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Analysis of rural credit policies in Ghana;  
case study Seko Odumase area

by

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## FOREWORD

The Federal Institute of Agricultural Economics is publishing with this volume again a study going beyond the Austrian borders and puts its focus on a very specific problem in an African country. But it is within the realm of the institute to study problems of world agriculture including developing countries.

Without doubt, the development of the rural sector plays the main role for the development of most Third World economies. It is a fact that capital becomes a more and more important production factor also in small scale agriculture in African countries. The difficulties in credit procurement, the dependence on private moneylenders because of lack of guarantees and the slowness of banks and the high interest rates often prevent rational investments in rural regions. Therefore we agreed to support this research work as a contribution to the transfer of know-how to the Third World within the North-South Dialogue. We have decided to pass on our know-how and research tools to post-graduate students as the most effective way of knowledge transfer within the limits of time constraints.

Mr. Emmanuel Plange graduated from University of Kumasi, Ghana, in agricultural economics and was employed as an Assistant Agricultural Development Officer with Barclays Bank, Ghana Ltd. In this capacity he had the opportunity to work within the Rural Credit Policy guidelines existing in Ghana. His experience with the Ghanaian rural entrepreneur and the problems he faces with regard to capital acquisition precipitated his intention to initiate a research work in this field.

After his first contact with the Federal Institute of Agricultural Economics we had a over one year lasting correspondence as a preparatory phase with advices in the design of the questionnaire and the choosing of the sample size and in this first phase of the research work data were collected and respondents interviewed. Than Mr. Plange was awarded a research assistantship for one year to carry out this study from the Austrian Federal Ministry of Science and Research and the Federal Ministry of Foreign Affairs out of funds allocated toward assistance to developing countries. So the second phase which involved the evaluation of the collected data and the final comment could be done at the Federal Institute of Agricultural Economics in Vienna. Without this financial contribu-

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tion this inquiry on the increasing importance of the production factor capital in Ghana's rural regions would not have been possible.

At the Institute Mr. K.M. Ortner as supervisor provided instructions in methodology, the conceptual framework and coaching throughout the analysis which is gratefully acknowledged. We hope that not only the concrete results of the study before us are of use to the further development of Ghana's agriculture, rural regions and economy but even more so will be - once he is back in his homeland - the knowledge and skills Mr. Plange acquired here.

Vienna, February 1989.

Hans Alfons, director.

## 1 INTRODUCTION

The aim of agricultural credit directives in Ghana is to ensure that formal credit gets to the rural small scale farmer/entrepreneur. The main instrument of effecting this process is through loan quotas and rediscounting measures. In pursuance of this aim, a strong emphasis was placed in creating new financial institutions and rural banks to facilitate the disbursement of subsidized credit and also to mobilize rural savings. The specific aim of these directives is to wean the small scale farmer/entrepreneur from the moneylender, whose activities are thought to impoverish the small farmer/entrepreneur.

Recent reviews of rural credit literature show that existing policies and programmes have failed to ensure credit to the target group. The revealed limitations of credit programmes are widespread throughout the developing world and not peculiar to the Ghanaian situation. Similarity of rural financial market problems in third world countries underscore the assertion that standard agricultural credit policies with subsidized credit as a principal tool to transfer income to small farmers are based on faulty assumptions. This awareness has led some researchers to question the sense of formulating credit policies aimed at eliminating the informal sector from the rural financial market. The standard objective of institutional credit sources of trying to relegate the informal sector may well require re-evaluation. Many farm level surveys show that, despite the attention in terms of resources and time invested, the formal sector of the rural financial market has not been able to match the informal sector when it comes to accessibility to the rural small scale entrepreneur. The two sectors of the rural financial markets have their strengths and weaknesses, and efforts should rather be made to combine the two sectors to ensure credit to the rural small scale entrepreneur.

An integral part of such an approach at unification of the two markets should be the recognition of the right of the participant in the rural financial market to contribute to policy formulation and project design. If the small scale farmer/entrepreneur is encouraged and helped to generate ideas of his own in policy formulation on matters affecting him, the gap between intended and actual effects of policies will be narrowed. An attempt is made in this paper to obtain the percep-

tions of 203 rural entrepreneurs on certain attributes of the rural financial market in the Seko Odumase area of Ghana and their recommendations for improvement.

This study is organised as follows. In section 2 a brief history of the credit delivery system in Ghana and its involvement in agriculture is described. This is followed by a brief description of past and present policies guiding their operations. In section 3 a brief discussion of some of the problems impeding credit administration and their consequences are attempted. The objectives of the study are also outlined in this section. Section 4 deals with the location of the study area and concerns itself with a description of the rural economy in which the credit system operates. Section 5 describes the way the study was conducted and the statistical technique used to analyse the data. Section 6 deals with the results and discussion of the analysis. This involves classifying respondents into groups in relation to how they answered the questionnaire and to find reasons for their preferences. Section 7 discusses the implications of these analyses for rural credit policies and proposes some approaches which may mitigate some of the problems in extending credit to the smallfarmer/entrepreneur.

## 2 THE RURAL CREDIT DELIVERY SYSTEM IN GHANA

### 2.1 Development

Agricultural or rural credit as it is called today actually started in 1946 with the establishment of the Gold Coast Co-operative Bank (G.C.B). The G.C.B, however, went into liquidation in 1961. Two other institutions concerned with much credit at the time were the United Ghana Farmers Council (U.G.F.C) and the Cocoa Purchasing Company (C.P.C). The C.P.C was specifically established to cater for the credit needs of cocoa farmers especially to redeem their pledged farms from money lenders. There were two foreign owned banks, Standard and Barclays. But these commercial banks were only interested in the export-import-trade. Another indigenous financial institution, the Ghana Commercial Bank which was established in 1953, did not initially concern itself with agricultural development.

The establishment of the Central Bank of Ghana in 1957 was to give birth, impetus and direction to a new rural credit delivery system. In 1963 the National Investment Bank was established to promote agricultural as well as other enterprises in the public, cooperative and other sectors. In 1964 the Bank of Ghana established a Rural Credit Department to prepare the way for an agricultural bank. In 1965 the Agricultural Credit and Co-operative Bank was established, which in 1967 became the Agricultural Development Bank.

The National Investment Bank provides credit for the large schemes; some 30-40 % of its funds go into Agriculture. The Agricultural Development Bank provides loans on a smaller scale but far from small scale.

Before these institutional sources of credit came into being, credit was already known and was largely controlled by the informal sector. It must be noted that private money lending is of widespread importance in the country though there are no reliable data on it. Rural informal credit was and still is part of the economic and social system. The informal sources of credit could be grouped as follows:

- |   |                                 |
|---|---------------------------------|
| I) Relatives and friends                | II) private money lenders       |
| III) traders                            | IV) distributors of farm inputs |
| V) processors of agricultural products. |                                 |

The private money lender is the most prominent and well known of these. Relatives and friends are perhaps the oldest source of credit in the country.

Today there are 10 financial institutions in the country, all of which are engaged in agricultural financing in varying degrees. This number excludes the rural banks which up to 1986 had 106 units in operation.

## 2.2 The present credit delivery system in Ghana

According to Prof. SEY<sup>1</sup> the credit delivery system consists of the institutions given in table 1. This list includes most of the institutions normally involved directly or indirectly in lending to agriculture in the country. Some of them, though popular, are not officially recognised.

TABLE 1: Classification of financial intermediaries and examples

| Intermediary                               | Name of institutions   |
|--|--|
| Central Bank                               | Bank of Ghana  |
| Commercial banks (private & state owned)   | Ghana Commercial Bank, Standard Bank, etc.                     |
| Specialised or development banks           | Agricultural Development Bank<br>National Investment Bank etc. |
| Co-operative banks                         | Ghana Co-operative Bank  |
| Unit banks e.g. rural banks, Credit unions | Rural Banks<br>Ghana Co-operative Credit Union                 |
| Revolving credit associations              | 'Susu' groups  |
| Money lenders                              | -  |
| Building societies                         | First Ghana Building Society                                   |
| Marketing Boards                           | Cotton Development Board etc.                                  |

### 2.2.1 The Central Bank

The Central Bank in Ghana traditionally issues the nation's currency, maintains the value of the currency by implementing monetary measures, and lends to institutions which may take recourse to it. Most of these institutions officially are controlled by the Ministry of Finance and Economic Planning, which is normally at the apex of the financial system. Under it the Central Bank exercises supervisory powers and ensures that all the financial institutions implement government policies which relate to the financial sector.

The Central Bank exercises supervisory power over all banking and other financial institutions. It uses its influence to coerce the banks to lend to agriculture and agribusiness and around 1979, issued a directive requiring that 20 % of the recognised commercial banks total lending portfolio be channelled into agriculture and forestry (i.e. the rural sector).

The Central Bank has also been the prime mover towards the establishment of specialised development banks. For example the ADB was initially part of the Rural Credit Department of the Central Bank and was subsequently hived off to operate on its own. It further involves itself in the agricultural/rural development efforts by actively supporting the development banks by giving them soft loans in order to facilitate on easy interest terms their transfer to the farm sector.

Despite the fact that the Central Bank has held its "credit to the farmer"-program at the forefront of its economic policy, actual achievement has been disappointing. The development banks it helped to establish exist but are grappling with difficulties, for example with repayment problems, poor quality of staff, weak capitalization base etc.

#### 2.2.2 Commercial Banks

The commercial banks in Ghana can be put into two main categories: Private and government owned. Their major area of operation is external trade financing, and they make short-term advances to enterprises at home. Their mode of operation until 1975 tended to exclude the small-scale farmerborrowers. The commercial banks, especially the foreign owned ones, are generally unwilling to take on the risk of lending to the agricultural sector. Under promptings from the government and other bodies they have unwillingly accepted the risk and are now involved in projects which a decade ago would have been unthinkable. They have started lending to the rural sector but generally go in for the larger and safer projects.

#### 2.2.3 Specialised development banks

The characteristics of these banks are that

- 1) they are required by statute to serve prescribed sectors - in this case agriculture,

- 2) they are expected to advance medium or long term loans to the agricultural and rural sector given the developmental nature of agriculture, and
- 3) they are dependent on concessionary loans from the government and international bodies .

#### 2.2.4 Co-operative banks

The Co-operative banks have similar characteristics as the specialised development banks both in structure and function. They differ from the specialised banks in that their major area of activity is the financing of cooperative movements in all sectors of the economy.

#### 2.2.5 Development banks

According to Professor SEY<sup>2</sup> the major role of the development banks is to ensure and maintain the flow of funds to the rural economy. Their task is particularly onerous, given the importance of the small scale farming sector in the country. They are expected to dedicate their energies to develop policies towards mobilisation of savings in rural areas. They are also expected to make sure that the credit needs of the rural entrepreneur are met. Their achievement, so far, is not one to be enthusiastic about. A number of reasons have been given for this dismal state of affairs; they are

- 1) high cost of reaching many dispersed small borrowers
- 2) lower than normal interest rates for loans
- 3) poor quality of staff
- 4) weak capitalisation base
- 5) political interference

#### 2.2.6 Rural Banks

A rural bank is a unit bank which is owned, managed and patronised by the people of the area in which it is located. Since it has no branches, the chance of a rural bank to siphon funds from one area of operation to another is eliminated. The rural banks are supervised by the Rural Banking Department of the Bank of Ghana. One important characteristic of rural banks is that their board of directors are local people who are also shareholders. Compared to the other banks, rural banks have a relatively simple structure. This is to ensure that the setup is inexpensive and easier to manage. It must be mentioned that the rural banking system is a novelty. The first rural bank in Ghana was established in July 1976.



### 2.2.7 Revolving Credit Associations and Credit Unions

These are self help organisations initiated by the informal sector. These credit associations are widespread in the country, especially among rural entrepreneurs. In Ghana the most popular form of these credit associations is known as 'Susu' groups. Their mode of operation and the variety of forms in which they appear has been described by SEIBEL<sup>3</sup> (1985, p.391).

The first type is the Rotating Savings Association. Under the Rotating Savings Associations each member pays a fixed amount on a fixed day and one member receives the total amount. On each contribution day a different member is the receiver.

The second type is the Revolving Credit Association. Here members make regular contributions which are kept by a collector or treasurer or paid into a bank account. At the end of a specified period, each contributor gets his money back.

Credit unions are not revolving in nature but have similar characteristics as the Revolving Credit Associations in that their members make regular contributions to an insurance and loan fund. Usually interest is charged at differing rates for members and non-members. In contrast to Revolving Credit Associations they enjoy some form of official recognition. The Ghana Co-operative Credit Union falls under this category.

According to SEIBEL<sup>4</sup> (1985 p.392), these Revolving Credit and Savings Associations are genuine self help organisations that enjoy mass participation at the rural level and attempt to alleviate the financial problems of its members. He admits that there are numerous problems they cannot solve because they often lack access to the formal financial markets, consultancy services and other systematic modern inputs. Their main impact is that they keep a near stationary economy moving, but they are not rapidly modernising it. As long as this situation remains the impact of self help Credit Associations are unlikely to result in any far reaching development processes.

### 2.2.8 Moneylenders

Moneylenders operate in the rural financial sectors and in several areas hold a near monopoly. Their interest rates and the 'Shylock' type repayment methods employed have been well documented by many researchers and need not be described here further. Their continuing existence inspite of the introduction

of institutional sources of credit exposes the inadequacy of the institutional financial arrangements to really meet the needs of the small farm sector. Moneylenders certainly satisfy a need for credit which has not yet been met by the recognised sources. The development banks were established to replace them, but the banks have not been able to do so.

