.A.O. (2001) further mentioned that the question of inadequate number of buyers and for that matter the infrequent visit of buyers was a result of transportation problem. The buyers find it difficult to frequent the villages because of the nature of transportation. The bad state of the roads, coupled with few numbers of vehicles which are very old do not make travelling safe. Consequently, the farmers have no choice than to sell to the few buyers who manage to go there usually at the prices dictated by the buyers. Furthermore, traders who manage to get to the producing villages are often allowed (on goodwill) to take the items with the promise to pay on their next visit. This agreement often resulted in the situation where dishonest traders easily absconded with these goods or sometimes came back to quote lower prices under the pretext that prices in the urban markets have fallen.

Related to the small number of buyers as a result of transportation difficulties is the lack of improved storage and or processing facilities. This implies that in order to avoid storage losses and possible spoilage or deterioration, farmers are forced to sell their produce to the small and inadequate number of buyers who visited the villages at long interval periods.

CHAPTER THREE

BACKGROUND TO THE STUDY AREA

3.1 Introduction

This chapter gives a brief description of the geophysical characteristics, the demographic characteristics (with emphasis on the population size, the growth rate and population density), the social characteristics regarding the educational status and health situation, the economic development and the current political structure within the district. These have been discussed with reference to the foodstuff marketing facilities and distribution channels in the study area.

3.2 Location

The study was conducted in the Asutifi District located between latitudes 6^o 40N and 7^o 15N, and longitudes 2^o 15W and 2^o 45W in the Brong Ahafo Region of Ghana. It shares boundaries with the Sunyani District to the North, Tano District to the northeast, Dormaa District to the northwest, Asunafo District to the southwest and Ahafo Ano District (Ashanti Region) to the southeast. With a total land surface area of 150 km^2, the district is one of the smallest in the Brong Ahafo Region. There are a total of 117 settlements in the district and four traditional paramountcies, namely:- Kenyasi No.1, Kenyasi No. 2, Hwidiem and Acherensua (Asutifi District Profile,1996). For the purpose of this study the District was divided into two, North and South because these two areas are separated by the Asukese forest reserve. In the North, Gambia No.1 and Gambia No.2 were chosen as buying centers with Krakyekrom and Kasapin as producing centers. In the South, the twin towns of Kenyasi (Kenyasi No.1 and Kenyasi No.2) and Hwidiem were chosen as the buying centers with Obengkrom and Amanfrom as producing centers.

3.3 Climate

The area under consideration lies within the confines of the Wet Semi-Equatorial Climatic Region of Ghana. The highest mean monthly temperature is about 30^{o}C which occurs between March and April with the lowest of about 26^{o}C being recorded in August. The average relative humidity is about 75%. The mean annual rainfall is between about 130cm and 150cm. The rains occur almost throughout the year with a double maxima characteristic being discerned. The first maximum occurs between May and July with the second coming between September and October (Dickson and Benneh, 1980).

3.4 Vegetation

The District has a moist semi-deciduous forest. This vegetation has however been disturbed by human activities, notably farming, lumbering and occasional bush fires. There are, however, large areas of forest reserves. These include the following:-

Biaso Shelter Belt	:	29.5km^2
Bia Tam Forest Reserve	:	91.34km^2
Asukese Forest Reserve	:	180.09km^2
Goa Forest Reserve	:	23.75km^2
Desiri Forest Reserve	:	150.95km^2

These forest reserves together cover a total of about 475.63 square kilometers, about 30% of the entire land surface area of the District. The forest reserves have fauna and varied flora of high economic value, e.g. elephants, monkeys, deer and medicinal herbs etc (Asutifi District Profile, 2006).

These extensive forest reserves stocked with timber have given rise to lumbering on a large scale. The economic trees in the forest include wawa, odum, and mahogany among others. In spite of this logging, there is no large scale sawmill plant in the district (Asutifi District Profile, 2006).

3.5 Topography and Drainage

The district lies within the forest dissected plateau physiographic region with average height of about 700 feet above sea level. The lowest part is about 650ft above sea level found along the river basins whilst the highest point is found within a chain of mountains in the northeast reaching a height of 1400 feet above sea level. The Tano River and its many tributaries, which include Nsubin, Goa and Ntotro exhibit dendritric pattern of flow. These youthful fast following rivers have cut up the plateau surface giving rise to the dissected nature of the plateau (Asutifi District Profile, 2006).

3.6 Soils

A study conducted in the sub-region by the Soil Research lnstitute of Kumasi in 1980 revealed the following soil Associations:-

(a) Kumasi Association found in the southeast of the district around Asikasu.

These soils are recommended for tree crops such as cocoa, coffee, citrus, oil palm and avocado pear. Food crops such as maize, legumes, cassava, plantain and cocoyam also do well on it. Where the soil occurs on valley bottoms, they are recommended for the cultivation of rice, sugar cane and vegetables.

(b) Asuansi Kumasi/Offin Association which occurs around Nsuta, Agravi and Gambia No. 1. These soils are like the Kumasi Association but differ in their rock basement. They are underlain by Dahomeyan rocks which are not suitable for

mechanized cultivation. They can support cocoa only for a limited period of time but are excellent for semi-perennial food crops like plantain, banana, etc. The soil

(c) Hwidiem Association which occur along the Goaso-Tepa major road around Nkaseim, Bronikrom, Hwidiem and extending to Kenyasi. These soils respond to phosphorus and other fertilizer application. They are good for the cultivation of food crops such as plantain, cassava and oil palm.

(d) Akumadan Bekwae/Oda Complex Association occurring around Kokuom, Biaso and Atwidie, Kensere and Goatifi among others. This soil is the dominant of the soils and are suitable for a wide range of arable crops including maize, cassava, plantain, cocoyam and vegetables. When the soil occurs on upland and slopes, tree crops like cocoa, citrus and cola are recommended. On valley bottoms as at Kensere, rice and sugarcane cultivation is recommended.

(e) Batia Association which are like (d) above but require proper management. The soils respond well to fertilizer application. Twabidi, Mankesim and Tenso fall within this soil zone.

(f) Besiesie Sutawa Bejua Compound Association: Soils of this Association have little agronomic value but are recommended for forest reserves and wildlife conservation. Majority of this soil type is within the Asukese Forest Reserve. Some few series within this soil Association can, however, support food crops with proper management.

(g) Birim-Awaham/Chechewere Kakum Association: These soils are recommended for vegetables, legumes, rice and sugar cane. They occur along the banks of the Tano

River with settlements like Sienchem, Mehame, Ntotroso all falling within this zone. It could also support maize and other food crops with good management.

With all these potentials, agriculture must be given the priority and attention it deserves so that it can play its proper role in the development of the district.

3.7 Geology and Mineral Availability

The district is underlain by Precambrian rocks of Birimian and Dahomeyan formation. This Birimian formation are known to be the gold bearing rocks. There are gold deposits at Kenyasi, Ntotroso, Nkrankrom, Acherensua and Wamahinso. Diamond has been discovered at Wamahinso. There is also widespread deposit of sand and clay, sand at Kenyasi, Gambia No. 2, Hwidiem and Acherensua and clay at Yawkra, Nsunyameye and Dadiesoaba. Birimian rocks also have a high potential for manganese and bauxite. There are rounded outcrops of granite found over the Birimian rocks as at Kwadwo Addae Krom, Goatifi, Georgekrom and Konkontreso. These rocks have a high potential for iron and bauxite (Asutifi District Profile, 2006).

3.8 Population Size and Growth Rates

According to the National Population and Housing Census of 2000, the District had a population of 84,475 with a growth rate of 2.8% per annum. The implication of a low population growth rate is the concentration of population in the working age group. This situation augurs well for development. However, the quality of the labour force in terms of health and skill has an obvious implication (Ghana Statistical Service, 2000).

3.9 Age and Sex Structure

As a result of the low population growth rate in the District about 50% of the population fall within the working age group compared to the national estimated figure

of 51%. The implication for development is that many hands would be available for production. This underscores the great need to create job avenues to absorb the large labour force. A total of 51% of the estimated population is female and the remaining 49% male. This gives a sex ratio of 1:1.04 males to females. The dominance of females over males is a reflection of a nationwide trend where the estimated ratio is 1:1.03. The need to target women in any development programme in the district can, therefore, not be over emphasized (Asutifi District Profile, 2006).

3.10 Population by Settlement; Rural/Urban Split

The district has about 117 settlements and out of this only Kenyasi and Hwidiem are urban settlements having populations of over 5,000. The District can be described as typically rural. As of the year 2006 it was estimated at 15% urban, whilst that of the nation is 37.4% (Asutifi District Profile, 2006).

3.11 Migration

About 54% of the people in the study area are migrants mainly Ashantis and Bonos. These immigrants have, however, stayed in the district since time immemorial and hence do identify with the area and with development activities (Asutifi District Profile, 2006).

3.12 Social Amenities

The district has one major health facility, namely, the Saint Elizabeth Hospital located at Hwidiem. This facility serves as the district hospital to Asutifi and referral centre for Asunafo district and is owned and managed by the Catholic Church. The 130-bed capacity hospital has 2 resident medical officers and renders both surgical, medical and obstetric services to the people. Besides, it has facilities for screening blood for

HIV and it runs a TB programme. There are five other health stations manned by the Ministry of Health namely:- Kenyasi Health Centre, Gyedu Health Post, Acherensua Health Post, Dadiesoaba Health Post and Gambia MCH Clinic. In addition to these facilities, there are seven (7) structural community clinics located at Gambia No. 1, Goamu-Koforidua, Kenyasi No.2, Amamaso/Gyedu, Sunkwa/Dadiesoaba, Nkaseim Community Clinic. The rest are, three private maternity homes located at Kensere, Kenyasi and Twabidi and three (3) Homeopathic Clinics and over sixty (60) trained Traditional Birth Attendants (Asutifi District Profile, 2006).

