Credit Policy, Rural Financial Markets, and Nigeria's Agricultural Development

by

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SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS OF THE
DEGREE OF

DOCTOR OF PHILOSOPHY IN
URBAN AND REGIONAL PLANNING

at the

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

January 1981

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MAK 1 9 1 9 8 1
For my parents

Kamene and Chukuka Okonjo

because they provided me the security which
they were denied during their student days in Germany.
CREDIT POLICY, RURAL FINANCIAL MARKETS, 
AND NIGERIA'S AGRICULTURAL DEVELOPMENT 

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NGOZI OKONJO-IWEALA 

Submitted to the Department of Urban Studies and Planning 
on January 19, 1981 in partial fulfillment of the 
requirements for the Degree of Doctor of Philosophy in 
Urban and Regional Planning 

ABSTRACT 

Agricultural credit has recently emerged as one of the leading policy tools for dealing with agricultural production and with income-raising problems in the rural areas of most Third World countries. The increasing importance accorded agricultural credit has led to the evolution in these countries of credit policies that have as their centerpiece the enactment of low interest rates on agricultural loans. 

Low interest rate credit policies are predicated on the belief by most policy-makers in certain generally untested assumptions about the need for and uses of agricultural credit and about the behavior of rural farm-households. 

This study tests, for the Nigerian case, six of the more important assumptions on which credit policy is based. Investigation of these assumptions reveals that they are of questionable validity and in need of reformulation if they are to provide a sound basis for credit policy aimed at improving agricultural sector productivity and rural incomes. 

The reformulation of the assumptions suggests the need for a re-orientation of credit policy away from its almost exclusive focus on the provision of low interest agricultural credit and toward more informed approaches involving (i) changes in interest rate policy, (ii) allocation of non-agricultural credit to farm-households, (iii) emphasis on savings mobilization, and (iv) emphasis on the detailed analysis and solution of the real constraints on Nigerian agriculture. 

Thesis Supervisor: Dr. Alan Strout 
Title: Lecturer 
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ACKNOWLEDGMENTS

This study would not have been completed without the effort and dedication of many people. I am primarily indebted to my thesis advisor, Dr. Alan Strout, whose hard work made this thesis possible. Dr. Strout spent long hours discussing the main ideas of the thesis. He helped make sense out of confusing data. He was always available when needed, and his personal encouragement and interest in the study helped make the writing process more bearable.

I am also grateful to my readers, Professors Karen Polenske and Lisa Peattie. Professor Polenske paid careful attention to the organization and structure of the thesis, thereby making it more readable. Professor Peattie made many valuable suggestions on thesis substance and was most encouraging through the entire writing process.

I would like to express my appreciation to Professor Dale Adams of Ohio State University for fostering my interest in rural financial markets and for making available a great deal of the literature on which this study is based.

Many people and institutions in Nigeria gave assistance during the data collection process. It is not possible to mention them all by name, but I am very grateful for their assistance. The Nigerian Agricultural and Cooperative Bank (NACB), Kaduna, financed part of the field research. The General Manager, Dr. Okurume, and Drs. Oyinlola and Kolawole of that institution were most helpful during the research process.
The cooperative division of the Ministry of Agriculture and Cooperatives, Kaduna State, the Oyo State Agricultural Investment Corporation, and the Anambra State Agricultural Finance Agency all provided information during the survey process. I am grateful to Alhaji Danjuma, Mr. Oyediran, and Reverend Okoye of the above institutions for their help in making contacts with the primary cooperative societies. I am also grateful to Mr. Akin Lot of the United Bank for Africa Ltd. (UBA), Mr. Duyile of the National Bank of Nigeria (NBN), and Dr. Abalu of the Institute for Agricultural Research, Samaru, for their assistance with research papers and other information.

I am much indebted to the many farmers who patiently answered my questions, made me welcome and accommodated me during my stay in their villages. I hope the findings of the study mirror some of their hopes and their frustrations. I would like to thank my research assistants, Mallam Abdullahi Mundi of Ahmadu Bello University and Mr. Tokunbo Salawu of Ibadan University for their careful translations.