According to Prof. SEY<sup>5</sup> the main strengths of the moneylenders' services are the simpleness of their advances, their flexibility with respect to security, and their anonymity. Though their reputation is not good to most people outside and inside the informal financial markets, their durability is sufficient proof that they are still needed and that something was basically wrong with the design, approach and implementation of institutional credit as it existed before 1975. In effect the mode of operation of the institutional credit delivery service tended to discriminate against the small scale rural farmer who produced the bulk of the country's agricultural output. It was not surprising that a World Bank survey in 1974 revealed that only 1 % of all farm families in the country had access to institutional credit (see table 2)<sup>6</sup>.

TABLE 2: Percentage of all farm families receiving credit from institutional sources in selected countries

| country           | percent | country         | percent |
|-------------------|---------|-----------------|---------|
| Ethiopia          | 1       | Nicaragua       | 20      |
| Ghana             | 1       | Panama          | 4       |
| Kenya             | 12      | Paraguay        | 6       |
| Morocco           | 10      | Peru            | 17      |
| Nigeria (Western) | 1       | Bangladesh      | 15      |
| Sudan             | 1       | China, (Taiwan) | 95      |
| Tunisia           | 5       | India           | 20      |
| Uganda            | 3       | Jordan          | 8       |
| Bolivien          | 5       | Korea, (South)  | 40      |
| Brazil            | 15      | Malaysia        | 2       |
| Chile             | 15      | Pakistan        | 5       |
| Colombia          | 30      | Philippines     | 28      |
| Ecuador           | 18      | Sri Lanka       | 14      |
| Guatemala         | 2       | Thailand        | 7       |
| Honduras          | 10      | Turkey          | 23      |
| Mexico            | 15      | Vietnam         | 21      |

Source<sup>7</sup>: World Bank 1974, pp.183-186

A quick look at table 2 reveals that the record of credit programmes throughout the developing world up till 1975 was a mixed one. With the exception of Taiwan, and to a lesser degree, South Korea institutional credit managed to reach only a small proportion of the farm families in the countries surveyed. Farm families in Africa were particularly worse off when compared to those in other regions of the world. For example, with the exception of Morocco and Kenya, in all countries surveyed in Africa only 5 % or less of the farmers received institutional credit. Ghana was one of the countries where institutional credit hardly got to the farmers.

### 2.3 The special programmes approach

In the past two decades, many developing countries with external assistance have initiated lending activities aimed at small farmer borrowers. These lending activities vary from region to region, for instance, the supervised lending efforts in Latin America, loans through farmers organisations or co-operatives in Africa and Asia, and input package-programs in other parts of the world. Although substantial differences are found among these lending activities, classified into two main categories:

- 1) The Special Programme Approach
- 2) The Systems Approach

This classification is based on the strategies emphasised under the different lending activities.

AMES<sup>8</sup> 1975 (pp.24-31) defines the Special 'loan' Programme Approach as a lending activity which involves direct government financing and closely supervised distribution of agricultural inputs, kits containing seeds, chemical fertilizers, plant protection chemicals and extension information for selected groups of farmers. The Special Programme Approach concentrates the administration of small farmer credit in the hands of a single agency. In Ghana the creation of the U.G.F.C.C., the Gold Coast Co-operative Bank, Agricultural Development Bank (ADB) etc. conform to the Special Programme Approach. Under this approach financial policies directed to promotion of small-scale agriculture and rural/cottage industries were based on the assumptions that

- small producers are poor and not rational in their decision making

- they are unable to save and their response to economic opportunity is limited or even negative
- they need cheap credit for investment

SCHULTZ<sup>9</sup> (1964) and JONES<sup>10</sup> (1970) have challenged some of these policy assumptions. They contend that small farmers are rational decision makers and that they respond positively to rewarding economic opportunities. SEIBEL (1985, p.390) explains that these false policy assumptions had far reaching consequences in that the development banks limited their business to credit, ignoring savings mobilisation. Also the subsidized credit element made it very difficult for the development banks to serve the small farmers well.

Some of the other causes of the failure of the lending institutions under the Special Programmes Approach is widely recognized in the literature (AID<sup>11</sup>, 1973). LOVE<sup>12</sup> (pp.227-238) discusses some of the causes of the failure of the Special Programmes Approach to meet the credit needs of the small farmer. ADAMS<sup>13</sup> (1981) summarises the causes of the failure of small farmer credit program as follows:

"One of the major problems encountered by small farmer credit program is their expense. It is costly to bring financial services to small farmers, especially if intensive supervision is also provided. Credit delivery cost can run between 25-50 % of the value of the loans made, even in carefully administered programmes.

These cost combined with concessionary interest rates that are common on these loans make it difficult, if not impossible, for the financial institution handling the programme to survive without constant infusion of outside funds and subsidies."

In Ghana the Special Programme Approach for agricultural credit delivery started in 1965 with the establishment of the Agricultural Development Bank (ADB). It was established to be the traditional 'Agricultural Bank' model for dispersing credit to small scale farmers. The ADB was designed to intervene actively in the rural financial market to augment or replace credit from traditional sources. That the ADB failed to achieve its aim of reaching out to as many farmers as possible has been documented by the World Bank<sup>14</sup> (1974) and F.A.O<sup>15</sup> (1973). LELE<sup>16</sup> 1975 (p.81) reports similar findings in other parts of Africa and noted that whatever institutional credit was available was going to large scale farmers.

Predominant among the problems encountered by the A.D.B. under the Special Programme Approach was that administering small loans to peasant farmers proved to be expensive and uneconomical. The A.D.B. had to establish branches in remote areas of the country to ensure accessibility to the farmers. This entailed erection of structures, recruitment and training of personnel. These proved to be too much for their weak financial base and often experienced liquidity problems. The need to stay viable forced the ADB to abandon its original objective of providing institutional credit to peasant farmers, and bring its cost in line with its revenue. This meant that the ADB concentrated more loans in the hands of experienced large scale borrowers as the other commercial banks were doing and consequently reduced the number of small loans made. They also located their branches in the urban and semi-urban areas where there was more lucrative trade to be engaged in. It must be appreciated that some of the problems the development banks (eg ADB and Ghana Co-operative Bank) encountered under the Special Programme Approach were beyond their control and needed macro-economic solutions.

MILLER<sup>17</sup> (1975, p.73) hits the nail right on the head by commenting: "While it is true that some of their problems arise from basic policies, organisation and operation of the institution, other impediments are inherent in the economic and social conditions within which they must operate. In the case of small farmer borrowers especially the resource base is severely limited, generally they have had meagre, if any formal education and they possess little understanding of the wise use of credit. The roads and transport-facilities required for bringing in necessary supplies and services and to take produce to market often range from mediocre to non-existent. Weather, price and biological risk are high, and government policies may provide little income incentive. If the credit-institution attempts to reach a significant number of farmers, it finds itself dealing with a very large number of individuals scattered over a wide geographic area, which hampers communication, inhibits timely action and limits the amount of effective supervision that can be provided. In short, most if not all the economic, social and political difficulties that have retarded agricultural development also hinder private or government credit institutions attempting to serve small farmers."

#### 2.4 The systems approach

The apparently insurmountable problems experienced by most credit institutions under the Special Programme Approach in developing countries prompted the Agency for International Development (AID), which had been closely associated with small-holder farmers both in the provision of funds and manpower technical assistance to launch a comprehensive review of credit programmes in the developing countries in 1972. The review aspired to find solutions to the problems hampering the efforts to get credit to small farmers.

The review, known as the "Spring Review of Small Farmer Credit", suggested emphasis on private rural banks, use of various forms of group credit, decentralisation of credit agencies to lower administrative and supervisory cost, subsidization of services to small farmers rather than the interest rate, use of moneylenders and other informal financial intermediaries to reduce the cost of extending credit to small farmers, ways to overcome loan defaults and many other things.

BATHRICK,<sup>18</sup> (1981, pp 33-36) in an overview of the "Spring Review of Small Farmer Credit" notes its comprehensiveness and classifies it as a data bank from which any matter related to Small Farmer Credit maybe extracted. However, he criticises its lack of detailed suggestions of how to overcome operational problems like management information systems and personnel matters in local institutions. Similar reviews were provided by other international organizations involved in small-farmer credit programs such as the FAO<sup>19</sup> (1973-75), the World Bank<sup>20</sup> (1974) and the Rockefeller Foundation. The findings and suggestions of these organisations complemented the policy recommendations of AID.

The implementation of some of these policy recommendations in Ghana took the form of the Systems Approach. ADAMS and TOMMY<sup>21</sup> (1974) define the System Approach as a lending strategy under which the existing financial agencies such as public banks, private banks, and co-operatives are induced or coerced through a series of measures to allocate a larger proportion of their loanable funds to agriculture. The Systems Approach is a type of selective credit policy by which the government encourages the banks to lend more to the small farmer and other less attractive sectors of the economy. This type of approach has been tried in India, Pakistan, Bangladesh, Colombia, Brazil and Costa Rica.

In Ghana, the System Approach took the form of implementing some of the guidelines of the "Spring review of Small Farmer Credit". Beginning in 1975, the government through the Central Bank issued credit policy guidelines which required all banks operating in the country to lend to the agricultural sector. These policy guidelines were enforced through specific financial tools like special rediscounting incentives, quota systems enforced with penalties, credit guarantee schemes and close auditing to ensure compliance. The Central Bank did not confine itself to merely ensuring that these credit guidelines were met by the banks. In 1976, it started with the establishment of rural banks throughout the country. It also used its influence and occasionally its licensing policy to encourage branch expansion by the established private banks into rural areas where banking facilities were absent.

One of the effects of these credit guidelines was the establishment of agricultural credit departments in almost all banking institutions to handle this new responsibility. There was also an increase in the number of branches by roughly 120 banks. In addition, 106 unit banks in the form of locally managed rural banks by 1986 had been added to the financial system. Many of these new banking units operate in rural areas.

The major objectives of these policy guidelines were to make institutional credit available to the small scale farmer in the rural areas and to decentralise the banking system in such a way as to reduce the cost involved in servicing their credit needs. Though, whilst not explicitly mentioned, rural savings mobilisation was to be encouraged by the rural banks.

Though the credit guidelines emphasized decentralisation to reduce cost of extending credit to small farmers, it did not attempt to tackle the problem of low interest rates on agricultural loans nor did it tackle the problem that most banks extend only short term loans to agriculture. It rather compounded the problem by allowing the rural banks to emphasise short-term loans. Rural banks allocate 70 % of their loanable funds to short term loans and 30 % to long term loans.

Despite the attention and support the System Approach received and continues to receive from financial institutions in the country, little information is available on its impact on small scale farmers.

2.5 Footnotes to Chapter Two

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### 3 PROBLEM

#### 3.1 Low interest rates

Attempts to make formal credit available to the rural dweller have been at the apex of rural credit-programmes in Ghana. Among the aims underlying these policy attempts have been above all to create income for the small scale farmer through low interest rates. The policy of subsidized interest rates has been maintained in rural credit programmes without due regard to the financial health of the agencies which advance these credits. If the intermediary serving the farmer is not able to cover his cost then he cannot serve the needs of the small farmer or rural entrepreneur satisfactorily. In 1974, the institutional rate of interest on a rural enterprise related advance in Ghana was 6,0 % while the administrative cost of such an advance alone was 10,0 %, not to mention the opportunity cost of capital<sup>1</sup> (World Bank, 1974, pg.2, Annex Table 9.).

Rural credit directives in Ghana have failed to acknowledge the problem of concessionary interest rates on rural enterprise related advances. Concessional interest rates charged on rural or agriculture related loans under the Special Programmes Approach made it impossible for the financial intermediaries to stay viable. The high cost of extending credit to small farmers and other rural entrepreneurs did not make it attractive for lenders to willingly allocate funds to the rural areas.

Appropriate levels of interest rate which would help the institutions involved to cover cost and make some profit on such loans could help channel funds into the rural sector. In the absence of a stimulating rate of interest, coercive policies of government which are the main ingredient of the Systems Approach will not have the desired impact they are expected to make (ie bringing more rural enterprises into the fold of institutional credit and eradicating rural poverty). Therefore, it is expected that a majority of rural entrepreneurs and farmers would, despite the present efforts would satisfy their credit needs outside the formal financial markets.

Low interest rates force lenders to concentrate loans. This is a rational behaviour because as formal rural credit is cheap, the demand for it rises, and as lenders are not willing to sa-

tisfy these demands because of a lack of incentive to do so, the little that is allocated is rationed by power and influence. The few who manage to obtain loans from the formal financial markets thus collect the benefits of income transfer associated with the subsidized interest rate. The low interest rate policy cuts off the majority of the rural entrepreneurs, in particular the small scale farmers, from the formal financial markets. Merely influencing the direction of credit through credit controls without due regard for the viability of the financial intermediary is bound to have negative consequences for the borrower as well as the lender.

Low interest rates undermine the development of rural financial markets and consequently rural development. The low interest offered on savings deposits makes it almost impossible for some financial intermediaries to mobilise rural savings. This is typical of the problem facing some of the rural banks in the country. Despite a series of adjustments in the lending rates of interest, the rate of interest on agricultural loans has always been below that of other sectors of the economy: In 1986 rural enterprise related loans attracted an interest of 18,5 % while other sectors attracted 23,5 %. Savings deposits attracted 11,5 % and the inflation rate was 35,0 %. The low interest rate element is expected to undermine the Systems Approach in the same way as happened to the Special Programmes Approach: Formal credit is expected to be monopolised by influence and contacts.