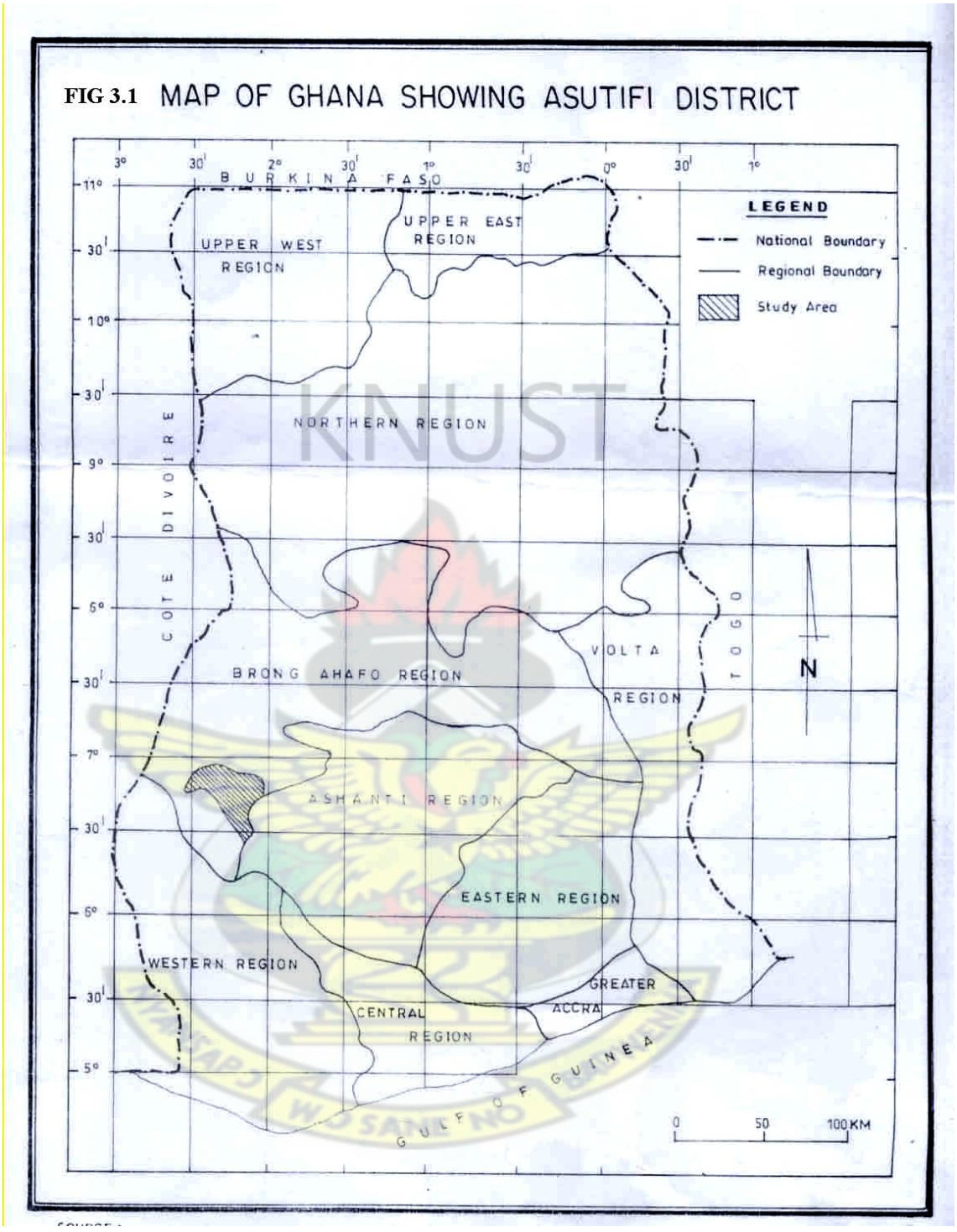
Only 3 communities (Kenyasi, Hwidiem and Acherensua 15%) have access to small town water systems. However, three others (Ntotroso-Gyedu, Wamahinso and Dadiesoaba) were projected to be served by the end of 2008. The rest use boreholes (20%), hand dug wells (23%) streams for domestic use (35%) and others (7%).

All the major towns in the district have access to electricity. About 10% of the district is connected to the national grid.

Only 7 communities have access to telephone services. These are all radio phones which operate either on Kumasi or Sunyani codes. Mobile telephone services like MTN, TIGO, and Onetouch are also available. Postal services are available in 8 communities (Asutifi District Profile, 2006).

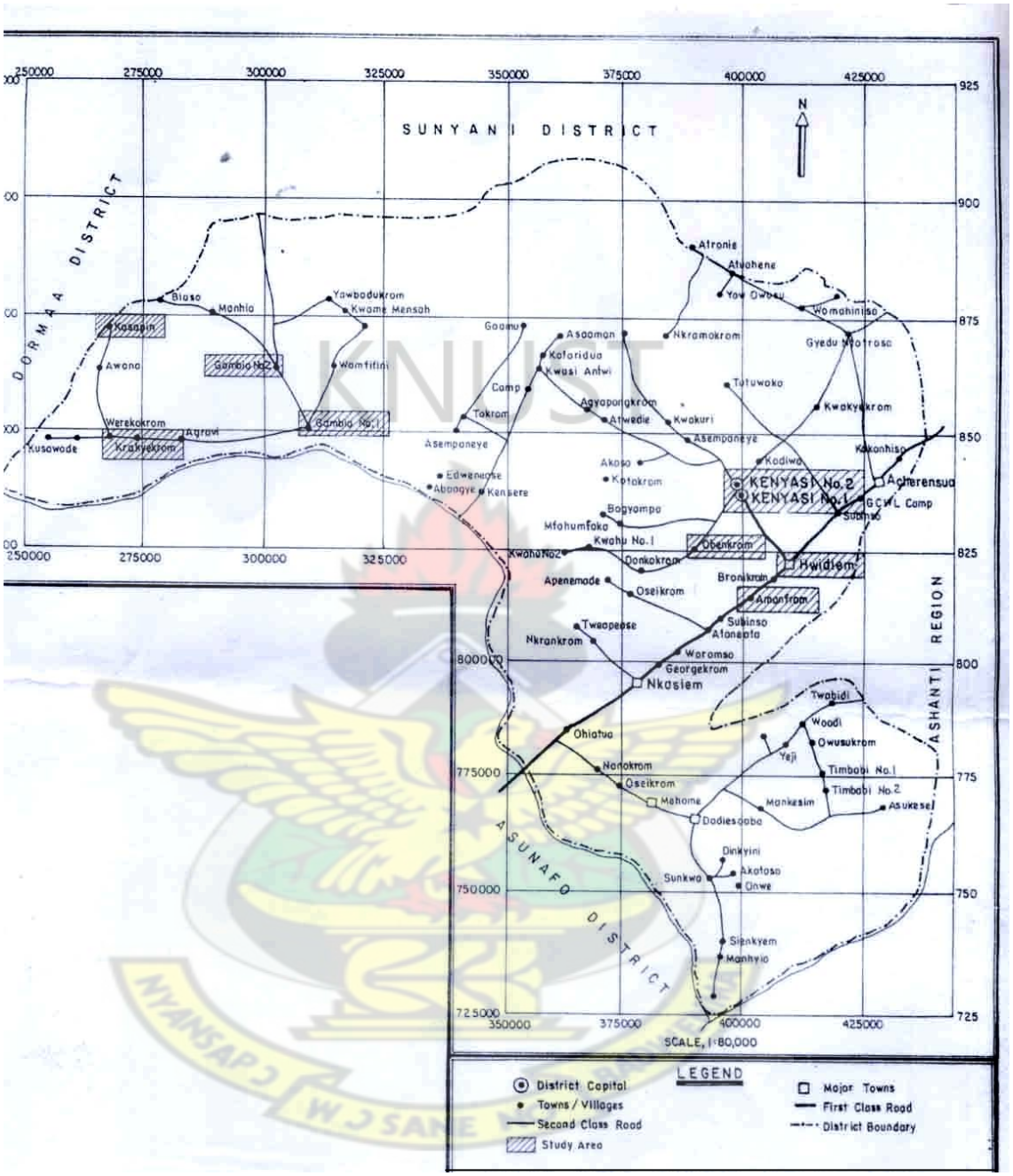
Basic schools are dotted all over the district and the pupils have easy access to them. However, the structures of a few of them need improvement. There are 4 senior high schools but no tertiary institution in the district.

The people in the district have access to banks such as Agricultural Development Bank, Ghana Commercial Bank, Ecobank and 3 Rural Banks with Branches spread in the district



Source: Department of Geography and Resource Development, KNUST, (1977)

FIG 3.2 MAP OF THE ASUTIFI DISTRICT SHOWING KENYASI AND SURROUNDING VILLAGES.



Source:- Asutifi District Profile (2006)

3.13 Farming Seasons and Crops Grown

This area has agricultural seasons conforming to other areas of southern Ghana. It enjoys two farming seasons in the year. The minor season starts from September when clearing and planting takes place to early October with harvesting coming on from December to January. The major season has the clearing and planting period from February to March with the crops being harvested from June to August (Asutifi District Profile, 2006).

The widespread occupation of the people in the study area is farming. The crops grown and the cultural methods adopted by the farmers do not vary within the selected areas. While cocoa is the major cash crop, there are others, like oil palm and coffee also gaining prominence. But crops like cocoyam, plantain, maize, cassava and vegetables (like pepper, garden eggs, tomatoes and beans) constitute the main foodstuffs grown.