I appreciate the efforts of Ms. Catherine Gimbel in typing successive drafts of this thesis, and I am indebted to Ms. Donna Gold for her efficient typing and editing of the final copy of this thesis as well as the final copies of my bachelor's and master's theses in previous years.

Finally, I would like to thank my parents and other members of my family for their generous moral and financial support through various stages of my education. In particular, I am grateful to my husband, Ikemba, for his patience, good humor and encouragement.
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EXPLANATION OF TERMS USED IN THE STUDY

Rural Financial Markets (RFMs). Those financial institutions and practices (formal and informal) that deal with the mobilization of rural savings, the channeling of credit, and other financial transactions for rural people or in rural areas.

Formal RFMs. Government and private financial institutions that have a clearly recognizable structural set-up and legal status.

Informal RFMs. Rural financial institutions or practices with no legal status. May be well-structured or fluid.

Financial Intermediation. The mobilization of savings, the channeling of credit, and the allocation of credit among productive uses by RFMs.

Rural-Agricultural Population. People in the rural areas, engaged mainly in agricultural production (as compared with other activities, such as rural industry/handicrafts).

Rural Farmers. A somewhat redundant term meant to distinguish the majority of farmers who live and farm in the rural areas from the small but influential group of elite farmers who are based in urban areas and own agricultural enterprises in rural areas or on the outskirts of metropolitan areas.

Coop Members. Members of government-supported, village cooperative societies.

Non-Coop Members. Non-members of the government-supported, village cooperative societies.

Nominal Rate of Interest. The apparent rate of interest paid by borrowers or earned by savers. The contractual amount of interest in a loan or savings transaction.

Real Rate of Interest. This is approximately the nominal or contractual rate of interest plus or minus the change in some price index (e.g., the consumer price index) over the period of the loan. This approximate definition is employed in the study. A more exact definition of the real rate of interest is:

\[
\frac{1 + i}{1 + p} - 1 , \text{ where } i \text{ is the nominal rate of interest and } p \text{ is an annual change in prices.}
\]

Effective Rate of Interest. This is defined (for loans) in this study as the nominal interest costs plus other hidden or apparent transactions costs of borrowing. In some usages, the inflation costs are also included in the definition of the effective rate of interest. However, this latter definition might be more accurately termed the effective real rate of interest.
CHAPTER ONE

STATEMENT OF STUDY AIMS, BACKGROUND ON THE AGRICULTURAL SECTOR, AND DISCUSSION OF DATA

Introduction

The notion that financial resources and instruments can play an important role in economic development by facilitating an increase in real output has earlier been espoused by Gurley, Patrick, Shaw, McKinnon, and others. One aspect of this role could be the encouragement of the development of financial services, including the supply of financial resources (credit) to "lagging" traditional sectors and regions in developing countries. Policy-makers in many Third World countries have embraced this idea of the development of financial services by encouraging the growth of formal rural financial markets (RFMs) to serve the rural areas of their countries. The policy-makers have also encouraged the supply by both government and private institutions of financial resources to the agricultural sector as a means of raising agricultural output and increasing rural incomes.

Nigeria is one of the countries that has been laying increasing emphasis on the role of credit and of rural financial institutions in facilitating productivity and income increases in the rural areas. This emphasis on the role of credit has largely been due to the recent poor performance of the agricultural sector. It has also been due to the easier availability of oil-generated financial resources, which could presumably be used to improve the agricultural sector's performance, and thereby hopefully increase lagging rural incomes.
Pursuing the credit approach has necessitated the evolution of some sort of credit policy, elements of which include legislation on the proportion of credit intended for the agricultural sector, legislation on the number of bank branches to be set up in the rural areas, interest rate legislation, and the setting up of specific agricultural credit schemes.