### 3.2 Infrastructure

Existing defects in the country's agrarian structure are expected to bar a large majority of rural entrepreneurs from access to financial institutions. This is particularly so with regard to security or collateral. Lack of collateral was one of the major reasons for which most small scale farmers were denied credit by formal financial intermediaries under the Special Programmes Approach. A majority of the rural entrepreneurs, especially small scale farmers have no tangible security to back up loan request. Land is very often not accepted as security as most rural dwellers have no ownership rights but only usufructuary rights and therefore most of the traditional or stool lands are not registered. The establishment of rural banks under the Systems Approach innovated an idea to overcome the problem of collateral: A guarantee by two influential people in the locality could be used in lieu of tangible security. It is feared that this innovation could be used by the same influential people to their advantage.

Credit policies before and after independence have failed to address structural deficiencies associated with Ghanaian agriculture. Rural infrastructural development, in particular with respect to storage systems and rural road networks, and sound pricing policies are not satisfactory and do not sufficiently support the long run objective of developing rural financial markets. These inadequacies were laid bare during 1984 and 1985 when a bumper harvest was recorded in the agricultural sector. A lot of produce was locked up in the rural areas because the roads were either too bad to transport them or the prices were too poor to make their transportation and sale in the cities profitable. The poor rural farmer became burdened with debt and more dependent on rural financial markets.

The rural small scale entrepreneur if offered a choice between appropriate climate for credit use and cheap credit availability is expected to behave rationally and choose the appropriate condition for successful credit use. The Systems Approach created a number of rural banks and brought banking services to the rural dwellers' doorstep but failed to create the proper conditions for successful use of credit: Farmers more often complain about a lack of supporting infrastructure, ready markets and good prices for their produce than credit availability.

Expansion of banking branches into the rural areas without the creation of the minimum conditions for successful use of credit is a waste of funds, tends to burden the poor rural entrepreneur with debt and makes the financial institution unviable. An institution that is not able to recover its costs cannot serve its clients properly.

Current rural credit policies appear to tackle the problem of rural finance and development by throwing money at it and not recognizing that the role of credit in growth is an indirect one and that, even if cheap credit can be made available, its contribution to growth and improvement in income of the recipient largely depends upon the adequacy and efficiency of the rural infrastructure.

### 3.3 Policies

The general aim of agricultural/rural credit directives is to ensure that formal credit gets to the rural small scale farmer and entrepreneur. The main instrument of effecting this pro-

cess is through loan quotas and rediscounting measures which were thought would entice formal financial intermediaries to comply.

In pursuance of this aim, a strong emphasis was placed on creating new financial institutions and rural banks to facilitate the disbursement of credit and also to mobilize rural savings. The specific aim of these directives is to wean the small scale farmer/entrepreneur from the moneylender whose interest rates are thought to be excessively high. Therefore low interest rates were made a central instrument of formal credit directives to eliminate the monopoly situation of the moneylender and to transfer income to small farmers as a policy of equalizing the negative terms of trade between the rural/agricultural sector and the commercial sector of the economy. Despite these policies, the formal financial market has not been able to match the informal financial market in terms of accessibility to the small rural entrepreneur.

The consequence of this intervention in the rural financial market is that formal loans became concentrated in the hands of a special clientele and the financial health of the intermediary deteriorated. Borrowers who could manage to obtain loans from the formal financial markets thus obtained all the benefits associated with the low interest rate. Low interest rates act as a disincentive to save. A situation is created in which policies to encourage rural savings actually undermine the realisation of this objective.

In order to operate effectively, financial intermediaries in rural financial markets must be able to cover cost. Since cost of providing large and small loans are similar, it is profitable to provide large loans to large farmers and entrepreneurs. If interest rate is so low that it cannot cover the cost involved in loan processing, small producers are the first to be excluded from the lenders portfolio.

Gonzales-Vegas<sup>2</sup> (1976) well known iron law of interest rate needs mention here. It says that in inflationary economies - Ghana is among them - lending costs are high and interest rates are controlled, the sizes of loans granted to non-rationed borrowers increase while those to rationed borrowers decrease.

Small scale entrepreneurs/farmers are primary subjects to rationing because the cost of extending credit is inversely pro-

portional to the size of the loan. Low interest rates thus are not a means to transfer income to the rural poor and make formal credit available to them. It cannot eliminate the monopoly of moneylenders in rural financial markets, but rather strengthen their position.

If policy makers really want to make formal credit available to the small scale farmer/entrepreneur, then ways and means must be found to reduce the risk associated with lending to them (ie the marginal cost of the lender must be measured by attractive interest rates and markets for the produce of the borrower, should be made available through good roads, storage systems, fair prices and extension programs). Low interest rates do not create these conditions. The money used to subsidize formal credit could instead be used to improve rural infrastructure and minimise the risk associated with small farmer/entrepreneur lending. When risks are reduced it would not even be necessary for lenders to demand security for loans.

#### 3.4 Performance of policies

Credit is often regarded as a major element in the modernisation of agriculture and rural development. It is conceived by international agencies and local governments as the spear head of a project to help raise agricultural productivity and rural incomes. In 1974, World Bank<sup>3</sup> (1974, p 2.) estimates put the total outstanding institutional credit in LDCs agricultural sector at about \$15,0 billion. It was estimated that informal credit could even be five times that of the institutional credit. Recent estimates by ADAMS and GRAHAM<sup>4</sup> (1984, pp 313-328) puts the figure of new agricultural loans in LDCs in excess of \$ 30,0 billion annually.

Despite the amounts being sunk in this sector there is little evidence as to the actual results of making credit available to the small scale farmer and rural entrepreneur. Apparently credit does not get to the small scale farmer, and financial intermediaries often fail to survive; this in turn has a negative effect on the small scale farmer who develops a lack of confidence in formal financial institutions. Some people advocate revitalisation of the financial intermediary through the injection of more funds, others hold poor management responsible for the failure of these policies but the widespread inability of current rural credit policies throughout LDCs to effect transfer of institutional credit to small farmers and other small scale industries vindicates management.

Credit policies rather neglect the difficult requirements that must be met if credit is to play a positive role in the development of rural areas. Credit policies are, more often, not based on rural level research but rather on abstract theorizing which leads to inadequate attention to the real need for technical change in the rural economy. Agriculture which is the mainstay of LDCs is often handicapped by inadequate policies. Instead of providing a solid foundation in the rural sector to enable small scale entrepreneurs assert their economic skills and consequently to strengthen Rural Financial Markets, these policies treat them as if they are not rational agents who need an injection of cheap credit to spur them to produce. The irony, however, is that even the subsidized element of the credit eludes the small farmer. Studies aimed at finding solutions to these problems are very important to LDCs. Ghana which is a developing country with a large rural population and grappling with the problem as to how she could effectively ensure credit to its rural entrepreneurs and small scale farmers could benefit from such a study.

### 3.5 Objectives of the Study

The enormous problems encountered in rural credit administration in Ghana requires intensification of research in this area to enable realistic suggestions to be offered that will help overcome them. Particular attention will have to be given to segments of the rural financial market concerned with Land tenure, product price, interest rate, extension, taxation, savings and marketing.

In attempting to research into these problems the views and ideas of participants in the rural financial market should be recognized and considered. Failure of rural credit policies to consider the true interest of participants in the rural financial market has led to the poor performance of credit programmes. In line with this philosophy of establishing a dialogue with the rural small scale farmer/entrepreneur and trying to obtain his view about the financial market in which he operates, this study is being undertaken.

The general objectives of the study are to determine what opinions small scale rural entrepreneurs in the Seko Dumasi area of Ghana hold about the rural credit delivery system and how it might be changed in order to eradicate deficiencies which they perceive.

The specific objectives are:

1. To determine the various sources of financial means available to the entrepreneur in the area and how these sources in their opinion, have influenced their economic wellbeing.
2. To find out what the rural entrepreneur especially the small scale farmer, would like to be done for him as regards the development of rural financial markets;
3. To determine what services the two financial markets operating in the rural economy provide to whom and how satisfied the clients are with these services.
4. On the basis of these observations and preferences to suggest changes in rural credit policies/directives which are supported to better serve their needs.



3.6 Footnotes to Chapter Three

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2. GONZALES-VEGAS: "Arguments for Interest Rate Reform" in J.D. von Pischke, Dale Adams and Gordon Donalds eds. Rural Financial Markets in Developing Countries. (John Hopkins Press, Baltimore Maryland) 1976.
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## 4 GEOGRAPHY OF THE AREA

### 4.1 Agrarian Structure

In the description of the agrarian structure of the country, I will confine myself to a description of important resources such as climate, land, characteristics of the rural population, level of technology and the marketing structure. Ghana lies between latitudes 4° and 11° north of the equator and longitudes 3° west and 1° east of the Greenwich meridian. It is bordered on the west by Côte d' Ivoire, on the north by Burkina Faso, on the east by Togo and on the south by the Atlantic Ocean.

The chief climatic variable affecting agriculture in the country is rainfall. The pattern of rainfall is bimodal giving rise to two rainy seasons: the major and minor seasons. The major rainy season is normally from March to June and the minor season from August to October. Generally mean annual-rainfall ranges from 300 mm in the southeastern coastal savannah to as high as 2000 mm in the tropical rainforest zone of the south west. Three main vegetational zones can be identified. The tropical rainforest of the southwestern region and the forest belt of the mid-section of the country, the coastal savannah and tree savannah of the northern half of the country.

The vegetational zones closely follow the rainfall pattern throughout the country. In between are the transition zones which have the characteristics of both savannah and forest vegetations. The soils are also a product of the underlying geology and climate and certainly influenced by land use. Forest ochrosols and osisols are mainly found in the forest zones. In the savannah areas soil types are mainly tropical black and grey earth; savannah ochrosols and sodium sterisols are found in the coastal savannah areas, especially near the lagoons.

Types of crops grown closely follow the rainfall pattern and the soil types. For example, cocoa, coffee, oilpalm are mainly cultivated in the tropical rainforest and forest zones. Cotton, yams and cereals like maize are popular in the transition and savannah zones.

Ghana has a total land area of 238.500 km<sup>2</sup> of which approximately 80 % or 194.000 km<sup>2</sup> are estimated to be suitable for

cultivation. According to AKIWUMI and ADEGEYE<sup>1</sup> the arable land per rural person in 1973 was about 9,6 hectares per person. Although the per capita arable land might have changed since then, the point is that there is an abundance of arable land for agricultural production. Present estimates will put the per capita arable land figure at approximately 2,3 hectares per rural person, using the present population figure of 12,2 million and assuming 70 % of it to be rural.

In spite of the general abundance of arable land, the agricultural sector is characterised by the predominance of small scale farming units. According to the 1970 Agricultural Census<sup>2</sup>, 30 % of all farmholdings were less than 0,8 hectares, 55 % were less than 1,6 hectares and 82 % were less than 4,0 hectares. Only 2 % of the farmholdings exceeded 20 hectares. A F.A.O.<sup>3</sup> survey in 1980 stated that maize production in Ghana is essentially a small scale enterprise in which more than 50 % of the area planted to the crop is in farms less than 4 hectares in size. Maize is widely cropped throughout the country by nearly every rural household. Some experts believe that the F.A.O finding could be indicative of an increase in farm size since 1970.

Generally land acquisition for farming purposes is not difficult, although there are some tenurial problems to be reckoned with: Land is held under the communal system of tenure. This implies that the ultimate ownership of land is vested in the community or clan. Members of the clan who farm on such lands do not have ownership rights but only usufructuary rights. This poses problems when tangible security is required by institutional lenders. As farmers do not have titles to the land they cannot offer it as security to obtain loans. It must be mentioned that because of the communal nature of landholding, partition of clan land is common, especially in areas of the country where cultivable land is scarce. In southeastern Ghana where suitable land for cultivation is scarce, individual tenure is developing and sale of land for agricultural purposes is common. Generally little agricultural land is registered in the country.

Many researchers, notable among them Prof. La ANYANE<sup>4</sup> have called for land tenure reforms in the country to remove the existing bottlenecks. Although successive governments have acknowledged this, none has been able to muster the courage to effect changes in the traditional tenurial system.

There are various forms of tenurial arrangements for tenant farmers. The two popular forms are the "abunu" and "abusa". Under these systems of tenureship payments for land use are made in kind. Normally the output from the land is divided between the landlord and the tenant farmer: In the case of the "abunu" the tenant takes two parts and the landlord one part, for the "abusa" the tenant takes 3 parts and the landlord one. There are varying forms of these tenurial arrangement depending on the locality.

#### 4.2 Characteristics of the Rural Population

The population in Ghana is predominantly rural. More than 80 % of the population is involved in farming and other enterprises related to agriculture. According to the population census<sup>4</sup> of 1984, nearly 69 % of a total population of 12,2 million reside in rural areas. The access of this population to schools, health care and good drinking water is very poor. They are generally illiterates or semi-literates and manage to live without the barest necessities of life. Nevertheless their contribution to the gross domestic product (GDP) in terms of agricultural production is very high. For instance, in 1976 agriculture contributed 26 % of GCP and between 1979 to 1983 its share of GDP has been 38,0 % on average.

Labour supply for agricultural work depends on the size of the household and those among them who are fit to work. There is also a close relationship between size of household and size of farms. This is especially so in areas where labour is very scarce and machinery is typically absent.

Despite the seemingly large number of the rural population, labour shortages are often experienced in the agricultural sector. This can be caused by the high price to be paid for rural labour and might be due to the fact that families are increasingly sending their children to school instead of having them stay to help on the farm. In an attempt to solve the problem of labour shortage in the agricultural sector, the government in 1986 changed the timetable for public schools such that holiday periods coincide with periods of intense activity on the farms.