3.14 Foodstuff Distribution Channels

Distribution of local foodstuffs are through four main channels whose length and complexity relate to the distance between the consumer and the producer. They are:-

(a) Farmer – Consumer

(b) Farmer – Retailer – Consumer

(c) Farmer – Wholesaler – Retailer – Consumer

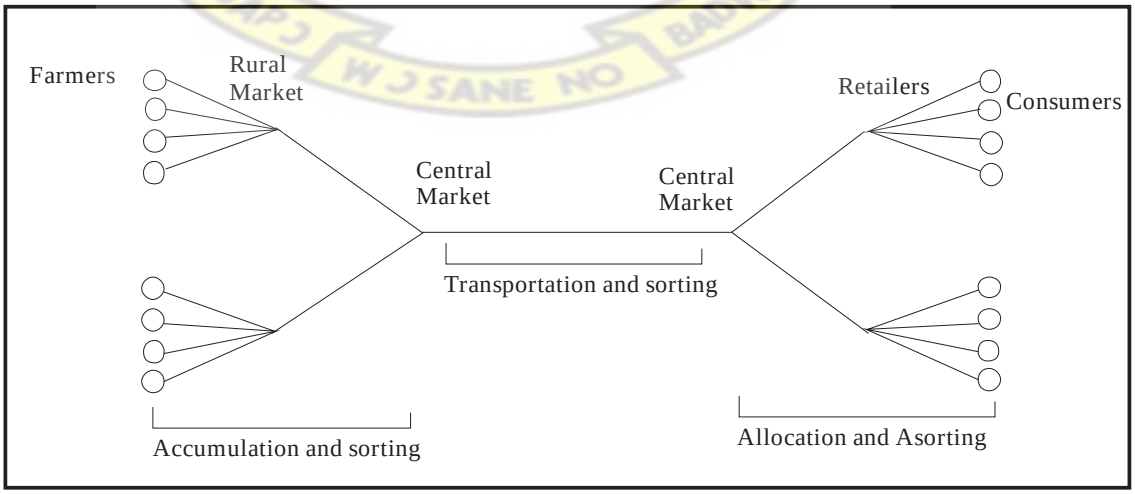
(d) Farmer – 1st Wholesaler – 2nd Wholesaler – Retailer – Consumer
(*Source: Adopted from Nyanteng, 1978*)

Sub-channels (a) and (b) are those found in the farming villages selected and semi-urban areas (like Kenyasi No.1, Kenyasi No.2, Hwidiem, Gambia No.1 and Gambia No.2) where the buyers live in the same locality as the farmers. In case of (a) the foodstuffs are either sold at the farmer's premises or both the farmers and the buyers meet at the local market. The local retailers in sub-channel (b) get their items either by

collecting them from the farms, villages or by buying from farmers during the public market days. Since most households in the rural areas produce the bulk of their food requirement, the quantity of foodstuffs which passes through these two sub-channels (a, b) is relatively small. The bulk passes through sub-channels (c) and (d). The last two sub-channels convey foodstuffs to towns and cities like Tepa, Sunyani, Dormaa Ahenkro, Techniman, Kumasi, Sekondi-Takoradi and Accra. The urbanization process which has engendered rapid increase in the demand for food in Accra, Tema, Kumasi and Sekondi-Takoradi where about 50% of traders (buyers) interviewed came from and the longer distances between the farm gates and consumers introduce many links into the channel system.

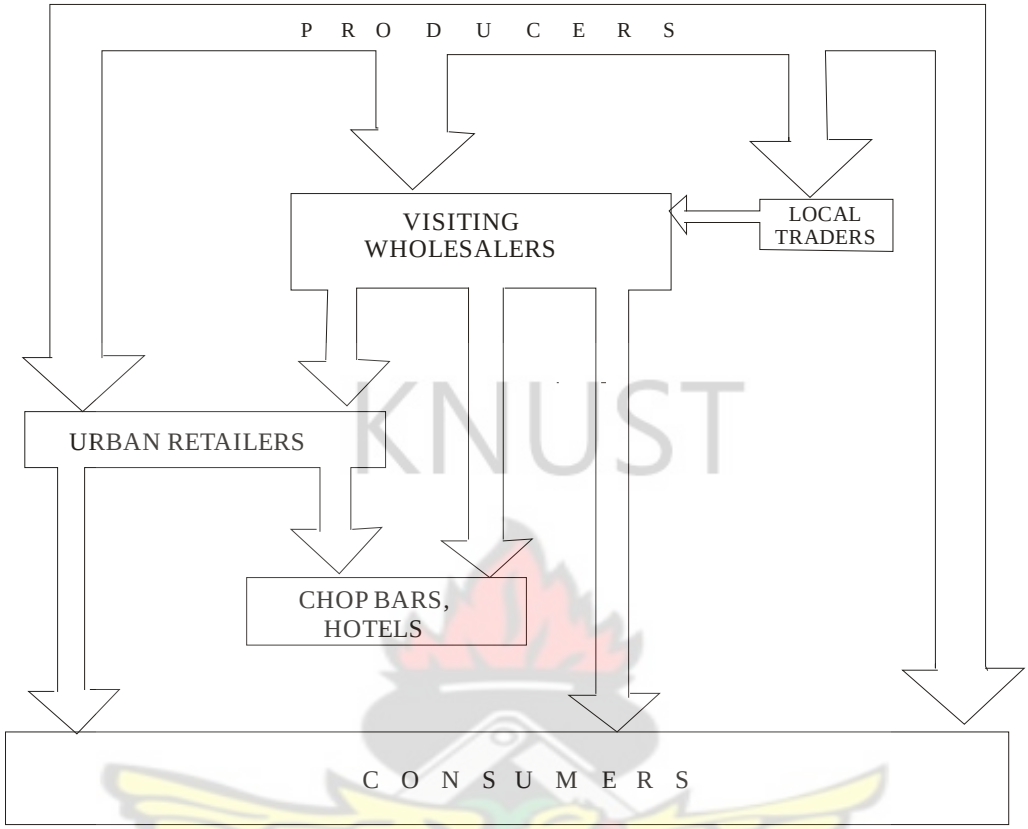
The complexity of sub-channel (d) is illustrated by figure 3.3 whilst figure 3.4 shows the channel of distribution of agricultural produce in the country. As illustrated by figure 3.3, the produce of the farmers are conveyed to the rural market where it is sorted for buyers. After the traders have bought the produce, they accumulate them for transportation to central depots-central market, where they are distributed to retailers who in turn sell them to final consumers after allocation and assorting.

Fig. 3.3 The Rural – Urban Distribution Structure of Farm Produce



Source: Adapted from Kwada, (1981)

Fig.3.4 Channel of Distribution of Agricultural produce: Marketing Channel



Source: Adapted from Nyanteng, (1978)

The distribution channels of farmers produce is represented like what was observed by Nyanteng (1978) in figure 3.3 which depicts that the producers sell majority of their produce to visiting wholesalers (buyers) some to local traders in the local market and also to urban retailers from the neighbouring towns. With the exception of chop bar operators and hoteliers who at times buy part of the produce, all the remaining channels get down to the final consumers at distant places through the traders. Using the thickness of the arrows as indications of the importance of channels one can readily infer that it is the visiting wholesalers who handle the larger part of the produce.

3.15 Existing Marketing Facilities

Marketing of foodstuffs is partly determined by the physical facilities available to the participants. Transport is, therefore, very important here (roads and vehicles). Storage facilities, processing facilities and the equipments of the various selling places are also of equal importance. The findings of the writer and to a greater extent his own personal observations are below.

3.16 Transport

In spite of the fact that the Brong-Ahafo Region cannot be ranked as the first among the regions with average poorest network of roads in the country, the Ahafo area experiences one of the poorest in the region. The main transport routes are footpaths or bush tracks and roads. Apart from Hwidiem none of the towns or villages selected for the study has a tarred road linking it directly to Kenyasi No.1 which is the capital of the Asutifi district. The twin-towns of Kenyasi which constitute the district capital have none of its red/ earth surfaced roads linking the other major towns tarred. Obengkrom is linked to Kenyasi by a 5km rough-surfaced feeder road which is rendered almost impassable to trucks during the rainy seasons. Except by footing which will enable farmers commute during these times. Amanfrom has a feeder road linking the area to the capital. It is characterized by deep potholes and broken bridges. Most of the bridges across rivers have been constructed by well arranged fallen trees. The villages of Krakyikrom and Kasapin in the North of the study area have very bad, feeder roads linking the buying centers of Gambia No. 1 and Gambia No. 2. Their muddy nature isolates the villages from the other areas during the rainy season. The state of these roads is a major constraint to many traders. They, therefore, do not go to most of the villages regardless of the abundance and the relative cheaper prices of foodstuffs. Another aspect of transport facilities lacking in the area is the limited number of

vehicles for carting foodstuffs. Lorries, trucks and tractors form the main mechanized transport in the area. Apart from Kenyasi and Hwidiem, which by virtue their sizes, have some number of cars plying between them and Kumasi, very few vehicles ply the other villages under consideration.

With respect to the other villages the situation is more difficult. Few feeder roads have one or two lorries plying on them everyday, even when the roads are motorable. Obengkrom, for instance, has very few trucks which link it with Kenyasi. Even these vehicles regularize their trips only on market days at Kenyasi which fall on Thursdays and Sundays. The situation at Kasapin and Krakyikrom are even worse. There are no identified vehicles which ply these roads, therefore, lorries go there only on special purposes among them being those hired to pick up a sick persons or those hired to cart foodstuffs bought by traders.