Statement of Study Theme and Aims

The central theme of this study is that credit policy, as currently pursued in Nigeria, is misguided and inadequate as a means of dealing with the productivity problems of the agricultural sector, the income-raising problems of the rural sector, and the financial-service problems and needs of at least the average and poorer members of the rural-agricultural population. This is so because the credit policy is based on a set of assumptions (implicit and explicit) whose validity is at best questionable. This study has three main purposes:

a) to make explicit the more deeply ingrained and important of the underlying assumptions, and to test their validity with the aid of data gathered during study sample surveys;

b) to point out and discuss the distortions caused in the behavior of rural financial markets by the government credit policy; and

c) to reformulate (in the light of information gathered in the study) the assumptions examined, as a means of suggesting alternative ways of viewing credit policy, and more effectively achieving the government's major objectives of raising agricultural sector productivity, improving rural incomes, and providing needed financial services for the rural population.
Numerous studies have been carried out on credit policies and problems in various developing countries (see Chapter Two). In Nigeria itself, studies have been undertaken on various aspects of credit and savings. These include, for example, studies of credit needs, inadequacy of credit facilities in rural areas, ineffectiveness of government credit mechanisms, formal and informal credit systems, and savings and its link to credit. However, no one study has been able to provide a framework for viewing many of the issues discussed as interrelated aspects of the same general problem, namely, that of government credit policy, and particularly the interest rate component. This study hopes to provide such a framework, contribute to a broader appreciation of the workings of informal financial services in rural areas, and underscore, in particular for the Nigerian case, the distorting effects of interest-rate legislation. The latter topic in Nigeria (in contrast to other developing countries—see Chapter Two) has hitherto either been ignored or only briefly and casually mentioned in the writings of authors on Nigerian credit problems.

A note of caution should be sounded about the study at this point. Most of the data which will be presented comes from a sample survey conducted in five villages in the north and south of the country, with supplementary data from an earlier study by the author in a sixth village. As such, the facts and figures emerging from these surveys may not be completely generalizable to the rest of the country. The intent in this study is not so much to claim generality for the facts and figures as to use them to question the applicability (throughout Nigeria's rural areas) of the assumptions that appear to underlie credit policy for Nigeria as a whole.
Credit and Other Factors

The study focuses on cash credit, despite the fact that other types of assistance are available to the rural-agricultural sector, e.g., occasional free distribution of improved seeds and the distribution of subsidized fertilizer. Credit policy is investigated because of its increasing influence and popularity in the country (this will become evident later in the discussion in this chapter), and because some of the beliefs on which credit policy is based are becoming, through constant public repetition, so deeply ingrained in the country's thinking as to be accepted, without sufficient justification, as facts.

The author realizes that credit does not and cannot work in a vacuum. Indeed, as Donald (1976) has stressed, without the presence of adequate marketing channels, needed inputs, and favorable product markets (among other factors), agricultural credit can be rendered much less effective and perhaps even useless. It is taken as given in this study that the inadequacies of these complementary factors feature very importantly in the difficulties with credit utilization in Nigeria. Considering these factors in any detail would require a separate study or studies. What is being stressed in this particular study is that the structure and workings of credit policy itself have as important an effect on the efficacy of credit use as any of the factors mentioned above. Credit policy in and of itself therefore also merits study. In fact, rather than gloss over the importance of the complementary factors, various sections of the discussion in this study bring out sharply the fact that credit-policy formulation must take into account the importance of factors such as prices in agricultural product and input markets if credit is not to be rendered ineffective.
Before the major tasks of the study can be undertaken, the background to increasing government emphasis on credit as one of the major solutions to the agricultural sector's problems will be presented. The presentation will be done in the next section of this chapter, through a brief discussion of the past and present roles, performance, and problems of the agricultural sector, as well as expectations for the future. In the final section of the chapter, the content of the data collected as a basis for the study, the methodological problems, and the survey process will be described.

The remainder of the study will be divided into five chapters. In Chapter Two, the theoretical underpinnings of the study and salient empirical investigations from other countries will be discussed. Chapter Three will contain a discussion of the elements of past and present Nigerian credit policy and a brief description of formal rural financial institutions involved in channeling credit. In these two chapters, the actions and utterances that give rise to the assumptions outlined at the beginning of the study will be highlighted. The testing of the validity of the assumptions and the discussion of the effect of credit (particularly interest rate) policy on the behavior of rural financial markets will be undertaken in Chapter Four.