#### 4.3 Technology and Marketing

The main tools employed in the agricultural sector are hoes and cutlasses. Recently draught animals and bullock ploughs

have been introduced, especially in the savannah regions of the country. Even some tractors are now being used mainly by large scale farmers. Chemical fertilisers and herbicides are not popular in the traditional farming sector partly because they are very expensive and partly because they are often not available. Traditionally, simple storage barns are employed to store cereals, whereas root crops are stored underground. The inadequacy of the traditional storage systems result in high post harvest-losses: In 1984, these inadequacies were exposed once again as a result of a higher than normal harvest.

Agricultural marketing is very labour intensive. It is controlled largely by self-employed women who travel to the primary markets to purchase the produce from the farmers. The marketing chain is often long: Normally between 4-5 intermediaries handle the produce before it arrives at the consumer. Generally conditions become more competitive and margins lower as one progresses along the chain to the final consumer. One major weakness of the traditional marketing system is lack of capital. The women traders can neither afford to invest in storage facilities nor to tie up their capital in produce for any length of time. They must rely on selling a commodity almost as soon as they have bought it.

Another weakness of the agricultural marketing system is the poor state of the roads in the rural sector. This affects the cost and reliability of transportation. The period of highest prices for foodstuffs coincides with the most difficult period for transportation when many feeder roads are impassable due to the rains. The government involves itself in direct marketing of agricultural produce through the Ghana Food Distribution Corporation which faces similar problems as the self-employed women traders.

#### 4.4 Study area

The study area lies in the transition zone between rainforest and savannah. In many respects it has very productive agricultural resources. The landscape is undulating in nature and lends itself to mechanized farming. The major agricultural activity is maize production. The climatic map for agriculture indicates that the mean annual rainfall lies between 1400 mm-1600 mm. Areas of high forest as well as grassland are identified.

Soils are characterised by four types of series. These are the forest ochrosols, forest lithosols, savannah ochrosols and savannah lithosols. Soil erosion is a serious problem in areas where the land has been left bare. This is noticeable along the lone road leading to the area.

Most of the inhabitants are engaged in small scale agricultural enterprises. The 1970 population census showed that 78,8 % of a population of 5,075 were engaged in Agriculture. Using the estimated growth rate of 3,2 % for Africa, the present population of the area should be between 8.000-9.000. Other small scale enterprises like blacksmithing, carpentry and soap making can be found in the area.

The infrastructure in the area leaves much to be desired. There is a healthpost, post office, police station, primary school and a rural bank which was established in 1984. These facilities also serve the neighbouring villages of Aframso, Teacherchrom and Franti. The dominant ethnic group are the Ashantis with settled migrants from the northern part of Ghana. The formal financial market in the study area is a recent introduction. Prior to the introduction of the Rural Bank, entrepreneurs in this area were travelling to Ejura, about 40 miles away to seek formal credit. In contrast the informal financial market is as old as the villages themselves. It is controlled mainly by indigenous moneylenders, traders and relatives. Financial self help organisations in the form of susu groups are also part of the informal financial market in the area.

#### 4.5 Footnotes to Chapter Four

1. AKIWUMI J.A. and ADEGEYE A.J.: "Prospects and Problems of a Common Agricultural Policy Among West African States." A contributed paper, read at the 16<sup>th</sup> International Conference of Agricultural Economists. Published by the University of Oxford, Institute of Agricultural Economics for the International Association of Agricultural Economists. Oxford 1977. p. 128
2. AGRICULTURAL CENSUS: Ministry of Agriculture - Agricultural Census Survey 1970.
3. FAO: "The Maize Grower", The Lost Harvest. L/L9500/E/7. 79/500. Rome; pp. 16.  
  
opt. citation in: JUMAH, A.: "Economics of Maize Production on small scale Farms in Ghana"; unpublished B.Sc. Dissertation Fac. of Agric. Univ. of Science & Technology Kumasi, Ghana, Dec. 1982.
4. LA ANYANE S.: "Issues in Agricultural Policy". In: Background to Agricultural Policy in Ghana. Proceedings of a Seminar organised by the Faculty of Agriculture, University of Ghana, Legon 1969. p. 16
5. CENSUS BUREAU: Population Cencensus 1984; National Bureau of Statistic Accra, Ghana.

## 5 METHODOLOGY

### 5.1 The sample

The questionnaire-interview survey method was used to obtain data from 203 small scale rural entrepreneurs in the study area. The design of the sample survey involved

- a) determination of the selection method
- b) the sample size
- c) drawing of the sample units
- d) design of the questionnaire
- e) implementation of the sample survey

In practical problems the statistician is often confronted with the necessity of discussing a population of which he cannot examine every member. According to YULE and KENDALL<sup>1</sup>, the analysis therefore requires the application of sampling methods since the fundamental object of sampling is to find the maximum information about the parent population with minimum effort. An enquiry into the whole rural population in Ghana would have been too costly and time consuming in relation to the tolerable error involved in a sample.

In order to obtain respondents who are representative of participants in rural financial markets random sampling was employed. This means that all members of the population had the same chance of being chosen. A list of 250 rural entrepreneurs in the study area was obtained during a reconnaissance survey conducted from May 5<sup>th</sup> to 8<sup>th</sup> 1985. Out of this list 220 were selected at random by the use of random chips and interviewed.

In designing the questionnaire special effort was made to win the confidence of the respondents. The questions were made as simple as possible so that they could be easily understood and answered. Every effort was made not to influence the respondents in answering the questions and they were asked to feel free to say their mind. The questions were more qualitative in nature as most of the respondents were not prepared to talk in detail about quantitative figures of funds borrowed and savings on hand etc.

The questionnaire was designed to bring out information from respondents on how they view credit operations both formal and informal. It provides for four major kinds of information



- a) Socio-economic background information on respondents
- b) Information on formal financial markets
- c) Information on informal financial markets
- d) Information on what they actually want to be done for them to remove current bottlenecks in the financial markets.

The survey was carried out from 2<sup>nd</sup> to 25<sup>th</sup> August 1985. The author was introduced to the respondents by a colleague who is resident in one of the villages. The survey was conducted in the local language of the area. It relied primarily on memory recall, sincerity and the ability of the respondent to act as a rational decision taker. On the average it required about half an hour to interview a respondent.

The villages of Afranso, Teackerkrom, Franti and Sekodumase were chosen as case study because the author is familiar with these villages and could therefore easily be tolerated by the inhabitants. The author had in 1982 researched into the "Economics of Maize Production" in one of the villages. In addition the area is an important grain producing area in the country. Most of the farming ventures, are owned by small farmers. There is also a sizeable amount of small scale agricultural related enterprises like blacksmithing, small scale soapmaking and carpentry. The largest of the villages Sekodumase has a rural bank which has the task of financing small scale enterprises. The area therefore presents an excellent case for a study of this kind.

## 5.2 Analysis

Data on socio-economic characteristics and answers to the other questions will be classified into groups on the basis of similarities. These groupings will then be presented as percentages of the total sample population to ensure clarity and easy interpretation.

Factor analysis, a multivariate statistical technique, will be used to arrange the variables collected from the individual respondents on two financial markets around a smaller number of actually variables called factors. This technique thus reduces the number of the perceived variables by placing them into sets each of which contain a particular kind of information from the sample. This is appropriate for this study because of its ability to highlight certain properties of a large body of interrelated data.

The power of factor analysis can be classified into four categories as follow:

- a) It is helpful to point out latent factors or dimensions in a body of data that determine relationships among a set of values.
- b) It picks out observed values that were there all the time but not easy to see.
- c) It groups items into categories with similar characteristics.
- d) It is helpful to cluster empirical observations to determine uncommon clusterings.

Factor analysis is popular in psychological and medical studies and market structure analysis. It is appropriate in the analysis of Rural Financial Markets and especially in a work of this type in which respondents in a market rank attributes, express how the market attributes affect them and recommend measures to overcome deficiencies of the market. When these attributes and recommendations are combined with the peculiar characteristics of the respondents background, the resulting information becomes so complex that a technique is needed to help in its interpretation by bringing important properties of the data into focus. This enables the researcher to detect common features and sometimes unconscious latent desires of the respondents which may be important to consider in policy recommendation.

The basic model of this analytical tool draws heavily on the work of AAKER<sup>2</sup> (1971). In this model the original variables are expressed in terms of factors and an error term.

The specification of the Model is as follows

$$X_{ij} = a_{j1}F_{i1} + a_{j2}F_{i2} + \dots \dots \dots a_{jm}F_{im} + e_{ij}$$

where  $X_{ij}$  is the value of variable  $j$  for respondent  $i$

$a_{jk}$  terms are the factor loadings. This represents the correlation between factor  $k$  and variable  $j$ , where  $k = (1, 2, \dots, m)$ .

$F_{ik}$  are called factor scores where  $k = (1, 2, \dots, m)$

$e_{ij}$  is the error term in the model which includes all residual variations not absorbed by the factors. The  $e_{ij}$  is a characteristic which is specific to variable  $j$  and not represented by any factor.

Each  $X_{ij}$  variable has a variation which contributes to the correlation with other variables. The amount of this variable variation is measured by so-called communalities<sup>3</sup>.

Using Infplan software by Siemens the above model was estimated. The software satisfied the three important processes of data standardization, achieve orthogonal solution through varimax criteria and the creation of a (203 x 52) matrix as input for the factor analysis.

The limitations of this technique are that it is costly in terms of computer time. The cost increases linearly with the number of respondents and faster than linearly with the number of variables. Like other statistical techniques its outcome can be flawed by measurement errors and variables whose values do not represent an ordering. Cross-classification tables will also be used to explain relationships among the variables under a factor.

5.3 Footnotes to Chapter Five

1. YULE G.U. & KENDALL M.G.: "An Introduction to the Theory of Statistics" (Griffins & Co, London) 1973. pp. 366-386.
2. AAKER A.A.: "Multivariate Analysis in Marketing; Theory and Application" (Wadsworth Publeshing Co. Inc. Belmore, California) 1971. pp. 209-256.
3. Ibid:

## 6 RESULTS

### 6.1 Socio-Economic Profile of the Sample Population

This chapter is divided into two parts, the first deals with the socio-economic background of the respondents and results of the survey, and the second concerns itself with the results of the interrelations between the variables and factors using cross-classification tables to ensure clarity in these interdependencies.

Out of the 203 respondents interviewed for this study 65 percent were male while 35 percent were female. 82 percent of the respondents were found to be married and non divorced, 6 percent were single (previously unmarried). 3 percent were divorced and 8 percent were widowed. Most of the respondents reported household size of six to eight members.

8 percent of the respondent were aged 30 years and below, 21 percent were aged between 31 to 40 years, 39 percent were aged between 41 to 50 years, 26 percent fall within the age group 51 to 60 while 6 percent were 61 years and above. By educational attainment, 32 % of the sample had had no formal schooling, 45 % were elementary school graduates or had had some amount of elementary education; 20 % had had some amount of high school education or were high school graduates while 5 % had completed their university education.

21 % of the respondents were found to be influential in the community while 79 percent described themselves as ordinary members of the community.

66 percent of married respondents had partners engaged in Agriculture, 28 percent had partners engaged in businesses outside agriculture while 6 percent had partners engaged in government work.

As regards projects for which credit has been obtained 97 % were for farming enterprises, 2 percent were for business outside farming and 1 percent was for private consumption (see table 3).

TABLE 3: Socio-economic profile of sample population

| Item   | Number | Percentage of Total |
|--|--------|---------------------|
| (A) SEX  |        |                     |
| Male   | 132    | 65,0                |
| Female   | 71     | 35,0                |
| (B) MARITAL STATUS                                     |        |                     |
| Married  | 167    | 82,2                |
| Single   | 13     | 6,4                 |
| Divorced   | 6      | 3,0                 |
| Widowed  | 17     | 8,4                 |
| (C) AGE  |        |                     |
| 30 - below   | 17     | 8,4                 |
| 31 - 40  | 43     | 21,1                |
| 41 - 50  | 79     | 38,9                |
| 51 - 60  | 52     | 25,6                |
| 61 - above   | 12     | 6,0                 |
| (D) STATUS IN COMMUNITY                                |        |                     |
| Influential  | 43     | 21,2                |
| Not influential  | 160    | 78,8                |
| (E) EMPLOYMENT BACKGROUND OF PARTNER                   |        |                     |
| Agriculture  | 135    | 66,5                |
| Business   | 28     | 13,8                |
| Government Service                                     | 6      | 3,0                 |
| (F) EDUCATIONAL BACKGROUND                             |        |                     |
| No formal Schooling                                    | 65     | 32,0                |
| Elementary School Graduate                             | 92     | 45,3                |
| High School Graduate<br>(incl. vocational + Technical) | 41     | 20,2                |
| College Graduate<br>(including Univ., Polytechnics)    | 5      | 2,5                 |
| (G) KIND OF PROJECT FOR WHICH CREDIT<br>WAS TAKEN      |        |                     |
| Agriculture  | 196    | 96,5                |
| Business   | 5      | 2,5                 |
| Private Consumption                                    | 2      | 1,0                 |

Source: Compiled from Sample Survey

## 6.1.1 Results of the survey

- 9)\* 96 % of the respondents reported using their accumulated savings to finance part of on going project. 10 % reported using income from other activities to finance part of on going project. With the exception of 4 % of the respondents all the others had some form of borrowed funds in on going project.
- 10)\* On the level of personal contribution to project, 8 % reported contributing between 5-10 % of invested funds in project, 8 % reported 10-15 %, 14 % reported 15-20 %, 14 % reported 20-25 %, 21 % reported 25-30 and 26 % reported 30 % and more as percentage of personal contribution to on going project. 9 %, however, reported nil contribution.