Lack of vehicles and the poor nature of the feeder roads make traveling on the roads woefully slow. Some of the drivers interviewed on these roads lamented on the long travel time. For instance, the drivers use more than one and half hours to cover the distance of 15km from Gambia No. 1 to Kasapin. The infrequent nature of trucks plying these towns make them overload when they go to these towns with foodstuffs and passengers which in turn make these trucks break down thereby aggravating the situation.

3.17 Processing

Few facilities for mechanical processing of farm produce like maize, rice and cassava are available to small farmers in the study areas. There are small mills for making flour from dried cassava and maize and also for milling rice. These facilities are clustered in the big towns of Kenyasi No.1 and Kenyasi No.2 with the former having two and the latter having four mills. Obengkrom, Amanfrom and Krakyekrom each has one corn mill but there is none in Kasapin. The farmers from these villages have to foot

10km to Gambia No.1 to grind their dried cassava at the grinding mill into cassava flour. Failing that, they use the traditional method of pounding the dried cassava and maize using mortar and pestle.

3.18 Storage

Storage facilities in these areas are worth mentioning. Even though little storage is done at the farm level, traditional materials are used exclusively. Maize is the most widely stored foodstuff. Traditionally or locally made sheds or cribs commonly called "Apata" are mostly used. Except in few instances where rooms with partly broken walls are used for storage.

Other foodstuffs are usually stored in the open air and on the floors of farmers' kitchen. Storage facilities for highly perishable farm produce are non existent in the study area. Unfortunately there are no government institutions or other institutional buyers in the area for these foodstuffs. The government's effort to preserve maize which has led to the building of silos has not been extended to the area even though it produces a high quantity of maize.

3.19 Markets

With regard to marketing of foodstuffs in Ghana, local markets feature prominently. Considering the area under study, Kenyasi and Hwidiem have major weekly periodic market days (Sundays and Thursdays) for the former and Tuesday for the latter. The market in Kenyasi has well built block structures but that of Hwidiem is in makeshift structures. There have been stalls built for the people of Hwidiem but because the town folks were against the site, they have refused to use them. With the buying centers in the north made up of Gambia No.1 and Gambia No.2, the markets comprise makeshift structures of sticks with palm fronds covering them. Their market

days are Tuesdays and Fridays respectively. The producing villages of Kasapin and Krakyikrom do not have any market structures or market days.

Even though in all these villages some foodstuff are sold daily along the streets, the streets are virtually empty on market days at the market centers since almost all the farmers send their produce to the market centers. Other traders sell some foodstuffs on tables infront of their houses in addition to those who send theirs to the streets. Thus the idea that farmers in most villages or farming areas do not buy foodstuffs as each farmer produce enough for his household consumption is not wholly tenable. Generally, foodstuffs grown are fairly well distributed throughout the selected places.

CHAPTER FOUR

MARKETING OF FARMERS' FOODSTUFF

4.1 Introduction

This chapter deals with the results of the analysis of data gathered from the field survey. It looks at the demographic characteristics of respondents, in this case farmers and buyers. It also discusses the marketing problems identified by farmers by looking at how it impacts on the farmer's productive capacity.

4.2 Social Characteristics of Farmer Respondents

The survey revealed that the farmers produce and sell a large range of crops. Out of the 160 farmers interviewed 29% were females with the remaining 71 % being males. Table 3.1 shows the age structure of respondents.

TABLE 3.1:- AGE STRUCTURE OF FARMERS

AGE IN YEARS	MALE		FEMALE		TOTAL	
	No.	%	No.	%	No.	%
19 – 30	20	11	8	5	28	16
21 – 40	32	20	12	8	44	28
41 – 50	48	30	20	12	68	42
50 and over	14	10	6	4	20	14
TOTAL	114	71	46	29	160	100

Source:- *Field survey 2006*

As depicted by table 3.1, the farming activity is still in the hands of the aged with a moderate number of the youth. Considering marital status, it was observed that 58% of the farmers were married. It was noted from focus group discussions that farmers had high number of dependents. This is indicative of the importance of family labour as the main source of labour in the area.

TABLE 3.2:- MARITAL STATUS OF FARMERS

MARITAL STATUS	MALE %		FEMALE %		TOTAL	
	No.	%	No.	%	No.	%
MARRIED	64	40	28	18	92	58
SINGLE	24	15	4	2.9	28	17.9
WIDOWED	10	6	0	0	10	6
DIVORCED	16	10.1	14	8	30	18.9
TOTAL	114	71	46	29	160	100

Source:- Field survey, 2006

It was also noted from the focus group discussions that most of the farmers had no formal education. While the high level of illiteracy may suggest that farming does not require any high level formal education, it nevertheless had a retrogressive effect on the farming activity.

4.3 Social Characteristics of Buyers

A total of 136 farmers, representing 85% sold their produce to buyers. Small quantity of items especially the highly perishable ones like tomatoes, pepper, and cassava were sold by female farmers and wives of male farmers in retail or semi-wholesale quantities in the streets.

One hundred and forty out of 160 farmers interviewed, sold their produce to private traders who came from outside the locality. Also of the 80 buyers, 72 were females with the remaining 8 being males thus showing the dominance of women in the trading (buying) business. The age distribution (table 3.3) shows the dominance of the youth 90% in the trading business with the remaining 10% consisting the aged. This reveals that, the aged no longer find the wholesale trade attractive because it needs a lot of moving around and coupled with the bad nature of the road network pose a threat to their health.

TABLE 3.3:- AGE STRUCTURE OF BUYERS

AGES IN YEARS	MALE		FEMALE %	
	No.	%		
16 – 25	2	2.5	24	30
26 – 35	5	6.25	36	45
36 – 45	1	1.25	12	15
46 – 55	-	-		-
55 and over	-	-		-
TOTAL	8	10	72	90

Source:- Field survey, 2006

The buyers from outside the locality consider the trade as their major occupation whilst the local traders have farms in addition. Most of the buyers deal in the food crops but the most popular ones are rice, maize and plantain.

4.4. Marketing problems

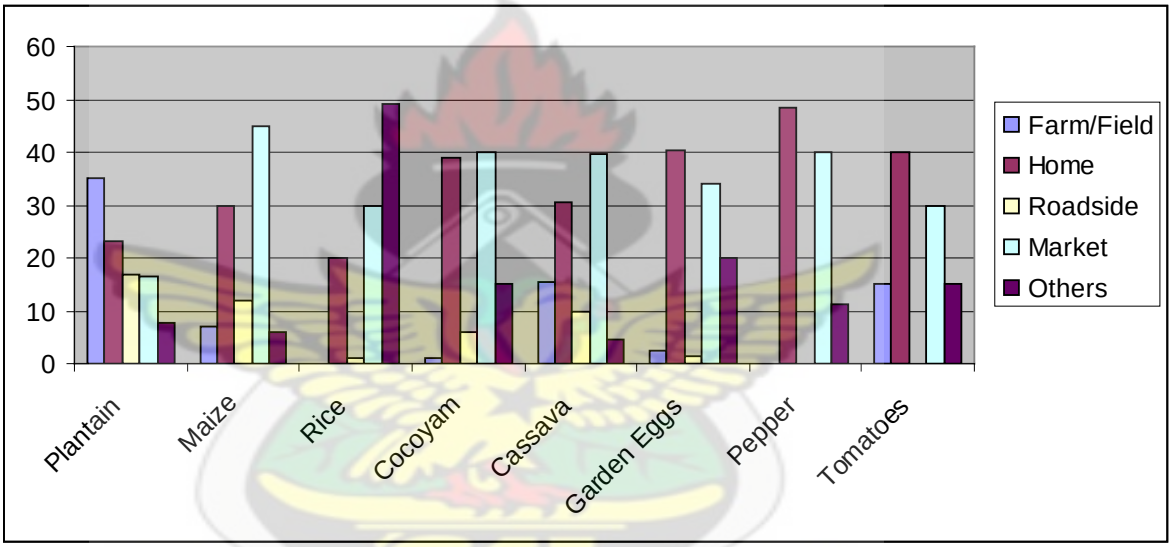
A host of problems were discovered during the survey. Among these are transportation difficulties, infrequent visit by buyers, pricing and conditions of sale, inadequate processing facilities and difficulty in getting credit. Even though the problems were recognized as being interrelated, their effect differs in magnitude. They are therefore analysed according to their magnitude of seriousness from the farmers' perspective.

4.4.1 Transportation difficulties

Transportation difficulties were the major constraint in foodstuff marketing in the study area. It is a known fact that efficient transport network is a prerequisite for efficient distribution system it was therefore not surprising that farmers complained about the inefficiency of the transport network as affecting efficient distribution. Farms in the area are largely scattered, the cost in collection of small dispersed product quantities is high and this, further increases the transaction cost. Also, transport charges

are very high especially during the wet season, when the roads are further damaged. Farmers therefore transport their produce by head porterage to the nearest place where buyers can be found. The research revealed that quite a number of farmers transport their produce in this manner to places where sales were effected as no significant sale is done on the farms. It was only with plantain that the greatest number of growers sold their produce on the farms since some of the traders went to the farms. This was followed by cassava.

Fig 4.1:- PLACES WHERE FARMERS SOLD THEIR PRODUCE (%)



Source:- Field survey, 2006

With the remaining crops a greater proportion sold their crops outside the farm. This therefore implied that majority of the produce were transported to places like the home which recorded the highest percentage for almost all the crops. Market was ranked second, and the roadside and other places (streets and on table infront of houses) ranked third. Head porterage constituted the principal means of transport. The major sources of labour for the head porterage was family and hired labour. The hired labour comprised women who were paid with foodstuff, and school children who collected cash.