Chapter Five will consist of a discussion of revised assumptions, an alternative framework for viewing credit policy in the light of these and of achieving the government's objectives of raising agricultural productivity, increasing rural incomes, and providing needed financial services for the rural-agricultural population. In Chapter Six, the study's major findings will be summarized, and suggestions will be made for future research.
The Agricultural Sector: Past and Present Trends

Despite the oil boom of the past decade, Nigeria is still predominantly an agricultural country. The characterization of the economy as essentially agricultural arises from the fact that 70% of the country's estimated 1978 population of 80.6 million were to be found in the rural areas, while approximately 56% of the labor force was employed in agriculture in the same year. (World Bank Development Report, 1980; Olalokun, 1979, p. 3)

The majority of the country's peasant farmers practice agriculture with few mechanical, chemical, or biological aids. Fertilizer consumption in the country stood at 1.28 Kg per hectare in 1975, while the total number of tractors nationwide was estimated at 7,900 in 1977. (Third National Development Plan, 1975–1980; Food and Agriculture Organization (FAO) of the United Nations, Production Yearbook, 1978) Although some parts of Nigeria (e.g., the East) are experiencing high man/land ratios, most of the country can be described as land surplus. Increases in output are, therefore, more likely to be achieved on the extensive rather than the intensive margin (that is, from opening up new land rather than from farming the same piece of land more intensively).

Agriculture has always played an important role in the Nigerian economy. Not only is the agricultural sector the main employer of labor, but up until 1971 the sector accounted for the single largest percentage contribution to Gross Domestic Product (GDP) (see Table 1-1). Since 1971, the petroleum or mining sector has taken over from agriculture as the single largest contributor to GDP.
### TABLE 1-1

PERCENTAGE DISTRIBUTION OF GROSS DOMESTIC PRODUCT  
AT 1974 CONSTANT FACTOR COST 1960-1977

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<th></th>
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<td>24.6</td>
<td>22.7</td>
<td>22.7</td>
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<tr>
<td>Mining</td>
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<td>20.9</td>
<td>30.0</td>
<td>36.0</td>
<td>37.2</td>
<td>38.5</td>
<td>37.1</td>
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<tr>
<td>Manufacturing</td>
<td>2.8</td>
<td>4.5</td>
<td>5.2</td>
<td>4.5</td>
<td>6.8</td>
<td>7.3</td>
<td>7.0</td>
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<tr>
<td>Construction</td>
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<td>2.2</td>
<td>2.3</td>
<td>2.9</td>
<td>6.0</td>
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<tr>
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<td>0.3</td>
<td>0.3</td>
<td>0.3</td>
<td>0.5</td>
<td>0.5</td>
<td>0.7</td>
</tr>
<tr>
<td>Transport &amp; Communications</td>
<td>2.8</td>
<td>2.8</td>
<td>1.9</td>
<td>2.0</td>
<td>3.2</td>
<td>3.3</td>
<td>3.6</td>
</tr>
<tr>
<td>Public Administration &amp; Defense</td>
<td>1.3</td>
<td>1.3</td>
<td>3.3</td>
<td>3.0</td>
<td>7.2</td>
<td>7.2</td>
<td>7.6</td>
</tr>
<tr>
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<td>14.2</td>
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</tr>
</tbody>
</table>

The agricultural sector has been important in accounting for the bulk of domestic food requirements, and also in providing an impetus for the growth of the Nigerian economy through export earnings. The nature of the export sector and its role in providing the economic wherewithal for Nigeria's development has been well-documented elsewhere (e.g., see Helleiner, 1966), and will not be dealt with in detail here. However, it is important to point out that until the mid-1960s, agricultural exports accounted for well over 50% of total exports by value (see Table 1-2). Most of the foreign exchange earnings from these exports accrued to government in the form of revenues which were used for the development of the economy.

In spite of its important role in the Nigerian economy, the agricultural sector has been performing poorly since the mid-1960s. As is visible in Table 1-3, and in contrast to other sectors, the growth rate of agricultural GDP was negative in the decade from 1960 to 1970, while it became even more sharply negative from 1970 to 1978.