TABLE 4: Level of personal contribution to project

| level of personal resource in on going project (financial)<br>% | Distribution     |
|---|------------------|
|   | % of respondents |
| Nil   | 9                |
| 5-10  | 8                |
| 10-15   | 8                |
| 15-20   | 14               |
| 20-25   | 14               |
| 25-30   | 21               |
| 30 and above  | 26               |

Source: Compiled from sample survey

- 11)\* 4 % of the respondents regarded credit as not important and therefore reported not using credit. 96 %, however, regarded credit as vital to their operations. a) 19 % of the respondents thought they were receiving adequate credit, 77 % reported, however, that their obtained credits were often not able to meet their required credit needs. (4 % did not answer this question because they do not rely on credit. b) 40 % of the respondents said their credit needs were timely, while 56 % reported delays in receiving credit (4 % did not answer the question).

\* See question in questionnaire (appendix)

- c) 60 % reported their source of credit as not convenient in terms of repayment conditions and interest rate. 36 % of the respondents reported source of credit as convenient as far as repayment terms were concerned and did not complain about interest rate terms. (4 % did not answer this question).
- 12)\* As regards their credit relations with the informal financial market in their neighbourhood, 21 % reported not taking money from non-institutional agencies (this includes 4 % of the respondents who were not taking credit at all) while 80 % reported the informal financial market as a source of borrowed funds.
- a) Of the respondents obtaining credit from informal financial market 5 % were obtaining between 5-10 % of credit needs from this market, 2 % were obtaining between 10-15 % of credit requirements, 11 % reported funds obtained as between 15-20 %. 4 % were procuring between 20-25 % of project funds from this market. 8 % reported 25-30 % as funds obtained and 50 % reported taking at least 30 % of their invested funds from this market.- (see table 5).

TABLE 5: Level of funds obtained from Informal Financial Market as a percentage of invested funds in project

| level of funds obtained from Informal Financial Market % | Distribution of respondent % |
|--|------------------------------|
| 5-10   | 5                            |
| 10-15  | 2                            |
| 15-20  | 11                           |
| 20-25  | 4                            |
| 25-30  | 8                            |
| 30 and more  | 50                           |
|  | 80                           |

Source: Compiled from sample survey

\* See question in questionnaire (appendix)



- b) 82 % of the respondents reported mode of repayment and high interest rate charged as the disturbing characteristic of the informal financial market, 18 %, however, do not think that to be a problem.
- c) As regards security demanded by agents in the informal financial market, 70 % of the respondents reported personal reputation in community as basis of granting credit. 4 % reported jewellery for cash being demanded, 26 % reported "no collateral" requirement demanded.
- d) 78 % of the respondents reported the repayment terms and high interest charged as the major characteristic they do not like about IFM, while 22 % gave inflexibility of agents in IFM in times of calamity as the major thing they do not like about IFMs.
- e) Asked whether they were or would be satisfied with existing conditions in the informal market, 79 % of the respondents said they do not think or are not satisfied with their services. 21 % reported satisfaction with this source of credit.
- f) 65 % of the respondents who obtain credit from the informal financial market reported not having any other sources of funds beside their present. 35 % admitted having taking some credit from the formal market.
- g) Of the 80 % of the respondents receiving credit from the informal market, 47 % reported moneylenders as source of credit, 26 % gave traders as source of credit and 3 % reported landlords, while 24 % cited relations as credit source.
- 14)\* 35 % of respondents were relying on FFM in varying degrees; while 65 % were not taking credit from FFM.
- a) With regard to possibility of receiving financial assistance from the formal financial market, 17 % of the respondents reported obtaining all their requirements from commercial or development banks outside the study area. 26 % reported receiving some credit from the rural bank in the study area. 2 % reported receiving credit from both Commercial and Rural Banks. 55 % of the respondents said it was almost impossible for them to obtain funds from this

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\* See question in questionnaire (appendix)

financial market because of the requirements that have to be met. Of the respondents who reported receiving some funds from this market, 1 % obtained between 5-10 % of the total amount invested in project from this market, 2 % obtained between 15-20 % of funds invested in project and 24 % of respondents were having between 20-25 % of funds invested in project from this market. 18 % of respondents were having all the funds invested in project from the formal market. (See Table 6) and 3,0 % were having at least 50 % but less than 100,0 % of their credit ~~form~~ from this market.

- b) As regards terms of credit repayment, 88 % of the respondents think the repayment terms and conditions in the formal financial market are good. While 12 % did not think so.
- c) As to what type of security is demanded by agents in the formal financial market, 67 % of the respondents cited buildings, 24 % reported guarantors and 9 % reported no knowledge of security requirements.

TABLE 6: Extent of credit obtained from formal financial markets in percentages

| % of credit requirements obtained from formal financial markets | Distribution of respondents in percentages (%) |
|---|--|
| Nil   | 55   |
| 5-10  | 1  |
| 10-15   | -  |
| 15-20   | 2  |
| 20-25   | 21   |
| 25-30   | -  |
| 30-35   | -  |
| 35-40   | -  |
| 40-45   | -  |
| 45-50   | -  |
| 50-55   | 1,5  |
| 55-60   | 1,5  |
| .   |  |
| .   |  |
| .   |  |
| .   |  |
| almost 100  | 18   |

Source: Compiled from sample survey

15)\* With regard to which services (extension, flexibility, interest rate, input delivery, sympathetic) respondents think are good and which services are not good when the two financial markets are considered.

a) 89 % cited low interest rate as a plus in formal financial markets, 11 % did not think so especially when gifts and other cost of obtaining credit are considered.

78 % reported high interest rate in the informal market as a negative aspect of this market, while 12 % did not think consider it a problem.

b) 85 % of the respondents think agents in formal financial markets are not sympathetic, while 15 % consider them sympathetic.

c) 56 % consider the formal financial market not only as a source of credit, but admire their extension services and their offer of inputs.

44 % do not care about their offer of inputs and extension of advice.

d) 97 % think the formal financial markets demand too much before making credit available, 3 % reported not worried about these demands.

e) 96 % of the respondents think that the agents of the informal financial markets are more flexible when it comes to credit repayment and when compared to the agents of the formal financial market, 4 % find agents in both financial markets not flexible.

16)\* With regard to their borrowing patterns in relation to the seasonal cycle of the major enterprise (ie agriculture), in the area,

92 % reported high borrowing just before the cropping season

4 % reported low borrowing during this period

4 % did not borrow during this period

72 % reported high borrowings during the harvesting period

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\* See question in questionnaire (appendix)

- 4 %, however, said their borrowing is low during the harvesting period  
 24 % reported not borrowing during the harvesting period  
 Only 10 % reported high borrowing during slack periods
- 17)\* 23 % of the respondents rated their prevailing debt position as too high in relation to their assets or income.  
 73 % reported a manageable debt position taking into account their assets and income  
 4 % reported as having no debt.
- 18)\* With regard to the trend of their indebtedness as regards the size of the agricultural harvest in the area  
 52 % reported high debt position during bumper harvest as compared to 48 %  
 69 % reported high debt position during poor harvest  
 31 % reported reduced debt position during poor harvest  
 4 % said their debt position appeared stable irrespective of good or bad harvest while 96 % reported fluctuating debt position
- 19)\* With regard to the question, how respondents think current credit operations and conditions in the area have affected their economic situation, 32 % think economic position has improved, 46 % reported no change in economic position and 20 % reported worsening economic position.
- 20)\* As regards recommendations of how to improve the financial markets in the area, 74 % of the respondents rated improved infrastructure to minimise lending risk and good prices for their produce as paramount. 80 % of the respondents did not think better trained staff to administer credit were necessary if the impediments to obtain credit were still there. 19 % recommended better trained staff. 33 % of the respondents would like more financial institutions in the locality. 67 %, however, did not think increased presence of financial institution would help.
- 21)\* 80 % felt that strict enforcement of current rural credit directives would not help, while 20 % thought that tighter enforcement of current directives will help. 84 % felt that dropping of collateral requirements will help them get easy access to formal credit, while 16 % felt

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\* See question in questionnaire (appendix)

that it will not make any difference since the agents in the formal markets will find new requirements to deny them credit.

### 6.1.2 Results of cross-classifications

This section of the results presents the outcome of the factor analysis of the 52 attributes of the rural financial market in the Seko-Odumase area. In all 10 factors were obtained but only four were picked for further analysis because they were found to be more useful to the aims of the study. The four factors discussed below show how the various variables are correlated with each of the factors. The factors are interpreted mainly on the basis of their factor loadings. Variables having correlation coefficients of 0,5 or more on the varimax axis were considered. All other variables were disregarded. Subjective evaluations of possible underlying processes influencing respondents responses as regards the two segments of the rural financial market are discussed, and each factor is also discussed with reference to attributes having high loadings on the respective factors.

#### FACTOR 1: Are you satisfied with Informal financial Markets

| No. | Variable  | Factor loadings |
|-----|---|-----------------|
| 1   | Satisfaction with agents in the informal financial-market         | 0,87413         |
| 2   | Rely on credit from informal financial market                     | 0,76684         |
| 3   | Debt position is stable irrespective of good or bad harvest       | 0,76684         |
| 4   | Credit needs low during slack periods                             | - 0,74486       |
| 5   | Educational background (Univ. High school, Primary, No schooling) | - 0,62826       |
|     |   | 0,56445         |

Factor 1 shows high positive loadings on attributes like "satisfaction with services of agents in the informal financial markets" and reliance on credit from informal market. Factor 1 has therefore significant relationship with informal financial market. It can therefore be used for further analysis to determine the background of respondents falling under this category. Their views on the market in which they find themselves and their recommendations for improvement could then easily be analysed. The factor loadings on variables 3 and 4 under fac-

tor 1 are negative and this imply an inverse relationship with the factor. The general relationship between Factor 1 and the variables indicate that respondents who are generally satisfied with agents in IFM rely on them as a credit source, they have fluctuating debt positions depending on good or bad harvest in the agricultural sector, that they have high credit needs during slack periods and normally have lower level of education or are illiterates.

A cross-classification table between variable 1 and 2 under Factor 1 reveals that 43 respondents or 27,0 % of those having IFM as a major source of credit are completely satisfied with their services while 73,0 % were not satisfied with services of agents in IFM. See table 7.

TABLE 7: Source of most credit in relation to satisfaction of services in IFM

|            | FFM             | Money lenders   | Traders         | Landlords      | Relatives       | Column Totals |
|------------|-----------------|-----------------|-----------------|----------------|-----------------|---------------|
| No         | 41 25,6<br>97,6 | 65 40,6<br>85,5 | 39 24,4<br>92,9 | 5 3,1<br>100,0 | 10 6,3<br>26,3  | 160<br>78,8   |
| Yes        | 1 2,3<br>2,4    | 11 25,6<br>14,5 | 3 7,0<br>7,1    |                | 28 65,1<br>73,7 | 43<br>21,1    |
| Row Totals | 42 20,7         | 76 37,4         | 42 20,7         | 5 2,5          | 38 18,7         | 203           |

It could be seen from table 7 that in IFM services of relatives seems the most satisfactory, with 73,7 % of respondents obtaining credit from this sources being satisfied with services, this is followed by respondents who obtain finance from money lenders with 14,5 % describing their services as satisfactory. Only 7,0 % of respondents who obtain finance from traders described their services as satisfactory. None of those financed by landlords were satisfied with their services. Only 1 respondent or 2,4 % of those who obtain almost all their credit requirements from FFM thought services on of IFM as satisfactory.

To find out which of the services or reasons why most respondents are not satisfied or find not satisfactory about IFM, Factor 1 was cross-classified with variable 3 (see table 8).

TABLE 8: Debt position in relation to satisfaction with services on IFM

|            | Unstable and rising debt position irrespective of output |        | Stable and decreasing debt position according to output |        | Column Totals |
|------------|--|--------|---|--------|---------------|
| No         | 156<br>91,2 %  | 97,5 % | 4<br>12,5 %   | 2,5 %  | 160<br>18,8 % |
| Yes        | 15<br>8,8 %  | 34,9 % | 28<br>87,5 %  | 65,1 % | 43<br>21,2 %  |
| Row Totals | 171  | 84,2 % | 32  | 15,8 % | 203           |

From table 8 it could be seen that 84,2 % of the respondents gave the unstable and rising debt position of a borrower from IFM as a major source of the dissatisfaction with the services of IFMs, while 16,0 % did not acknowledge this trend. 8,8 % of the respondents, who view the debt position of a borrower in IFMs as unstable and rising, still reported being satisfied with other services of IFM. The most plausible explanation for the unstable and rising debt of borrowers in IFMs could be traced to the mode of repayment of debt. Many agents in IFMs demand payments in kind and often fix the prices of the produce themselves. Especially guilty in this respect are traders who provide financing for productive purpose and later buy back the produce on terms dictated by them.

Further cross-classification of the variable '1 under Factor 1' with the variable "adequacy of credit" it is realised that most of the respondents were of the opinion that the informal sector was not able to provide adequate credit (see table 9).

TABLE 9: Satisfaction with IFMs in relation to adequacy of credit

|            | Not Adequate  |        | Adequate     |        | Column Total  |
|------------|---------------|--------|--------------|--------|---------------|
| No         | 132<br>84,6 % | 82,5 % | 28<br>59,6 % | 17,5 % | 160<br>78,8 % |
| Yes        | 24<br>15,4 %  | 55,8 % | 19<br>40,4 % | 44,2 % | 43<br>21,2 %  |
| Row Totals | 156           | 76,8 % | 47           | 23,2 % | 203           |

Table 9 shows that approximately 77,0 % of the sample population viewed loans from the informal sector as inadequate, however, 23,2 % of them perceived loans from IFM as adequate. It can be deduced from the table that agents in IFMs are not adequately endowed with financial resources to be able to provide sufficient funds to borrowers.