Furthermore, because most of the vegetables cannot be stored for long periods of time, with the limitation of head loading, large quantities of such vegetables rot on the farms. This in no doubt reduces the quantity of food produced that actually is sold. Farmers therefore, cultivate tracts of land only large enough to be handled by the family and other available resources they can marshal.

The transportation problem is not only restricted from the farm to roadside or home or local market but from the farmers villages and the major market centres like Kenyasi. As stated earlier, the nature of the roads also offers a constraint even when the foodstuffs have been conveyed to the village depots. About 70% of farmers from Amanfrom and Obengkrom were more concerned about the nature of the roads as they had the worst road network. At times, the farmers mobilize themselves to hire a tractor from Kenyasi to convey their foodstuffs to the local markets where the buyers would be waiting. This is done as the buyers are not prepared to bear the heavy charges by the drivers to convey the foodstuffs. This increased the farmers' transaction cost which further reduced their profit margins.

The situation can be analysed further when one compares the carting of maize on better accessible roads and farms located several kilometers away from main roads through rough surfaces of which Kasapin – Obengkrom – Kenyasi and the Gambia - Hwidiem – Kenyasi roads give a good example. Results from data collection showed that the estimated average cost for producing one bag of maize (mini bag of 50kg) was Gh. ¢18.00 (*all prices were recorded in 2007*). The cost of transporting a mini bag from Obengkrom to Kenyasi was about Gh. ¢2.50 The following analytical model formulated by Addo (1984) was used

FR = Pf – Cf – dijt (Eq.1) where:

FR = Farmers' net returns;

Pf = Price paid for a mini bag of maize at the market (i.e. Kenyasi market)

Cf = Production cost of a mini-bag of maize;

Dij = distance (in km) between the producing point (i) and the intermediate market (j);

t = transport cost per unit per kilometer.

Price paid for a mini bag of maize (Gh. ¢30.00) was obtained from buyers and sellers at the Kenyasi market. By superimposing the available data into the model, the following result is obtained.

FR = 30 – 18 – 2.5

= 30 – 20.5

= Gh. ¢9.5

The consumers cost per unit (a mini-bag) in a given urban centre can be calculated to assess the traders' net profit for comparison with that of the farmers. The following model was used:

Pcj = (Pfj + K) + dtij (Eq.2) where

Pcj = consumers cost per unit at (j) retail centre (i.e. Kumasi);

Pfi = Price paid to farmer per unit at (i) immediate market (Kenyasi);

K = Middlemen's charge per unit;

d = distance commodity is transported;

t = transport charge per unit of farm produce;

Substituting data on the model the following results were obtained:

Pcj = 30 + 10* + 5

= 30 + 15

= 45

(*Figures were arrived at through interview with middlemen)

Comparing the analysis it becomes clear that at an average price per unit (one mini-bag) of maize at 2007 prices, a farmer at Obengkrom obtained a smaller net income on a bag of maize than a middleman. Thus the middleman got as much as Gh. ¢5.50 more (K – FR or Gh. ¢15.0 – Gh. ¢9.5.0). This is because as farmers catered for almost all the transport costs; the middlemen transferred it on to the consumer. This analysis therefore, gives premium placed on transportation problems by farmers in marketing their foodstuffs a justification.

4.4.3 Infrequent Visit by Buyers

The infrequent nature of buyers' visit to the producing areas confirmed the assertion that transportation problems had adverse effects on the marketing of farm produce. The farmers complained also about the small number of the buyers. On the average between 2 and 5 buyers visited, Amanfrom and Obengkrom per week during harvesting period. It was no wonder then that about 75% of the farmers in the villages complained about this situation. However, there was an average of 6 buyers who visited Kenyasi and Hwidiem. Considering the nature of roads stated earlier, one can suggest a possible correlation between the nature of the roads, the availability of transport facilities and the number and frequency of visits by buyers to the producing areas. The problem is clearly seen when analysed from the perspective of the buyers.

TABLE 3.4:- FREQUENCY OF BUYERS VISIT

NORTH		**SOUTH**	
Town/village	Average visits per week	Town/village	Average visits per week
KENYASI No.1	6	GAMBIA 1	5
HWIDIEM	6	GAMBIA 2	6
OBENGKROM	5	KRAKYIKROM	4
AMANFROM	3	KASAPIN	2

Source:- Field survey, 2006

As depicted in table 3.4, the highest number of buyers visits were to the bigger towns. Even though the frequency of the visits has been averaged, the highest frequency occur in the peak or major season of harvest which happens between March and April and also between April to August with the lowest frequency in the lean or planting season. The lowest average number of buyers were recorded in Amanfrom and Kasapin which are farther away from the market towns of Hwidiem and Kenyasi No.1 as compared to Obengkrom and Krakyikrom which were comparatively nearer. This confirmed the transportation problems earlier highlighted that poor roads result in fewer visits. Also, this attested to the fact that very small quantities of various foodscrops were bought at a time. Under such conditions, farmers were compelled to sell their produce at very reduced prices (since storage facilities are almost non-existent) or the foodstuffs were left to rot either on the farm or at home.

Several reasons were given by the buyers for the nature of their visits. The most important reasons were the lack of vehicles, high transport charges and the bad nature of the roads. For instance about 75% of traders interviewed who went to Amanfrom complained of infrequent movement of vehicles to and from the village. They further observed that, the road was nothing but a death trap to vehicles which ply the road. Others going to Kasapin preferred to walk the 6km journey to Krakyikrom where they could find vehicles than to wait for vehicles which scarcely came there. Also, they considered it safer to walk than boarding the vehicles on the difficult-to-pass road.

With the infrequency of buyers coupled with insufficient number of traders acting as middlemen and for that matter the small quantity they were able to buy, the buyers constituted themselves into groups, who dictated prices to farmers. In a bid to dispose off their produce during the major harvest season so as to avoid spoilage, the farmers were forced to reduce prices drastically. Obviously this situation served as a disincentive to increased production.

4.4.4 Pricing and Condition of Sale

The question of pricing was realized as one of the important problems. Almost all the farmers encountered problems in getting fair and reasonable prices – prices which were higher enough to cover their expenses (production costs) and also, with a reasonable profit margin to urge them on. They complained of low prices which came about immediately after harvest. A few months later, prices rose steadily reaching their peaks just before the next harvest.

As shown by the data, majority of the farmers sold their various crops immediately after harvest. In case of the vegetables which were difficult to store by the farmers (i.e. tomatoes and garden eggs) everything was sold either immediately after harvest or at most a shorter time after harvest. With the root crops such as cassava and cocoyam, and also, plantain, they were sold after harvest to at most three months. Maize and rice presented a different picture as sales spread over the twelve months period. This exception was explained by the fact that cereals could be stored for comparatively longer periods of time without great losses.

Considering the place and condition of sale what was realized was similar to the observation made by Nyanteng and Apeldoorn (1971) that prices are actually found to be higher in market places than at home and in the field. Nevertheless, it was observed that some farmers preferred sale at the home and in the field. This relieved farmers from the problem of transporting their foodstuff to the market places and also when the buyers went to the homes of farmers they were seen to be in great need for their commodities and therefore the farmers had a relatively better chance to haggle out with the buyers. However, it was not always the case where they would have to wait for the buyers in the homes. For most of the cases they had to carry them to the market for fear of the buyers not coming to their homes, and for fear of the produce getting spoilt since they do not have any good storage system in place.

TABLE 3.5:- PERCENTAGE OF FARMERS WHO SOLD THEIR PRODUCE

CROP	NO.OF FARMERS WHO PRODUCED	F+	1	2	3	M 4	O 5	N 6	T 7	H 8	S 9	10	11	12
Plantain	50	96	10	3	-	-	-	-	-	-	-	-	-	-
Cocoyam	30	95	16	4	1	-	-	-	-	-	-	-	-	-
Maize	55	15	10	12	15	18	7	4	3	9	2	2	-	-
Rice	30	10	16	13	25	18	10	7	-	-	4	3	3	4
Dried Pepper	20	55	24	15	8	6	2	1	-	-	-	-	-	4
Cassava	45	50	22	9	6	4	3	5	-	3	-	2		
Tomatoes	25	100	-	-	-	-	-	-	-	-	-	-	-	-
Garden Eggs	15	99	1	-	-	-	-	-		-	-	-	-	-
													-	-

Sources:- Field survey 2007. (F+ percentage of farmers selling immediately after harvest)

Most of the farmers through long experience, had rough estimates of their production costs. About 80% of the farmers interviewed stated that they based their current prices on satisfactory prices of the previous past. Despite this situation, the farmers were disadvantaged because if they kept on refusing prospective buyers as a result of low prices being offered, they would run into the problem of transporting the items carried to the market back, and also the risk of the items getting rotten. To prevent this situation, they chose to sell at the disadvantageous lower prices. This lack of market information always put the farmers in a disadvantaged position, with the buyers always having the upper hand at all times.