The poor performance of the agricultural sector is also well-illustrated by production statistics for total agricultural and food crops, as well as by the statistics for important categories of crops. Table 1-4 shows production indices for agriculture and for food on a total and per capita basis from 1961/65 to 1978. Total agricultural production increased very slowly over these years, and, in fact, showed a decline on a per capita basis. More importantly, total food production, with an average annual growth rate of 2.3% from 1966 to 1978, did not quite keep pace with the estimated population growth rate of 2.6% (FAO figures) per annum. Table 1-5, containing figures for important categories of food
<table>
<thead>
<tr>
<th>% Total Domestic</th>
<th>% Total Domestic</th>
<th>% Total Domestic</th>
<th>% Total Domestic</th>
<th>% Total Domestic</th>
<th>% Total Domestic</th>
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<tr>
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<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
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These include at varying periods, cocoa, groundnuts, palm kernels, palm oil, raw cotton, natural rubber, hides and skins, benniseed, etc.

<table>
<thead>
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</tr>
<tr>
<td><strong>Agriculture</strong></td>
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</tr>
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<td><strong>Industry</strong></td>
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<td></td>
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<td>13.4</td>
</tr>
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<td>of which Manufacturing</td>
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<table>
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</tr>
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<tr>
<td>1978</td>
<td>112</td>
<td>90</td>
<td>112</td>
<td>90</td>
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### TABLE 1-5

**PRODUCTION OF VARIOUS FOOD AND EXPORT CROPS**

<table>
<thead>
<tr>
<th>Year</th>
<th>Area Harvested</th>
<th>Yield (Kg/Ha)</th>
<th>Production 000's Metric Tons</th>
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<tr>
<td></td>
<td>000's Hectares</td>
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<tr>
<td>A. Food Crops</td>
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</tr>
<tr>
<td>Cereals</td>
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</tr>
<tr>
<td>1961-65</td>
<td>11081</td>
<td>662</td>
<td>7333</td>
</tr>
<tr>
<td>1969-71</td>
<td>12361</td>
<td>652</td>
<td>8054</td>
</tr>
<tr>
<td>1976</td>
<td>12674</td>
<td>667</td>
<td>8459</td>
</tr>
<tr>
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<td>12969</td>
<td>672</td>
<td>8710</td>
</tr>
<tr>
<td>1978</td>
<td>13099</td>
<td>688</td>
<td>9011</td>
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<tr>
<td>Pulses</td>
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<td>273</td>
<td>605</td>
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<tr>
<td>1969-71</td>
<td>3973</td>
<td>214</td>
<td>849</td>
</tr>
<tr>
<td>1976</td>
<td>4160**</td>
<td>224</td>
<td>932**</td>
</tr>
<tr>
<td>1977</td>
<td>4210</td>
<td>190</td>
<td>800**</td>
</tr>
<tr>
<td>1978</td>
<td>4526**</td>
<td>185</td>
<td>838**</td>
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<tr>
<td>Roots and Tubers</td>
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<td>9608</td>
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<td>2828**</td>
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<td>1977</td>
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<td>9736</td>
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<tr>
<td>1978</td>
<td>2868**</td>
<td>9922</td>
<td>28465**</td>
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<td>B. Export Crops</td>
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<tr>
<td>Cocoa</td>
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<tr>
<td>1961-65</td>
<td>550</td>
<td>395</td>
<td>217</td>
</tr>
<tr>
<td>1969-71</td>
<td>683</td>
<td>382</td>
<td>261</td>
</tr>
<tr>
<td>1976</td>
<td>720**</td>
<td>229</td>
<td>165*</td>
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<tr>
<td>1977</td>
<td>720**</td>
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<td>229</td>
<td>160*</td>
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<td>704</td>
<td>348</td>
<td>245**</td>
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<tr>
<td>1978</td>
<td>635</td>
<td>176</td>
<td>112**</td>
</tr>
</tbody>
</table>

*FAO unofficial figures

**FAO estimate

crops (e.g., roots and tubers) and export crops (e.g., cocoa) tells the same story of slow growth or even decline in terms of output.

One of the most noticeable consequences of the slow growth in agricultural output is the sharp percentage decline in the export of major agricultural commodities. Agricultural exports as a percentage of the total value of exports dropped from 58% in 1965 to 30% in 1970. In 1977, there was a further drop down to 4.5%. (Refer to Table 1-2.) Petroleum exports have, in contrast to agricultural exports, risen sharply, and thus counter-balance the decline in agricultural exports. In fact, the petroleum sector is now the driving force behind the Nigerian economy, contributing well over 80% of total government revenues since the mid-1970s.