Further cross-classification of the first variable under Factor 1 with type of security demanded by IFM, shows that personal reputation was the major requirement for obtaining loans. 89 % of the respondents stated this attribute as one of the positive aspects of IFM. None stated building or land as a requirement for obtaining loans from this sector. Of the 161 respondents who were obtaining credit from IFMs only 22 respondents or 14,0 % reported securing loans with personal effects. See Table 10.

TABLE 10: Satisfaction with IFMs in relation to type of security demanded

|            | Building | land | Personal effects | Personal reputation     | Column Total |
|------------|----------|------|------------------|-------------------------|--------------|
| No         | -        | -    | 22<br>95,5 %     | 37<br>62,7 %<br>20,6 %  | 59<br>29,1   |
| Yes        | -        | -    | 1<br>4,4 %       | 143<br>99,3 %<br>79,4 % | 144<br>70,9  |
| Row Totals | -        | -    | 23<br>11,3 %     | 180<br>88,7 %           | 203          |

It could be observed from table 10 that type of security demanded in IFM is one of its strongest attributes admired and this could be attributed to the fact that the common form of security that could be provided by the rural folk is honesty and hardwork. Type of security demanded by agents in IFM appear realistic considering the developmental stage in rural areas and economic background of most respondents.

FACTOR 2: Source of credit and effect on economic position

| No. | Variables  | Factor loadings |
|-----|--|-----------------|
| 1   | Contribution of FFM + IFMs to total supply of credit (1-5) | 0.90906         |
| 2   | Contribution of IFM to total supply of credit (1-7)        | 0.90865         |
| 3   | Availability of alternative sources of credit (1/0)        | 0.87210         |
| 4   | Impact of credit services on Economic position (1,2,3)     | 0.71078         |



Factor 2 shows high positive loadings on contribution of FFM and IFMs to total supply of credit and together with the other three variables can be described as explaining this Factor 2 in terms of credit sources and its effect on income and economic position of respondents.

Variable 2 under Factor 2 can be eliminated without changing the meaning of the Factor, because like variable 1 it measures the same item. It is therefore designated here as a redundant variable and deleted. Variable 3 shows a positive correlation with variable 1 and indicates that the less adequately one receives finance from FFM the more likely it is that one might seek finance from IFMs. In other words the more adequately one is financed by FFM the less likely it is that one might obtain financing from IFM. Variable 4 likewise is positively correlated with variable 1, indicating that the less one relies on FFMs the more likely it is that credit operation will negatively affect ones income and economic position.

The above are generalisations and to obtain the true picture among the sampled population with reference to this factor needs further analysis. To achieve this aim variable 1 is cross-classified with variable 3 to determine how truly the above generalisations hold among the sample population. Table 11 is the result of this cross-classification.

Table 11 clearly shows how variable 1 and 3 under factor 2 distributes the sample population into categories. It is clearly seen that 97,2 % of the respondents who rely solely on FFM had more than one source of credit in this market and that only 3,0 % reported having only one direct source in this category. Although respondents were not asked the reason for this behaviour, several assumptions could be made here. This trend could suggest inadequate finance from any one agents in the FFMs, or the low interest rate on credits from this source makes it more attractive to borrow from many sources in the FFM. Respondents dealing only with agents in IFM were in contrast not cross borrowing, although one of the major complaints against IFM under Factor 1 was the inadequate funds that they advance. To illustrate this characteristic, table 11 reveals that 100,0 % of those taking credit solely from this market had no alternative source of credit, despite the fact that the opportunity to obtain credit from other agents in IFM was possible. The plausible reason could be that the high interest rate on credits in IFMs prevents this behaviour. Otherwise it is doubtful why respondents in this category do not borrow from more than one source to satisfy their total credit needs in a market where they can meet the lending conditions.

TABLE 11: Availability of alternative sources of credit in relation to degree of dependence on FFM and IFM

|  | Have no<br>alternative<br>source of credit | Have alter-<br>native source<br>of credit | Column<br>Totals |
|--|--|---|------------------|
| wholly dependent<br>on FFM   | 1            2,8 %<br>0,8 %                | 35            97,2 %<br>38,5 %            | 36<br>17,7       |
| wholly dependent<br>on IFM   | 110            100,0 %<br>98,2 %           |   | 110<br>54,2 %    |
| 5-10 % of credit<br>from FFM<br>and rest from IFM  |  | 3            100,0 %<br>3,3 %             | 3<br>1,5 %       |
| 10-15 % of credit<br>from FFM (rural<br>banks)<br>and rest from IFM                                |  |   |                  |
| 15-20 % of credit<br>from FFM (rural<br>banks)<br>and rest from IFM                                |  | 5            100,0 %<br>5,4 %             | 5<br>2,5 %       |
| 20-25 % of credit<br>from FFM (rural<br>banks)<br>and rest from IFM                                | 1            2,3 %<br>0,8 %                | 42            97,7 %<br>46,1 %            | 43<br>21,2 %     |
| .....<br>.....<br>at least<br>50 % of credit from<br>FFM but            100 %<br>and rest from IFM |  | 6            100,0 %<br>6,5 %             | 6<br>2,9 %       |
| Row Totals   | 112            55,2 %                      | 91            44,8 %                      | 203              |

Part financing was typical among respondents who were obtaining finance from rural banks. Four categories of respondents were classified and this could be used to describe the effect of the rural banks on the people in the locality. Respondents

who were obtaining part financing from rural banks often had alternative sources of credit and in most cases these were in the IFM.

Approximately 25,0 % of respondents were enjoying part financing from the rural bank in the locality. This type of financing appears to be a credit rationing method used by most rural banks and it is mainly aimed at agricultural producers. In an analysis of the lending portfolios of rural banks in Ghana Adam Nyinaku<sup>1</sup> (1986) stated that agriculture received the lowest average per borrower compared to borrowers in other sectors such as transport and commerce. The reason given by the rural banks for the small amounts given to agricultural borrowers are that they are small borrowers and their needs are not huge. The sample data, however, indicates the contrary and shows that respondents depending on them are hardly given adequate credit and often fall on IFMs for additional credit. Out of 57 respondents depending on rural banks only 6 or 10,0 % could obtain 50 % or more but less than 100 % of their credits needs there.

Further cross-classification of variable 1 and 4 under Factor 2 shows the relationship between the degree of reliance on the two financial markets and its perceived influence on income and economic position of respondents (see table 12).

That source of credit affects income of respondents is not in doubt as shown by table 12, although factors like entrepreneurial ability, prices of product etc. are also very important in this respect. Holding all other factors constant, it could be inferred from table 12 that source of credit has some influence on income and hence economic position of the borrower.



TABLE 12: Degree of reliance on a segment of the financial market and its effect on income and economic position

|   | Income and economic position improved | Income and economic position has not changed | Income and economic position deteriorated | Column Totals  |
|---|---------------------------------------|--|---|----------------|
| wholly dependent on FFM   | 31 86,1 %<br>41,9 %                   | 5 13,9 %<br>5,6 %                            |   | 36<br>17,7 %   |
| wholly dependent on IFM   | 18 16,4 %<br>24,3 %                   | 53 48,2 %<br>59,6 %                          | 39 35,5 %<br>97,5 %                       | 110<br>54,2 %  |
| 5-10 % of credit from FFM (rural banks) and rest from IFM                           | 2 66,7 %<br>2,7 %                     | 1 33,3 %<br>1,1 %                            |   | 3<br>1,5 %     |
| 10-15 % of credit from FFM (rural banks) and rest from IFM                          |                                       |  |   |                |
| 15-20 % of credit from FFM (rural banks) and rest from IFM                          | 3 60,0 %<br>4,1 %                     | 2 40,0 %<br>2,2 %                            |   | 5<br>2,5 %     |
| 20-25 % of credit from FFM (rural banks) and rest from IFM                          | 17 39,5 %<br>22,9 %                   | 25 58,2 %<br>28,0 %                          | 1 2,3<br>2,5                              | 43 %<br>21,2 % |
| .....<br>.....<br>at last<br>50 % of credit from FFM but 100 %<br>and rest from IFM | 3 50,0 %<br>4,0 %                     | 3 50,0 %<br>3,3                              |   | 6<br>2,9 %     |
| Row Totals  | 74 36,5 %                             | 89 43,8 %                                    | 40 19,7 %                                 | 203            |

Respondents relying wholly on FFM had the highest percentage (41,9 %) among the 74 respondents reporting improved income and economic position as a result of credit operations. Those relying wholly on IFM made up 24,3 % of those reporting improvement in income and economic position as a result, and the remaining 33,8 % in this category were obtaining credit from both rural banks and IFMs. The reason for this trend is not far fetched. The subsidized credit in FFM greatly benefits those who manage to obtain credit from this source. This is evident in the sample population, where 31 out of 36 respondents who were completely relying on FFM reported improvements in income and economic position. A mere 14,0 % of respondents in this category did not see any change in their income and economic position. This contrast sharply with respondents who rely completely on agents in IFM for credit, where 36,0 % of a total of 110 respondents reported deterioration in income and economic position, 48 % did not observe any change and 16,0 % thought their income and economic position had improved. The high interest rate charged on this market presumably may be responsible, but most of the complaints were largely directed at the mode of repayment of credit in this financial market and not at the interest rate per se. However, it could be argued that high interest rate could be embodied in the mode of repayment in IFM as interest as well as principal are paid for in kind. Normally the terms of such repayment arrangements are inimical to the interest of the client.

Of the 57 respondents who obtained part finance from the rural bank 25 or approximately 50 % reported improvement in income while the other 50,0 % reported not observing any change in economic position and income. On the whole 37,0 % of the sample population thought they were benefitting as a result of credit activities, while 20,0 % thought they were not benefitting and rather being disadvantaged with 44,0 % not observing any improvement.

Cross-classify variable 1 under Factor 2 with the variable "adequacy of credit" gives a clearer picture of the performance of the various agents in the formal market with credit adequacy (see Table 13).

TABLE 13: Credit adequacy in relation to credit provision by IFM

| Source                     | inadequate |        | adequate |        | Column Totals |
|----------------------------|------------|--------|----------|--------|---------------|
| (IFM)                      | 92         | 82,9 % | 19*      | 17,1 % | 111           |
| Not-Applicable             | 59,0 %     |        | 40,4 %   |        | 54,7 %        |
| Comm.+<br>Dev. Banks       | 17         | 50,0 % | 17       | 50,0 % | 34            |
|                            | 10,9 %     |        | 36,2 %   |        | 16,7 %        |
| Rural Banks                | 43         | 81,1 % | 10       | 18,9 % | 53            |
|                            | 27,6 %     |        | 21,3 %   |        | 26,1 %        |
| Both Rural +<br>Commercial | 4          | 80,0 % | 1        | 20,0 % | 5             |
|                            | 2,6 %      |        | 2,1 %    |        | 2,5 %         |
| Row Totals                 | 156        | 76,8 % | 47       | 23,2 % | 203           |

\* figure includes 8 respondents who were not borrowing

As table 13 indicates 77 % of the sample population complains about inadequate credit as against 23 % who thought they were having adequate credit. Credit inadequacy was highest in IFMs with 83,0 % of the 111 respondents reporting inadequate credit. The probable reason could be the low capital base of agents in IFM. Lack of project appraisal technique by agents in IFMs could also be responsible for their advancing inadequate credit.

50 % of the respondents obtaining funds from commercial and development banks admitted being adequately financed while 50 % thought they were not receiving adequate finance. The performance of the rural banks among the sample population with regard to adequacy of credit was very poor when compared to the commercial and development banks. 81 % of the 58 respondents taking money from this source complained of inadequacy of credit. It could be observed from the table 13 that commercial and development banks did better in providing adequate credit than the rural banks and agents in IFMs.

The probable reason is not far fetched. The commercial and development banks with their large capital base and their use of qualified staff to appraise project are well equipped to provide adequate credit to their clients. The poor performance of

the rural bank in providing adequate credit is a bit difficult to explain, because they also have staff who do appraise projects. The probable reason that could be given for this behaviour therefore is that the rural banks being new in the rural credit market are reluctant to commit themselves too deeply with borrowers whose only security are recommendations from guarantors.

Further cross-classification of variable 2 under Factor 2 with variable timeliness of credit reveal some interesting results and clearly points out one of the major strengths of the informal market (see table 14).

TABLE 14: Timeliness of credit in relation to source

| Source                     | Not Timely   |        | Timely       |        | Column Totals |
|----------------------------|--------------|--------|--------------|--------|---------------|
| IFM                        | 49<br>43,8 % | 44,1 % | 62<br>68,1 % | 55,9 % | 111<br>54,7 % |
| Comm.+<br>Dev. Banks       | 20<br>17,9 % | 58,8 % | 14<br>15,4 % | 41,2 % | 34<br>16,7 %  |
| Rural Banks                | 39<br>34,8 % | 73,6 % | 14<br>15,4 % | 26,4 % | 53<br>26,1 %  |
| Both Rural +<br>Commercial | 4<br>3,6 %   | 80,0 % | 1<br>1,1 %   | 20,0 % | 5<br>2,5 %    |
| Row Total                  | 112          | 55,2 % | 91           | 44,8 % | 203           |

Table 14 shows that 55 % of the sample population were not receiving credit timely as against 45 % who were obtaining credit timely. Of those receiving credit timely, 68 % were obtaining funds solely from IFMs and only 32 % from FFM. Within the FFM the performance of commercial and development banks on one hand and rural banks as regards the attribute "timely" was the same among the sample population. Each having 15 % of respondents receiving timely credit. Table 14 shows clearly that the efficiency of IFM with regards to timeliness of loans was higher than FFM among the sample population. The probable reason here is the very simple and little paperwork involved in negotiating loans on IFM.