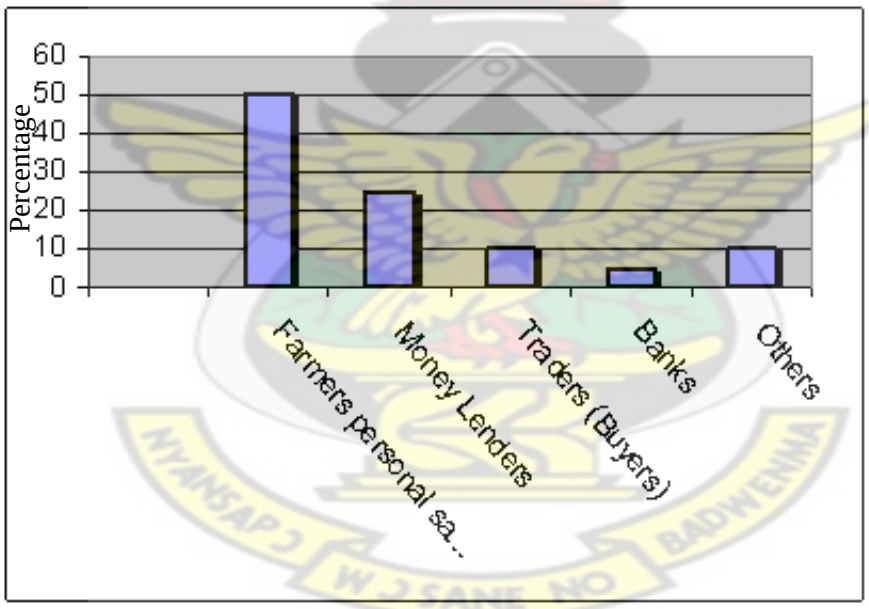
4.4.5 Storage and Processing Facilities

As stated by the Food and Agricultural Organization (1965), one of the most serious problems in marketing staple food crops in Africa is lack of efficient and adequate storage facilities. The storage system used by farmers in the study areas was inadequate and inefficient to protect their produce for even a short period of time. Structures constructed with sticks and thatch (commonly called *apata*), rooms with partly broken walls and kitchens were used. Specifically, maize, rice and pepper were the items which were preserved most on the erected structures which are regularly or intermittently heated by smoke from fire set underneath. With others like okra, tomatoes and garden eggs, they were stored in cool places by spreading them on the floors of rooms. These could not be preserved for more than seven days. With plantain, there was not a clear cut procedure for storage so they were disposed off as early as possible. Considering the root crops (cassava and cocoyam) the former is either soaked in barrels of water or buried in the soil but the latter was buried in the soil. However, they cannot last for more than seven days. The storage facilities are

effective in keeping off rodent and pests but ineffective against insect and fungal infestation. This situation often resulted in considerable post-harvest losses.

Related to the above problems was the lack of processing facilities. Processed foodstuff are comparatively easy to store and also reduces post-harvest losses. Yet, the little that was processed by milling (cassava to cassava dough, corn dough and ground pepper) were kept for consumption but not enough to be sold. Faced with this dilemma, farmers sold their crops at the earliest opportunity for fear of high storage losses even if prices were not satisfactory. The poor farmers had to continually contend with high risk and uncertainty in marketing of produce.

Fig. 4.2 Farmers' Sources of Credit



Source: Survey data 2006

4.4.6 Access to credit

Even though the farmers complained of the absence of good credit facilities, their sources of finance identified were monies from their own personal sources, from money lenders, traders (buyers), banks, and relatives and benevolent people. From figure 4.2 it can be realized that the main source of farmers' finance is their own personal sources, 50%. Credit from money lenders constituted 25%. Traders (buyers)

10%, Banks 5% and others (relatives and benevolent people) 10%. With the exception of money from the farmers' own resources, other sources of finance like money lenders, traders, buyers and banks were found to have "unfavourable conditions" or had "strings" attached which often compelled the farmers to take certain decisions against their wishes. This explained the reason why they relied more on their own sources than the others. For instance, it was revealed that farmers who received loans from money lenders often paid up to 50% interest, payable immediately after harvesting. A farmer at Amanfrom mentioned that in 2004 he borrowed GH¢100.00 (¢1,000,000) with the promise to pay GH ¢150.00 (¢1,500,000) after harvest. The money lender threatened to auction his farm should he failed to keep to the agreement. Consequently, he sold almost all his produce immediately after harvesting to pay off the loan.

Credit given out by traders was repaid with foodstuffs just after the harvest when prices were low. In situations where indications were clear that prices would go up, (as a result of generally small yield by all the farmers which is associated with future high prices) the traders do not consider but buy the items at the ruling low prices. This always went to the advantage of the traders but to the disadvantage of the farmers.

The least source of credit was from the banks. The reason given was that majority of the farmers were often unable to provide collateral security which was a prerequisite for accessing bank credit and also those who qualified for the loans received them at the wrong time – after they have planted the crops instead of at the time of field preparation. Others also refused to collect the loans for avoidance of the risk of being unable to pay back because of uncertainties surrounding farming. Eighty percent were not aware of the existence of any credit facilities offered by the banks. With the conditions attached to other forms of credit facilities available, farmers

preferred to rely on their own sources which were often not reliable as these were contingent upon farmers' yields and marketing which was in turn inefficient and shrouded in uncertainties. This situation did not provide any boost or incentive for increased production.

4.4.7 Impact of Marketing Problems on Farmers Decision

With a good understanding of the survey area, it could be established that at present many farmers produce very little for the market. With the exception of those who produced rice and to some extent maize and pepper (the first two not being the staple foodstuffs in the areas), most of the farmers do not produce primarily for sale. Land allocated for food crop production (especially for vegetables) were therefore relatively small.

Added to the above was the traditional societal perception that people in the village who always bought from the market items or basic household food needs that they could easily produce were lazy. This has made practically farming subsistence. Every farmer interviewed cultivated the food they needed for their family and their labourers in order to concentrate much on the cultivation of cash crops which had gained prominence among the farmers as a result of the losses made in food crop production. The farmers' decision on what to produce was not necessarily determined by considerations of marketing opportunities alone. It was discovered that the supply of food crops to the market was not only a consequential function of the total production and household demand of farmers, but it was also influenced by economic incentives coupled with availability of market. For, as the production was not basically subsistence oriented, but cash or commercial oriented any problem which rendered the exercise unprofitable made it dissuasive.

The possibility to sell the produce was greatly reduced by the problems of transportation. With head porterage being the chief means of transporting food as a result of poor road network of transport facilities, women and school children were being used as the main carriers. This means of porterage made the quantity of foodstuffs available to be inadequate. It was no wonder then that farmers reduced the land they allocated to food crops grown.

The poor road network further effected a reduction in the quantity of foodstuff earmarked for sale. High transport charges and losses incurred when there were no means of transport available reduced the returns to the farmer when easily perishable crops were considered. Consequently, the capacity to maintain or expand the scale of production of the farmer was drastically reduced.

Even though there was no indication that farmers would alter their present cropping pattern entirely, cultivation of crops like rice and maize were sometimes suspended when their prices drop. But the others like plantain, cassava and garden eggs were cultivated throughout by all the farmers regardless of recession in their prices. The net effect was reflected in the reduction of the hectreages because their cultivation could never be left out as they formed the basic food staples of the farmers. It was revealed therefore, that as price fluctuations were as an integral part of the general farming activity, good prices can therefore be said to have an influence on farmers' output.

The risk generally associated with foodstuff marketing to a larger extent determined the allocation of land between food crops and cash crops like cocoa and coffee which was becoming popular in the farming business in the area. Thus farmers allocated relatively large hectreage of land to export crops as against food crops because of the risks associated with marketing the latter.

About 75% of the respondents said they placed much premium on the cultivation of cocoa and oil palm which are cash crops (export crops). This observation is in line with that made by Dapaah (1984), when he used a multi-period linear programming risk simulation model to assess farmers attitudes towards risk associated with marketing of foodcrops relative to export crops such as cocoa. He found out from his empirical analysis that farmers allocated relatively large hectreage of land to export crops as against that of foodcrops because of the risk associated with marketing the latter.

Added to low magnitude of risk was the security provided by cash crops for the future of the family. This was borne out by the response given by about 60% of the farmers that even if the prices of cocoa fell, they were always assured of a ready market. It was, therefore, no risk expanding their scale of production of cocoa or any other export crops. It is apparent, therefore, from the discussion that farmers were likely to expand their scale of production if they were assured of ready markets.

It can be inferred from the on-going discussion that prices, transportation and generally risks associated with marketing of foodstuffs played a crucial role in farmers' decision on the size of land allocated to food crops and the quantity produced for the market.

4.5 Conclusion

It is obvious from the ongoing discussion that the problems faced by farmers in terms of low productivity, low profit and consequently poverty is as a result of the associated problems of transportation, storage, processing and lack of credit. These problems have put farmers at a disadvantaged position in the marketing of their produce. From the discussions, traders make more money than the farmers who toil for most part of the year in making sure that these crops were produced. The proposition of this study

which states that improvements in marketing facilities (that is; transportation, storage, processing, and credit) can effect quick increases in available local food supplies holds. It was observed that farmers reduced the acreages allocated to food crop production and this affected the food supplies. They were gradually devoting more acreage, resources and effort into cash crop production. If these problems identified are adequately addressed it will definitely increase food production in the district and the country as a whole.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The final chapter of the study looks at the research findings as well as the lessons that can be learnt and recommendations to be considered in the design and implementation of practical agriculture and foodstuff marketing policy in the country.

5.2 Summary of Research Findings

Against the backdrop of foodstuff production, food sufficiency, and rural poverty alleviation, the issue of marketing in the production of food crops is very crucial if income poverty of farmers in the rural areas of the country could be checked. The study was conducted on the proposition that:

i. Improvements in transportation, storage, processing, credit can effect quick increases in available local food supplies and increase farmers' income.

From this perspective therefore, the study sought to achieve the following objectives:

i. To investigate and analyse the problems faced by farmers in the marketing of their food crops;
ii. To access the effects of the present foodstuff marketing system on farmers' decision with respect to what to grow and acreage of land to cultivate; and,
iii. Offer some problem solving suggestions as solutions to the marketing problems.