The agricultural sector's poor performance has been cause for grave concern among policy-makers, because of its implications for domestic food supplies, for the supply of raw materials for domestic industry, and for farmer incomes. Lagging agricultural output (already estimated on a per worker basis at one-half that in other non-mining sectors\(^1\) of the economy) may mean lagging farmer incomes. This will be so if the output decreases are not compensated for by price increases for agricultural products. Increasing domestic demand for food and raw materials from an agricultural sector seemingly unable to cope implies increased inflationary pressures on domestic prices. It also implies greater dependence on food and other agricultural imports. Such dependence would represent a drain of foreign exchange, which otherwise would be used for importation of much needed capital.

\(^1\)In 1975, the government estimated that agricultural output per worker was ₦ 175, or one-half the output in non-mining sectors. (Third National Plan, Vol. 1, 1975-1980)
goods. It would also present a potential political problem if food-exporting nations used these exports as a 'political stick' with which to beat Nigeria.

Given these possibilities and the fact that the agricultural sector is expected to continue furnishing the bulk of employment, food and raw materials for domestic industry for some time to come, there has been a search for reasons and solutions for the agricultural sector's problems.

The main explanations usually proffered by academics and policy-makers for the agricultural sector's problems can be grouped into four main categories having to do with inadequacies in manpower, marketing, economic incentives, technological and other inputs, particularly credit.¹ (E.g., see Third National Development Plan, Vol. 1, p. 66; Osuntogun, 1979, p. 4.)

With regard to manpower, it is thought that the scarcity of high level personnel in the areas of hydrology, farm management, and agricultural and irrigation engineering constitutes a constraint on the expansion of output, because availability of these skills would have opened up possibilities for increasing output in various ways. The inadequate extension service that results in high farmer-to-extension-agent ratios in parts of the country is said to affect the introduction of practices and knowledge which could help farmers increase output.

The lack of feeder roads and other transport facilities in some areas, and their poor condition in others is cited as an important aspect of the

¹ Other reasons mentioned in connection with performance problems in the agricultural sector and which do not fall neatly into any of these categories are: the communal land tenure system in the country, which does not allow land to be used as collateral for personal agricultural loans; the old age of some of the export tree crops such as cocoa; and the problem posed by the Sahelian drought of the early 1970s.
marketing problem, thought to account for shortfalls in marketed surplus. Poor storage resulting in susceptibility of crops to pest and disease is also another aspect of the marketing problem linked to lower quantities of marketed output.

In terms of economic incentives, the arguments involving linkages to output decreases have not been so well defined in the Nigerian situation. On the one hand, the government acknowledges the existence of unattractive returns to agriculture (see Third National Plan, Vol. 1, p. 66). Yet, on the other hand, it laments the increasing prices for agricultural products. Given the importance of the linkages between prices and agricultural output, this area merits greater consideration. Further analysis on the subject of prices and output is undertaken in Appendix A of this study. From analysis in this Appendix, it appears that while agricultural prices have, on average, been rising relative to the consumer price index (CPI) since 1965, wages for agricultural labor (the major production input) have recently been rising just as fast. (The increase in wages has been caused by greater migration of rural youth to urban areas, attracted by the better economic and cultural opportunities in these areas.) Potentially higher increase for agricultural output prices (particularly food) may have been dampened by large imports of such food grains as rice. Farmers appear then to be caught in a squeeze between rising prices for agricultural labor and dampened prices for agricultural output. Such a situation could be responsible for reduced farmer incentives to produce and/or market increased output. These constitute the probable links between price incentives and agricultural output in the rural sector.
The fourth category of reasons given for the agricultural sector's poor performance involve inadequacies in the availability of appropriate technology packages and farm inputs, particularly credit. The lack of credit, for instance, is often quoted as constraining the farmer from using more fertilizer, improved farming techniques, and hiring more labor. This is then said to limit the possibilities for the expansion of output.