The surprising thing here is that rural bank had a larger percentage of respondents borrowing there not receiving timely credit (74 %). The simple structure of rural banks compared to commercial/development banks leads one to expect quicker disbursement of credit by rural banks than commercial banks.

FACTOR 3: Satisfaction with credit conditions in FFMs

| Nº | Variables  | Factor loadings |
|----|--|-----------------|
| 1  | Demands before credit is granted are stringent (1/0) | 0,67293         |
| 2  | Are you satisfied with agents in FFMs (1/0)          | -0,62391        |

Factor 3 shows a high positive Factor loading on "demands before credit is granted" and this variable is negatively correlated with the variable "are you satisfied with agents in FFMs". The Factor 3 generally means that those not satisfied with FFM blame the stringent conditions that have to be met before one obtains credit. Cross-classifying variable 1 and 2 under Factor 3 results in table 15:

TABLE 15: Satisfaction with FFM as regard demands made before credit is granted

|                           | Not satisfied with FFM |        | Satisfied with FFM |        | Column Totals   |
|---------------------------|------------------------|--------|--------------------|--------|-----------------|
| Demands are not stringent | 5<br>2,8 %             | 83,3 % | 1<br>4,3 %         | 16,7 % | 6<br>3,0 %      |
| Demands are stringent     | 175<br>97,2 %          | 88,8 % | 22<br>95,7 %       | 11,2 % | 197,0<br>97,0 % |
|                           | 180                    | 88,7 % | 23                 | 11,3 % | 203             |

It can be observed from tabel 15 that 97,2 % of the sample population who were not satisfied with FFM gave stringent demands before credit is given as reason for unsatisfaction. Even among those who were satisfied with services of FFMs 95,7 % mentioned their stringent demands before credit is extended as negative; 6 respondents or 3,0 % of the sample population, however, did not think demands before credit is exten-



ded by agents in FFM are stringent. Out of this 6 only 1, however, reported satisfaction, the other five reported unsatisfaction. The unsatisfaction with FFM as regards "their demands before granting credit" can be explained by the fact that majority of the rural folks cannot meet this requirement because they do not own the items being demanded as pre-requisites for credit. This therefore excludes most of them from obtaining funds from FFM.

**FACTOR 4: Nature of enterprise and security requirement demand by financial intermediary**

| N <sup>o</sup> | Variables   | Factor loadings |
|----------------|---|-----------------|
| 1              | Type of project for which financing is sought (Agric/Business/Private Consumption | -0,75559        |
| 2              | High credit requirements during harvesting period (1/0)                           | -0,67027        |
| 3              | Type of security demanded by agents in FFM (1-7)                                  | 0,66548         |

Factor 4 shows high loadings on "type of project for which financing is sought". It is correlated in a similar direction with level of credit requirement during harvesting period. These two variables together with the third describe Factor 4 in terms of nature of enterprise and the degree of risk attached to it by intermediaries in FFM. The negative correlation between variable 1 and variable 3 shows that the security demands by agents in FFM becomes tougher as one borrows for projects from private consumption to Business and then to Agriculture. This trend should reflect the risk lenders attach to activities in these three areas. It means that lenders attach high risk to agricultural projects and therefore tougher security requirements are attached to agricultural loans. Similarly the high correlation between variable 1 and 2 under Factor 4 shows that level of credit requirements are high at harvest time as the project activity shifts from private consumption through Business to Agriculture. This trend is not surprising as labour requirement for harvesting are high during harvesting period in agriculture. Borrowing for private consumption is expected to be negligible during harvesting period.

To obtain a clearer picture of how variables 1 and 2 are perceived or affect the sample population, they are cross-classified. (See Table 16).

TABLE 16: Level of credit-requirement at harvest time

| Type of project     | low            |         | high            |        | Column Totals   |
|---------------------|----------------|---------|-----------------|--------|-----------------|
| Agriculture         | 53,0<br>91,4 % | 27,0 %  | 143,0<br>98,6 % | 73,0 % | 196,0<br>96,6 % |
| Business            | 3,0<br>5,2 %   | 60,0 %  | 2,0<br>1,4 %    | 40,0 % | 5,0<br>2,5 %    |
| Private Consumption | 2,0<br>3,4 %   | 100,0 % |                 |        | 2,0<br>1,0 %    |
| Row Total           | 58             | 28,6 %  | 145             | 71,4 % | 203,0           |

Table 16 shows that the credit needs of respondents engaged in agriculture were high at harvest time. 73 % of the respondents engaged in agriculture as against 27,0 % reported high credit needs during harvesting period. The probable reason could be the high dependency on hired labour for harvesting activities in the locality. Although the population of respondents in the sample involved in business is only 5, 40 % of them had high credit needs during harvest time as against 60 % whose credit requirements are low during this period. The 2 respondents who obtain credit for private consumption, both reported low credit requirement at harvest time. The explanation here could be, the availability of own funds for consumption as a result of the harvesting activities. Cross-classification of variable 1 and 3 both under Factor 4 reveal an interesting relationship between type of project and security demanded by lender in FFM. (See table 17).

It could be observed from Table 17 that out of the 196 respondents engaged in agriculture 67,3 % were required to secure their loan demands by buildings. 14,8 % could use or had used personal reputation to secure credit from agents in FFM and 17,9 % could manage credit from FFMs with the help of guarantors. Of the 5 respondents engaged in "Businesses" outside agriculture 80,0 % were required to secure credit demands by buildings and only 1 or 20 % could secure credit through the help of guarantors. Two of the respondents who borrow for consumption purposes had to be secured by guarantors. On the whole the agents in FFM require security in the form of buildings. 66,5 % of the respondent have been asked by agents in

FFMs to do so. 14,8 % have or could manage to obtain loans on their personal reputation or status and 18,7 % have had to be supported by guarantors before they could secure credit in FFMs.

TABLE 17: Type of project in relation to security demanded by FFM

| Type of project     | Building             | Personal reputation | Guarantors            | Column Totals   |
|---------------------|----------------------|---------------------|-----------------------|-----------------|
| Agriculture         | 132 67,3 %<br>97,1 % | 29 14,8 %<br>100    | 35,0 17,9 %<br>92,1 % | 196,0<br>96,6 % |
| Business            | 4,0 80,0 %<br>2,9 %  |                     | 1 20,0 %<br>2,6 %     | 5,0<br>2,5 %    |
| Private Consumption |                      |                     | 2,0 100,0 %<br>5,3 %  | 2,0<br>1,0 %    |
| Row Total           | 165 66,5 %           | 29 14,8 %           | 38,0 18,7 %           | 203,0           |

To integrate the perceptions of the sample population on the rural financial market in the locality and to find out how they will like it modified to ensure financial credit to more rural entrepreneurs, their sources of credit were cross-classified with the following attributes.

"More financial institutions must be within locality"

"More properly trained staff to administer rural credit"

"Government must improve rural infrastructure and marketing services"

"Tighter enforcement of existing rural credit directives"

"Stringent requirements like possession of immovable security before credit is extended should be dropped"

It must be mentioned that the factor loadings on these variables were often low and where they were high, they appeared under redundant factors and therefore had to be discarded. However, because of their direct importance in judging respondents opinion on improvement of rural financial markets the following cross-classification tables are presented.

Table 18 portrays the opinions of members of the sample population on the attribute "More financial institution must be within locality".

TABLE 18: Source of most credit in relation to increase in banking institutions in locality

|                                      |     | FFM               | Money lenders     | Traders           | Landlords       | Relations         | Column Totals |
|--------------------------------------|-----|-------------------|-------------------|-------------------|-----------------|-------------------|---------------|
| Movement of more banks into locality | no  | 26 19,3%<br>61,9% | 50 37,0%<br>65,8% | 32 23,7%<br>16,2% | 4 3,0%<br>80,0% | 23 17,0%<br>60,5% | 135<br>66,5%  |
|                                      | yes | 16 23,5%<br>38,1% | 26 38,2%<br>34,2% | 10 14,7%<br>23,8% | 1 1,5%<br>20,0% | 15 22,1%<br>39,5% | 68<br>33,5%   |
|                                      |     | 42* 20,7%         | 76 37,4%          | 42 20,7%          | 5 2,5%          | 38 18,7%          | 203           |

\* includes those who obtain at least 50 % of their credit from this market

It can be observed from table 18 that generally 66,5 % of the sample population do not think establishing more financial institutions in the locality would make accessibility to formal credit easier, 33,5 %, however, think otherwise.

By source of credit, out of the 135 respondents who do not think establishing more banks in the locality would make accessibility to formal credit easy, 37,0 % were borrowing from moneylenders, 23,7 % were borrowing from traders, 3,0 % from landlords and 17,0 % were obtaining credit from relatives. Even those who are presently enjoying credit solely from FFM make up about 18,3 % of the respondents who do not think increase in the number of banks in the locality will help get formal credit to the majority of them. The probably reason for this opinion could be that, most respondents know that the creation of more banks in the locality will not change the requirements of the banks for advancing credit. As most of them cannot satisfy these pre-conditions for formal credit, their responses are not surprising. Another reason for the negative response in recommending this attribute could be that the effectiveness of the rural bank in the locality in satisfying their credits needs satisfactorily has not been such as to recommend further establishment of more banks. The extreme difficulty in obtaining loans from the FFMs could be the reason for this response. In other words the administrative hurdles that discourage the small farmer to receive credit from FFMs would not diminish, in the perception of respondents, with the introduction of more financial institutions.

Table 19 shows a cross classification between the variable "source of credit" and the variable "more properly trained staff to administer rural credit".

Table 19 generally shows that 80,8 % of the respondents do not think improvement in the quality of rural credit staff could help strengthen rural financial markets and make credit accessible to them. This result suggest that respondents do not perceive the present quality of staff in formal markets as an obstacle. This view might be true considering that almost all institutions in the formal market have trained rural credit experts well versed in their fields. The most probable explanation for this response, however, could be that most of the respondents have not come into real operational contact with staff of institutions in FFM to be able to judge the quality of staff handling their needs. Even among the 42 respondents or 20,7 % of the sample population who receive more than 50 % of their credit from FFMs 62 % do not think improving the quality of staff could strengthen FFMs and make credit available to more people.

TABLE 19: Perceptions on the attribute "properly trained staff to administer rural credit" in relation to source of credit

|   |     | FFM               | Money-lenders     | Traders           | Landlords       | Relatives         | Column Totals |
|---|-----|-------------------|-------------------|-------------------|-----------------|-------------------|---------------|
| Properly trained staff to administer rural credit | no  | 26 15,9%<br>61,9% | 70 42,7%<br>92,1% | 34 20,7%<br>81,0% | 3 1,8%<br>60,0% | 31 18,9%<br>81,6% | 164<br>80,8%  |
|   | yes | 16 41,0%<br>31,8% | 6 15,4%<br>4,9%   | 8 20,5%<br>19%    | 2 5,1%<br>40,0% | 7 17,9%<br>18,4%  | 39<br>19,2%   |
| Row Totals  |     | 42 20,7%          | 76 37,4%          | 42 20,7%          | 5 2,5%          | 38 18,7%          | 203           |

TABLE 20: Perceptions on the attribute "Government must improve infrastructure and marketing services" in relation to source of credit

|  |     | FFM               | Money-lenders     | Traders           | Landlords       | Relatives         | Column Totals |
|--|-----|-------------------|-------------------|-------------------|-----------------|-------------------|---------------|
| Gov't must improve infrastructure and marketing services as top priority | no  | 19 36,5%<br>45,2% | 8 15,4%<br>10,7%  | 9 17,3%<br>21,4%  | 2 3,8%<br>40,0% | 14 26,9%<br>36,8% | 52<br>25,7%   |
|  | yes | 23 15,3%<br>54,8% | 67 44,7%<br>89,3% | 33 22,0%<br>78,6% | 3 2,0%<br>60,0% | 24 16,0%<br>63,2% | 150<br>74,3%  |
| Row Totals   |     | 42 20,8%          | 75 97,1%          | 42 20,8%          | 5 2,5%          | 38 18,8%          | 202           |

Table 20 shows the source of credit-backgrounds of respondents and their perception on the attribute "Gov't must improve rural infrastructure to strengthen rural financial markets".

It could be seen from table 20 that 74,3 % of the respondents view this attribute as of top priority to strengthen rural financial markets. The respondents whose source of credit were from moneylenders make up the highest percentage (44,7 %) of those who perceive this attribute as important in strengthening rural financial markets, followed by those borrowing from traders with 22,0 %, relatives with 16,0 % those borrowing solely from FFMs with 15,3 % and those supported by landlords with 3,0 %. When the percentage of those who recommend this attribute is compared to the percentage of respondents who recommend the other four attributes apart from the attribute dealing with stringency of security for strengthening rural financial markets, it is seen that more people positively recommended this attribute than the others. The main explanation would be that respondents regard this attribute as basic and of top most-priority than the other four. This result shows that the direct benefits of infrastructure in promoting the rural economy has not been lost on the rural entrepreneur. The indirect relationship between sound rural infrastructure, including of course, sound and enlightened policies such as good prices for produce, good storage system and good distributive network in reducing risk and making credit administration and its use safer, is of utmost importance in the view of the rural dweller with regard to strengthening rural financial markets.

Table 21 portrays the opinions of members of the sample population by source of credit on the attribute "tighter enforcement of existing rural credit directives".