There is a downward trend in foodstuffs production in the Asutifi area. Farmers have decided to produce only for subsistence rather than embark on large scale production but to concentrate on the production of cash crops like cocoa, oil palm and coffee which the farmers are assured of guaranteed markets. This suggests

that the marketing system for food crops need improvement if farmers are to produce on large scale to feed the ever increasing urban population and the country as a whole.

Production of foodstuff is largely in the hands of farmers with majority over 30 years of age. It is also dominated by males whilst the buyers are mostly relatively youthful females. Even though on few occasions the farmers rely on hired labour, production is mainly based on family labour.

The major problems realized in the study include, transportation, infrequent visit by buyers, pricing and unfavourable conditions of sale and lack of credit.

Transportation is largely by head porterage from the farms to the market centres. However, trucks are also used to transport the produce from rural centers to intermediate markets and further, to the urban centers. Transportation charges are quite high and vary depending on numerous factors among which are the season – dry season charges are lower than wet season which makes roads difficult to pass on, the condition of the road and demand for the trucks which are very scarce. The trucks are normally hired from the urban centres to cart the foodstuffs from the producing areas. Traders pay irregular visits to the producing centres and the few who managed to reach these producing centers refused to buy much for the fear of being unable to transport items bought due to the bad nature of the roads and the limited number of trucks. With this situation when there is a glut in production, substantial quantities produced rot on the farms.

The prices of farmers produce are not stable. It varies from year to year and also exhibits a marked seasonal fluctuation. Prices tend to be very low immediately after harvest (in which case farmers become 'price takers') and rises to a peak just before the next harvest. Prices are arrived at through bargaining and haggling and therefore vary from market to market – imperfect markets. Prices are usually lower in the producing areas during the harvesting season but during the off-seasons, prices

tend to be higher in the producing centers than the larger urban centers. This results when all the produce with the exception of little left for consumption were sent to the urban areas by the traders where they are stored for distribution.

Farmers finance the production activities mainly from their own monetary sources. Some receive aid from friends, relatives and benevolent members from the locality. Monies from these sources attract no interests. Some borrow monies from money lenders but this source had become unpopular among farmers because of high interest rates. Others took loans from buyers, which were repaid with foodstuffs and very few people borrowed from the banks as a result of the collateral security that was demanded, which majority of the farmers lacked.

Storage is done on the farms and in the villages. The foodstuff are stored in barns, kitchens and room with broken walls. All the farmers stored some for their own consumption as seeds to plant and for higher prices. But this ends up with large quantities of the produce with the exception of rice and maize rotting because of the inefficient nature of the storage facilities. To reduce quantities that get rotten 80% of the farmers sold their produce immediately after the harvest.

5.3 Conclusion

The study has provided evidence to show that farmers are dissatisfied with the marketing system of foodstuff in the producing areas by switching to the production of cash crops. As is realized from the study, improvement in the marketing system should emphasize transportation, traders' ability and willingness to buy the produce, storage and credit to finance farming activities of farmers. Clearly, it has been shown that there is strong tendency for foodstuff prices becoming unstable because of seasonal nature of the output. Most of the farmers are forced by various circumstances to sell

their crops immediately after harvesting. With lack of storage facilities, farmers look on helplessly as their produce rot.

Consequently, the farmers are discouraged from increasing their output. They therefore tend to allocate large tracks of land to the cash crops notably, cocoa, coffee and cashew whose market are assured than to allocate them for food crops whose marketing is shrouded in uncertainties. Therefore, the size of land allocated every year for food crop production reduces to favour the ever-expanding cash crops which has gained the confidence of the farmers.

5.4 Recommendations

Having analysed the problems faced in the marketing process, there is the need to suggest a few recommendations to remedy the inefficiencies and the weaknesses in the system. Even though the study concedes the fact that the suggestions for solutions prescribed are not universal remedies or even full-proof in all cases, it is hoped that most of the recommendations when considered, would be essential precursors or pre-requisites to finding the solution to most of the problems so for discussed. Also, where there have been efforts underway for solutions, it is hoped the suggestions will enhance quick actualization.

i. Systems Approach

The tendency exists for policy makers and implementers to see foodstuff production and foodstuff marketing as different entities, each independent of the other. Furthermore, the other problems like storage, processing and credit facilities are seen as separate problems which should be solved by separate or different institutions. However, considering the multiplicity and interdependency of these factors (problems) which cannot be solved in isolation, it is suggested that the problem should be viewed

as an integrated system problem which demand an integrated system approach for solution. This requires that the problems should be seen as interrelated which one institution or different institutions should be co-coordinated in their activities to address the situation at the same level so as to achieve the desired goal.

ii.Rural/Feeder Road Development

Among all the problems, transportation was found to be the most serious. The poor nature of roads made trucks in the areas unwilling to ply the roads. The buyers hire trucks from urban centers to cart the food stuffs leading to increased prices consequently making it difficult for people to buy and also serving as a disincentive to traders to buy more. This in turn led to infrequent visits by buyers and consequently affecting the productivity of farmers. The total of about 32,000km road network estimated in Ghana, the Greater Accra which produces less than 3% of the total agricultural output has the highest road density. Most of the farming villages have no roads linking them. Places where there are roads, they are in deplorable conditions. With the need to export produce from producing areas being vital to distribution and economic development, rural/feeder road development is therefore essential incentive for agricultural production effort. Considering discriminatory transport charges of bitumen-surfaced roads and rough-surfaced roads (the former being cheaper than the latter) transport cost will considerably reduce by having improved adequate road network.

To ensure a good transportation system, existing roads and tracks should be put in good condition to keep them open throughout the year for several categories of vehicles. This can be effected when the people in the localities mobilize resources both human and financial to supplement government's effort. Also, both buyers and producers should form cooperative bodies to purchase vehicles which would cart their

produce at reduced or subsidized prices which would boost production. This strategy has been found rewarding by the Ahwerewam Cooperative Tomatoes Producers Association in the Ashanti Region which has led to increases in their productivity. Furthermore, this would solve the problem of head poterage of foodstuffs which is slow and ineffective.

iii. Storage and Processing Facilities

To address for the problem of deterioration which has become an inhibiting factor for increased production, there is the need to make available adequate facilities at cheaper prices to preserve farm produce for a longer period of time. The provision of storage facilities would improve the selling capacities of farmers who have no alternative outlets and who are as a result forced to sell. Here, the provision of silos being embarked upon by the Ministry of Agriculture is commendable but should be intensified enough to reach the rural areas as the present target areas have been the urban places. Farmers should be assisted to use solar energy for storage purposes. Thus there should be the provision of solar driers in the rural areas as solar energy is abundant there.

The government through the district assembly should provide simple processing facilities which would help the foodstuffs to be stored for comparatively longer than non-processed ones. It is, therefore, being suggested that there should be a conscious effort to educate and help farmers on post-harvest technology using simple and locally available materials and drugs which are cheap enough to meet pockets of farmers.

iv. Prices of Foodsuff

As there are no standardized units of weight and measures for the foodstuffs, they are often bought at arbitrary units of measures often to suit the traders (buyers) who do not visit the producing areas regularly. This result in price fluctuations, over-filling of containers used as measuring units by buyers. There is, therefore, the need to provide guaranteed prices with standardized units of weight and measure which would be beneficial to the two parties (buyers and farmers), for it would be meaningless to control prices without guaranteed buyers. Government agencies like the Food Distribution Corporation, Sasakawa Global 2000 and other food processing industries should assure farmers of easy and ready markets which would eventually reduce the risks in expanding the scale of food crop production.

v. Credit Facilities

As was observed in the survey, farmers' sources of credit were themselves discouraging and counter-productive. Some of these sources were aid from friends, relatives, spouses and traders, which were often very low because of their interest-free nature. Other sources of finance was to borrow from money lenders who were prepared to give out huge sums of money for large scale production but farmers did not patronize this system because of the high interest rate (ranging from 30% to 50%) and also the fear of not being able to pay back the loan due to unreliable marketing situations. An insignificant proportion of farmers (5%) knew of bank credit facilities as the greater majority were illiterate. The proportion with knowledge could not access the bank credit facilities due to lack of collateral security, which is a pre-requisite to access loan. Others also complained of administrative bureaucracies by bank staff resulting in the late disbursement of the loans to the farmers half way into the farming season. To influence the staff to get the loan at expected time, the farmers are

compelled to ‘tip’ (give out part of the money) to the staff thus reducing the amount. This discourages the farmers. They, therefore, refuse to collect the loans after the bank has finished with the processing.

To solve the problems associated with credit, there should be the establishment of a credit outfit to cater for farming activities in the rural banks and other credit facilities. Effort must, therefore, be made to educate farmers on the existence of these credit facilities as well as encourage mobile banking system. This programme of “banking-at-your-doorstep” (mobile banking) would make loans easily available to farmers. Farmers should be made aware that the undue delays and the ‘tips’ demanded by the banking staff are illegal and, therefore, should be reported to the appropriate law enforcing agencies for redress.

To address the practice of demand for collateral security which involves huge properties which are often difficult to be met by most farmers, honest persons and people of good repute like chiefs, priests etc. could be made to serve as guarantors for the loans in lieu of the huge properties. Furthermore, farmers should be encouraged to form cooperatives or unions to give them stronger voice in asking for bigger loans or adequate credit facilities and also to make it easier for retrieval by the creditor (Bank).