Of all the major explanations discussed, the issue of credit use as a solution to the agricultural sector's problems has received the most widespread attention on both an academic and policy-making level. This attention is typified by such statements as that by Fabiyi and Ekong (1979), that "since farmers' resources are limited, outside sources of capital are therefore essential to promote investment in agriculture." (p. 2) It is also typified by Laogun's 1979 remark, that "the use of credit appears to be one of the most important factors which has to be activated in order to achieve maximum progress in the area of rural development." (p. 1)

On the government side, the attention to credit is underscored by a series of actions designed to increase the volume of credit intended for the agricultural sector. For example, there is the fourfold increase (in 1970 prices) of government allocations to credit, between the two plan periods (1970-1974 and 1975-1980). These allocations rose from ₦22.7 million in 1970-74 to ₦184.6 million in 1975-80. (Third National Development Plan, 1975-1980, Vol. 1; Essang and Olayide, 1975, p. 251) There is also the establishment in 1977 of the Agricultural Credit Guarantee Scheme Fund, with an authorized capital of ₦100 million to be subscribed to by the federal government (60%), and the Central Bank (40%). This scheme of government guarantees is designed to increase the volume of loans by
commercial banks to the agricultural sector, particularly to small-scale farmers. Finally, there is the series of legislative actions (to be described in detail in Chapter Three) requiring the banking sector to lend increased proportions of their loan funds to agriculture at low rates of interest.

The greater publicity given to credit above other factors probably arises from the fact that attention to other factors involves more difficulties than attention to credit. For example, investments in transport systems (to improve marketing) have fairly long gestation periods and involve a lot of planning. Redirection of product and input price policies in favor of farmers brings up the specter of political unrest among urban dwellers. In contrast to these, increased credit for greater investment in agriculture is an immediately visible, often popular, and easily manipulated policy tool. Hence, the government's predilection is to stress credit policy above other types of policies in both its rhetoric and actions.

The basic question being asked in this study is whether an increased stress on credit, with all the elements of credit policy involved, is indeed the answer to the agricultural sector's problems. If, for example, unattractive returns to agriculture compared to other activities proves to be a problem for farmers, then a credit approach (particularly as it is currently carried out in Nigeria) may do little to help the farmers improve agricultural production and their own incomes. To examine the suitability of current Nigerian credit policy for solving the rural-agricultural sector's production and income problems, this study investigates a series of generally-untested assumptions on which credit policy is based. The more
common and important of these assumptions are:

1) Rural farm-households in Nigeria face credit shortages, particularly for agricultural credit.

2) Such credit as is needed is not readily available in the rural areas, or is available only at prohibitive costs from usurious moneylenders.

3) The existence of credit shortages prevents the adoption by farm households of modern technological inputs which could ensure increases in output.

4) Such credit as is provided by the formal system must be given at low or concessional rates of interest in order to persuade farmers to borrow since their demand for credit is highly interest elastic. (That is, a slight percentage increase in the price of credit will induce a much greater percentage drop in the quantity of credit demanded by farmers.)

5) The current distribution mechanisms for credit can, with little or no modification, be effective in reaching poorer farmers.

6) Lack of credit is the most important problem related to financial services in the rural areas. Savings mobilization, in particular, is relatively unimportant, since savings capacities are quite low. Given this, there is little need to revise the interest rate structure in favor of savings.

The background to these assumptions is presented in Chapters Two and Three. In Chapter Two, it becomes obvious that Nigerian policy-makers, as they shape elements of credit policy, are not alone in the Third World in their unquestioning acceptance of many of the assumptions. Given the importance of such policy for the agricultural sector, and its effect on formal rural financial markets, the assumptions merit further investigation. Just
such an investigation is carried out in the current study, with the aid of data to be described in the next section of this chapter.

Description of Data and Study Sample Surveys

It has already been mentioned that most of the data used in this study comes from field surveys conducted by the author in Nigeria during a six-and-a-half month period from May to October, 1979. Supplementary data from a previous study undertaken in the summer of 1977 are also used. The surveys involved the collection of two levels of data: one from the formal banking system, and the other from farmers at the village level.