TABLE 21: Perceptions on the attribute "tighter enforcement of existing rural credit directives in relation to source of credit

|   |     | FPM               | Money-lenders     | Traders           | Landlords      | Relatives         | Column Totals |
|---|-----|-------------------|-------------------|-------------------|----------------|-------------------|---------------|
| Toter enforcement of existing rural credit directives | no  | 26 16,0%<br>61,9% | 67 41,4%<br>88,2% | 34 21,0%<br>81,0% | 5 3,1%<br>100% | 30 18,5%<br>78,9% | 162<br>29,8%  |
|   | yes | 16 39,0%<br>38,1% | 9 22,0%<br>11,8%  | 8 19,5%<br>19,0%  |                | 8 19,5%<br>21,1%  | 41<br>20,2%   |
| Row Totals  |     | 42 20,7%          | 76 37,4%          | 42 20,7%          | 5 2,5%         | 38 18,7%          | 203           |

Table 21 generally shows that the sample population do not think tighter enforcement of existing credit policies will strengthen rural financial markets and increase their access to credit. 79,8 % of the respondents were of a negative opinion on this attribute. This response shows how the sample population appears dissatisfied with the current state of affairs in FFMs. It could also be observed from the table that more than 75,0 % of the respondents obtaining most of their credit needs outside the formal market did not recommend this attribute. The reason for this response could be that, respondents are aware that agents in the FFM are prepared to pay penalties to the central bank rather than serve them with credit.

Table 22 shows the opinions of the sample population by source of credit on the attribute "stringent requirements like possession of tangible security before credit is granted should be dropped".

It could be seen from table 22 that 84,2 % of the respondents were of the opinion that relaxation in collateral requirements in rural financial markets will improve their access to more formal credit. Even among those who currently depend fully on FFMs for their credit requirements 88 % as against 12 % were of this opinion. Respondents depending largely on landlords were an exception, with 60 % not sharing the opinion that relaxation of security demands will improve their access to formal credit.

Generally the opinions expressed by the sample population on this attribute show that it has been a disturbing feature hindering their access to credit. The explanation for this opinion is not far fetched, few rural entrepreneurs have or own the right type of collateral demanded by formal lenders. Rural people often cannot have their houses accepted as security because they are built of mud and deteriorate very fast. Land is one asset which almost all rural families in Ghana possess and which could help ease the problem of collateral. Use of land as collateral is often criticised as problematic especially as titles to land are not clear. It is, however, one of the most basic assets which every rural household could put forward as collateral. Registration of farm lands and conferring titles of ownership could make it suitable as collateral. Land as an acceptable collateral could remedy the unfortunate situation where rural entrepreneurs with good projects are often turned down by formal lenders because they cannot provide suitable security.

TABLE 22: Dropping of strict collateral requirement and source of credit

| attribute   |     | FFM              | Money-lenders    | Traders           | Landlords       | Relatives        | Column Totals |
|---|-----|------------------|------------------|-------------------|-----------------|------------------|---------------|
| stringent security requirements like possession of tangible security before credit is granted should be dropped | no  | 5 15,6%<br>11,9% | 8 25,0%<br>10,5% | 10 31,3%<br>23,8% | 3 9,4%<br>60,0% | 6 18,8%<br>15,8% | 32<br>15,8%   |
|   | yes | 37 21,6%         | 68 39,8%         | 32 18,7%          | 2 1,2%          | 32               | 171           |
|   |     | 88,1%            | 89,5%            | 76,2%             | 40,0%           | 84,2%            | 84,2%         |
| Row Totals  |     | 42 20,7%         | 76 37,4%         | 42 20,7%          | 5 2,5%          | 38 18,7%         | 203           |

6.2 Footnotes to Chapter Six

- 1 ADAMS, NYINAKU: Paper presented on rural banks during the African Agricultural Credit Association Conference held at Continental Hotel Accra, Ghana, 3<sup>rd</sup>-9<sup>th</sup> May, 1986.

## 7 SUMMARY AND CONCLUSIONS

The basic objective of the study was to find out what opinions small scale rural entrepreneurs in the Seko Odumase area of Ghana hold about the rural financial market in which they operate and how they perceive changes to eradicate its shortcomings. It was noted that current problems in rural financial markets centred around interest rate, infrastructure and other distorted policies which are at best counterproductive and inimical to the interest of the majority of participants in rural financial markets.

This paper used factor analysis to study the interrelationships between the opinions, preferences and actual data relating to socio-economic background and activities to respondents in the rural financial market. 10 factors were obtained but only 4 were used in subsequent analysis and discussion. The results show that only a small fraction (13,7 %) of respondents were receiving all their credit requirements from FFM (mainly from Commercial and Development banks). The majority (86,3 %) were relying in varying degrees on agents in IFM (in order of importance moneylenders, relatives, rural traders and landlords) for their credit requirements. With the exception of a negligible 3,0 %, the degree of reliance is tilted more towards IFM than FFM. The results further show that efforts by policy makers to relegate IFM and promote more rural entrepreneurs into FFM have not had the desired effect. The popularity of IFM in terms of the number of respondents who patronise its services (72,0 % ie those who obtain more than 50,0 % of credit from this market) compared to those catered for by FFM (21 % ie including those who obtain at least 50,0 % of credit) shows its importance in rural financial markets. Further to this was the finding that out of the 57 respondents who were having any dealings with rural banks, only 10,5 % were receiving 50,0 % or more but less than 100,0 % of credit requirement from them. These have shown that under current rural credit policy directives rural entrepreneurs are not at all better served by formal institutions. Multiple borrowing by respondents within the IFM is completely absent showing a lot of discipline in this segment of the rural financial market. On the contrary, multiple borrowing within FFM was rampant with 97,2 % of respondents who obtain credit from it having alternative sources of credit in the formal sector. Opinions expressed by respondents show that the two segments of the rural financial market both have their strength and weaknesses. Informal credit sources in their opinion are more

74:  
1%

1.18

flexible, timely, easily accessible and general credit are more adapted to local needs and more responsive, to the special problems of the rural entrepreneur. Its weak point are that credits are highly inadequate and respondents mentioned dissatisfaction with repayment procedures and high interest rates charged by agents here was implied. On the contrary, respondents perceived FFM as having adequate resources and especially in instances where agents in this market commit themselves fully to financing a client. The low interest rate element was also perceived by most respondents to be positive. Formal institutions were, however, criticised for mounting formidable institutional barriers which make it difficult to obtain credit. Their speed of advancing credit is perceived to be unsatisfactory. A majority of respondents were of the opinion that they would be satisfied with FFM if they would manage credit from that source. How then can the average rural entrepreneur obtain credit from FFM especially when he can scarcely satisfy the required demands?

Most of the respondents were of the opinion that their chances of obtaining credit and strengthening of the rural economy could be improved, if government improves infrastructure (ie good roads, storage systems attractive prices and good marketing outlets). Also removal of stringent requirements and tailoring security requirement to meet what most of them can offer. Most respondents did not think, however, that direct intervention by government through the creation of more banks and enforcing existing credit directive would improve their chances of obtaining credit.

The evidence in this study suggests that benefits from a combination of incentive policies aimed at distributing income and making credit accessible to the poor accrue disproportionately to a few rural entrepreneurs. This stresses the wide divergence between the intent of government policies on rural credit and what actually obtains in reality. The results also highlights the conflicts between policy directives and economic forces, and that rural entrepreneurs obtain credit easily in the segment of the rural financial market where economic forces prevail. The implication here is that competitive rates of interest can help more rural people gain access to formal credit. Deregulation of interest rates on formal markets will encourage formal institutions to improve their performance in the rural economy and enable them to innovate to meet the peculiar credit needs of rural households. Rural credit policies should limit their roles to removing obstacles which hinder

financial intermediation in rural financial markets. Important areas such as problems associated with interest rates, product prices, yields, technology, vague and uncertain land titles and rural infrastructure. Objectives of such policies should be to find ways and means to reduce cost of financial intermediation instead of concentrating on the use of subsidies which have their obvious limitation.

It is recommended that in order to reduce transaction cost of credit to participants (both on the demand and supply side) in rural financial markets, and make credit widely accessible, a better recognition must be given to suitable low cost intermediaries such as indigeneous savings clubs, financial self help groups, private individuals, rural deposit collectors, money lenders and other rotation savings associations with strong local identity. Such financial intermediaries are already present in rural areas and known to rural people; these intermediaries could then through suitable policies be linked to the formal market. Given the popularity of such informal institutions it should then be easier through them to mobilize rural savings and remove the distrust some rural people have about formal financial markets. Under such an arrangement the government should provide a strong extension service to help in advising the rural entrepreneur especially in preparing loan proposals. Such an arrangement, although cannot solve all problems of rural credit overnight, it is hoped it can help minimise them. However, more research will have to be done on how best to integrate the positive aspects of the two presently segmented markets. Such research should concentrate more on the informal sector with which rural people are more identified, but about which little accurate information is available. The intricate connections the informal sector has with the culture and customs in rural areas points to its potential in the rural economy.

## 8 APPENDIX

Questionnaire

1. Respondent number:
2. Sex: Male  
Female
3. Age:
4. Marital Status: single  
married  
widowed  
divorced
5. Status in Community: Community leader or  
Influential  
Ordinary member of  
community
6. Background of partner:  
(if married) Agriculture  
Business  
Government
7. Educational background of  
respondent: No formal schooling  
Primary School  
High School  
University
8. Current Project: Agriculture  
Business  
Private Consumption
9. How is this Project being financed? borrowing (ie rely on  
credit)  
Personal income  
Savings
10. % (Extent) of own resources  
invested in project: I) Nil contribution  
II) 5-10 %  
III) 10-15 %  
IV) 15-20 %  
V) 20-25 %  
VI) 25-30 %  
VII) 30 and above



11. Is credit an important means in meeting your project needs?      Yes      No      N/A
- a) Is its supply adequate?      Yes      No      N/A
- b) Is its supply timely?      Yes      No      N/A
- c) Do you find credit use and terms of repayment convenient?      Yes      No      N/A
12. Do you obtain your credit from non-institutional agencies?      Yes      No
- a) How much of your credit needs come from non-institutional agencies?
- I) Nil
- II) 5-10 %
- III) 10-15 %
- IV) 15-20 %
- V) 20-25 %
- VI) 25-30 %
- VII) 30 and above
- b) Do you consider the terms and conditions for repayment as favourable?      Yes      No
- c) What type of security is asked for by agents in this informal financial market?
- I) Building
- II) Land
- III) Personal effects
- IV) Personal reputation
- V) None at all
- d) What do you think is the major problem you don't like about the informal market?
- I) terms of repayment are stiff and interest rates are too high
- II) Not flexible in periods of calamity

- e) Are you satisfied with this market? Yes No
- f) Apart from the informal source of credit do you have any other source of credit? Yes No
- 13) Which agencies within the informal market supply you with credit? I) Money lenders  
II) traders  
III) landlord  
IV) Relatives
- 14) Do you obtain any of your credit requirements from the formal financial markets? Yes No
- a) How much of your credit needs comes from this source? I) Nil  
II) 5-10 %  
III) 10-15 %  
IV) 15-20 %  
V) 20-25 %  
VI) 25-30 %  
VII) 30 and above
- b) Do you consider the terms and conditions as favourable? Yes No
- c) What type of security is demanded by agents in FFM ? I) Building  
II) Land  
III) Personal effects  
IV) Personal reputation  
V) None at all
- d) Which agents in the FFM supply respondents with credit? I) Commercial/Development Banks  
II) Rural Banks  
III) Both Commercial/Development Banks and Rural Banks  
IV) None

e) What is the relative role of the Formal and informal financial markets in your credit supply?

- I) 100 % dependent on Formal Financial Market
- II) 100 % dependent on Informal Financial Market
- III) 5-10 % dependent on Formal Financial Market and rest from IFM
- IV) 10-15 % dependent on Formal Financial Market and rest from IFM
- V) 15-20 % dependent on Formal Financial Market and rest from IFM
- VI) 20-25 % dependent on Formal Financial Market and rest from IFM
- VII) 25-30 % dependent on Formal Financial Market and rest from IFM
- X) 50 % and above but below 100 % on Formal Financial Market and rest from IFM

15) Which of these attributes (interest rate, sympathy towards credit needs, extension services and input delivery and flexibility in credit repayment) do you think applies better to the two financial markets in your locality?

a) Agents in IFM charge higher interest when compared to agents in the FFM:

Yes No

b) Agents in the FFM are sympathetic toward credit needs of borrowers than

Yes No

c) Extension services and input procurement are better in FFM than IFM:

Yes No

d) Flexibility in credit repayment is better in FFM than IFM:

Yes No

e) FFM demands before credit is given are stiffer than IFM:

Yes No

16) How does your level of borrowing relate to the agricultural cycle in the area?

- I) High at the beginning of the cropping season
- II) High during the harvesting season
- III) High during the slack periods

- IV) Low at the beginning of the cropping season
- V) Low during the harvesting season
- VI) Low during the slack periods

17) Is your prevailing level of debt or borrowing too high in relation to your income?                      Yes        No

18) What has been the trend of your indebtedness overtime in relation to factors such as incomes and prices

- I) High during bumper harvest
- II) low during bumper harvest
- III) high during poor harvest
- IV) low during poor harvest
- V) stable irrespective of food or bad harvest.

19) Has current credit operations been conducive to the improvement and the economic position of respondent or have they tended to be burdensome and to weaken his economic position?

- I) Has improved economic position and income
- II) Economic position and income has not changed
- III) Economic position and income has deteriorated and credit has become burdensome.

20) In what directions would you recommend the improvement in the rural financial market in which you find yourself in order to facilitate an efficient and progressive business climate?

- I) More financial institutions must be within locality
- II) More properly trained staff to administer rural credit
- III) Government must improve rural infrastructure and marketing services
- IV) Lighter enforcement of existing rural credit directives
- V) Stringent requirements like improvable security before credit is extended should be dropped.

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