Sasakawa Global 2000 and other institutions which assist farmers with credit in the form of inputs like fertilizers, improved seeds, cutlasses and other implements at manageable prices and repaid after the harvest in exchange for farmers’ produce, should be encouraged and assisted by the government to widen their scope of operations. With the positive response being received from farmers who are members of the Global 2000 pilot project being initiated throughout the country, it is hoped would encourage rural farmers to increase production as they also offer guaranteed market to the farmers. Farmers should be encouraged to patronize the Government’s

Youth in Agriculture Programme which offers credit to farmers to undertake their activities.

vi. The Need for Marketing Research

There is a wide gap in the knowledge of marketing operations in Ghana. The knowledge in existence is weighed in favour of finished consumer items like textiles, clothes, hardware and other finished manufactured goods at the expense of foodstuff production. There is, therefore, the crucial need for marketing research for foodcrops in order to identify the inefficiencies and inadequacies for effective solutions. The present approaches of trying to solve the problems are not sustainable and are without thorough investigations, feasibility studies and scientific scrutiny. There should, therefore, be the establishment of a separate institution made up of farmers, buyers, marketing experts to co-ordinate the activities of all institutions related to food crop production to find a lasting solution to the problem. It is hoped, when these problems are seriously tackled, it would not only increase the supply of foodstuff in the market and alleviate farmers problems in the study area in the short-run but would in no small measure contribute as a measure in our efforts to find long-term solutions to the agricultural problems militating against agricultural development in Ghana.

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APPENDICES

APPENDIX A

DEPARTMENT OF GEOGRAPHY AND RURAL DEVELOPMENT

QUESTIONNAIRE TO ELICIT INFORMATION ON FARMERS PROBLEMS IN MARKETING THEIR FOODSTUFFS

1. Age ……..

2. Sex: (1) male [ ] (2) female [ ]

3. Name of town/village……..

4. Marital status (1) Married [ ] (2) Single [ ]

5. What is your educational background? (1) No formal education [ ]
   (2) Middle school [ ] (3) Secondary school [ ] (4) University [ ]
   (5) Others (specify)…….

6. How long have you been farming?.....

Crops grown and their marketing

7. (a) What crops do you grow?.....
   (b) Grow for cash [ ] Grow for subsistence [ ]

Crop	For consumption	For cash	month of harvest	month of sale	quantity sold in cash
1 2 3 4 5					

8. Why did you sell these crops at the time you have mentioned?.....

……

……..

Storage

9. (a) Do you normally store your produce before selling? (1) Yes [ ] (2) No [ ]

(b) if no, why?.....

10. How do you store before selling?

Crop	Construction Material	Average Cost	Capacity relative to quantity harvested	Estimated storage losses	Cause of average losses
1					
2					
3					
4					
5					

11. What difficulties do you have in storage?.....

12. Where do you normally sell your produce?.....

Crop	Field (tick)	Home (tick)	Roadside (tick)	Market (tick)	Others specify
1					
2					
3					
4					
5					

13. Why do you sell these?.....

14. If any sale is done at home did the buyer pay the transport cost?.....

15. (a) Do you or/and your family sometimes sell the produce yourselves?

(1) Yes [ ] (2) No [ ]

(b) If yes, why? ……..

Effects of prices and marketing problems on crop grown and farm sizes

16. When do you sell your produce?.....
17. Why do you sell at a particular time?.....
18. (a) Do you fix the prices of your produce? (1) Yes [ ] (2) No [ ]
    (b) If no, why?.....
19. Do the buyers pay ready cash or pay after sales?.....
20. Have you been growing one type of crop? (1) Yes [ ] (2) No [ ]
21. Do you grow many crops? (1) Yes [ ] (2) No [ ]
22. (a) Do you change the types of crops you grow when there are changes in prices? (1) Yes [ ] (2) No [ ]
    (b) If yes, why?.....
23. What do you do to your farm size when there is an increase in prices?.....
    …….
24. What about a decrease in prices?.....
    …….
25. What have you been doing to maintain a reasonably good prices for your produce?.....

Transportation

26. How do you transport your foodstuffs from the farm to the village……
    ……
27. What is the approximate distance?.....
28. (a) How do you transport your foodstuffs from the village to the place of sale?

    …….
    (b) What is the approximate distance?.....

Crop	Head (tick)	Bicycle (tick)	Tractor (tick)	Lorry (tick)	Distance	Head (tick)	Tractor (tick)	Lorry (tick)	Distance

29. What were the transport charges per unit during harvest season?.....
    ……
30. Are the unit charges for transport constant or do they fluctuate?.....
    ……
31. How many days do you (approximately) use in harvesting and transporting a hectare of respective crops? ……
32. What major transportation problems do you face in marketing your foodstuffs?.
    ……
33. Has the transportation system in any way influenced the types of crops you grow for the market?.....
34. How does the transportation system influence the land you allocate to the crops:…….
    …….

Processing

35. In what forms do you normally sell your produce?.....
    …….

Crop	Fresh	Dried	Unshelled	Shelled	Other (specify)
1 2 3 4 5					

36. Why do you process those products before selling?.....
37. How is the processing done?.....

38. What problem do you generally face in the processing?.....
……
……

Farmer – Trader Relationship

39. To whom do you sell your produce?

Crop	Trader	Cooperative	Place Buyer comes from	Sex	Remarks

40. Do you have special traders/organisation etc to whom you usually sell your produce? (1) Yes [ ] (2) No [ ]

(b) If yes, what are the terms of agreement?.....

41. How often do buyers come to buy? (1) Everyday [ ] (2) around market days [ ] (3) Only special seasons [ ] (4) do not come at all [ ] (5) others (specify)……..

42. Are there changes in the number of buyers? (1) Yes [ ] (2) No [ ]

(b) If yes, explain……
……

43. Do the buyers try to cheat you? (1) Yes [ ] (2) No [ ]

(b) If yes, how?.....

44. What is the general relationship between you and the buyers? (1) Bad [ ] (2) Good [ ] (3) very good [ ] (4) other (specify)……..

Credit

45. Mention your main sources of credit…….
46. What conditions are attached to these credits?.....
47. How do you pay back these credit?.....

Others

48. What other crops do you grow?.....
49. Which crop (cash and foodcrops) do you allocate much land for cultivation?.....
    (b) Why?, explain……..
50. What do you consider to be the major problems in marketing your produce? (please list them according as they appear serious to you)…….
    ……
    ……

Thank you.

APPENDIX B

DEPARTMENT OF GEOGRAPHY AND RURAL DEVELOPMENT

QUESTIONNAIRE FOR TR ADERS

1. Age ……..

2. Sex: (1) male [ ] (2) female [ ]

3. Name of town/village……..

4. Region……...

5. Marital status (1) Married [ ] (2) Single [ ]

6. What is your educational background? (1) No formal education [ ]
   (2) Middle school [ ] (3) Secondary school [ ] (4) University [ ]
   (5) Others (specify)…….

Business Information

7. Do you consider this as a major occupation? (1) Yes [ ] (2) No [ ]
   (b) What are your occupations, if any?.....
8. For how long have been in this trading business?.....
9. What are the principal commodities you handle?.....
10. How much of those commodities do you handle in a week?.....
11. Is there any variation in the quantity you handle in a week through the year?
    (1) Yes [ ] (2) No [ ]
12. What are the factors which influence the quantities you handle?.....
    ……..
    ……..
13. In what forms do you normally buy your goods?.....
    (b) From where exactly do you buy them?.....

Crop	Form in which bought	Farm	Roadside	Rural market	Others (specify)

14. Give reasons why you buy from the place (s) mentioned in 13 (b)

……

……...

15. If you buy from the farm, do you buy after or before harvesting?

(1) After harvesting [ ] (2) Before harvesting [ ]

16. Do you have special customers you buy from or you buy from anybody?

(1) special customers [ ] (2) Anybody at all [ ]

17. If special customers, do you have any special purchasing arrangement with them?

(1) Yes [ ] (2) No [ ]

18. Where do you normally sell your commodities?.....

Please state town, village or region……..

19. Do you retail or sell them in bulk? (1) Retail [ ] (2) Wholesale

(b) If wholesale, to whom do you do you sell? (1) Retailer [ ]

(2) Institution [ ] (3) Exporters [ ] (4) Others (specify)……

20. How do you determine the price you pay for them?.....

21. Do you normally get what you ask for? (1) Yes [ ] (2) No [ ]

22. If you don't get the price you mention what will make you accept a higher price bid by the farmer/seller?.....

23. What are your general relationship with farmers? (1) Not very good [ ]

(2) Ordinary [ ] (3) quite good [ ] (4) very good [ ]

24. Do you normally pay the full price at the moment you buy or do you pay in advance?.....

25. Do you at time buy and promise to pay later? (1) Yes [ ] (2) No [ ]

    (b) If yes, after how long do you pay?.....

26. Do you buy all the farmer's produce or just enough? (1) all [ ] (2) enough [ ]
27. Do you offer any credit to farmers? (1) Yes [ ] (2) No

    (b) Explain why…….
28. Do you collect money back after harvest or you accept foodstuffs in place?

    (1) cash [ ] (2) Foodstuffs [ ]

29. Do you charge interest? (1) Yes [ ] (2) No [ ]
30. Do you sometimes change the crops you buy? (1) Yes [ ] (2) No [ ]
31. Why do you sometime change the crops you buy?.....

32. Does a change in type of crops you buy affect the quantity produced in the subsequent year? (1) Yes [ ] (2) No [ ]
33. How does this change affect the production capacities of farmers?.....

    ……
34. Do you think t he prices you offer for particular crops affects the quantity produced? (1) Yes [ ] (2) No [ ]
35. How do farmers react to these changes…….
36. What problems do you normally encounter in buying the foodstuffs……...

    …….

37. Could you suggest some solutions:……

    ……

    ……..

Thank you.