Banking System Interviews

Information was collected from commercial banks in Lagos, Ibadan, and Kaduna (shown in Figure 1-1), although the majority of the interviews were conducted in Lagos, where most of the banks have their headquarters. The type of information sought concerned each bank's agricultural lending activities, particularly its participation in the Agricultural Credit Guarantee Scheme set up by the government in 1977 to augment loans to the agricultural sector, especially to the rural smallholder.

More specifically, questions were asked on the types of borrowers receiving loans (with a request for information on their socio-economic characteristics—assets, income, education, etc.), total number of loans applied for and total granted, and total Naira amount requested by grantees.

Visits were made to seven out of the nineteen commercial banks in the country. The seven were selected so as to minimize travel to distant
FIGURE 1-1
SKETCH MAP OF NIGERIA, SHOWING NINETEEN-STATE STRUCTURE AND SURVEY VILLAGES

KEY:
- Cities or towns of relevance to the study
- Survey villages
----- State boundaries
- Indicates Rivers Niger and Benue within country boundaries
and disparate headquarter locations since research funds were limited. The seven chosen, however, included the three most important commercial banks in the country, accounting between them in 1976 for 65% of all commercial bank loans and advances, 69% of all deposit liabilities, and 80% of the banking system's reserves. The two oldest and best established indigenous banks (wholly Nigerian-owned or -controlled) in the country were also included in the seven. In addition to the commercial banks, two out of the six merchant banks (banks that deal mainly with corporate clientele) in the country were visited.

Problems encountered in obtaining the required information include poor record keeping at the banks, probably because of the novel nature of the Agricultural Credit Guarantee Scheme (ACGS). Because of this, only five of the banks were able and willing to put together at least a part of the information required. Some of the banks found it difficult to supply information because they had not yet received certain returns from several of their branches, and so could not present a total picture of the information required for the bank as a whole at that particular time. Moreover, the banks were loath to give out what they considered private information. So, although the author was permitted to view records on names and socioeconomic characteristics of borrowers, she was not permitted to write any of this down, and in fact had to promise in each bank to present any information.

1 This kind of bank selection process introduces a sampling bias. However, since the banking industry is dominated by a few large banks, it was more important for purposes of this study to include these banks than to obtain a random sample, which might comprise many smaller and relatively unimportant banks. Note that the three largest banks in the country were originally established by foreign interests and still have a substantial amount of foreign participation.
information given for the study without mentioning banks by name. These problems have resulted in the compilation of very aggregated (and therefore, less informative) facts and figures on loans and loan recipients under the ACGS. This is visible later in Table 4-18 (Chapter Four) where the information collected is used. Very little information was obtainable from the merchant banks, because of their limited participation in the ACGS. In addition to data collection from commercial and merchant banks on the ACGS, considerable time was also spent at the government-owned Nigerian Agricultural and Cooperative Bank (NACB), collecting information of a descriptive nature on the bank's own agricultural lending activities. This will be presented in Chapter Three, where the nature of government credit policy is explained and further discussed.

Village Level Interviews

The other set of information used for exploring the validity of assumptions in the study was obtained from farmer interviews in five villages. The villages are Yakasai, Turawa, and Giwa, all in Zaria Province, Kaduna State in the north; Araromi in Oyo State in the south; and Nomeh in Anambra State, also in the south. Supplementary data came from a former study in Ogwashi-Uku Bendel State in the south. These villages have been geographically located in Figure 1-1. The small number of villages surveyed was strictly a function of financial resources. At the beginning of

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1Araromi is later also referred to as a western village, because it is also located in the western part of the country (see Figure 1-1). Similarly, Nomeh is also located in the east.
the research process, it proved impossible to obtain research grants. The
Nigerian Agricultural and Cooperative Bank (NACB) gave a small grant in the
middle of the research process which enabled the author to hire translator-
research assistants in the north and southwest, where language differences
presented a problem. Because of these financial difficulties, the scope
and size of the project had to be scaled down to what the author could
handle on personal funds and the small NACB grant. The decision to survey
villages in both the north and the south was to permit regional comparisons
in the variables of interest (although, admittedly, in such a small study
such comparisons have obvious limitations). A great deal of research in
Nigeria has been geographically restricted, so that intra- and inter-
regional comparisons prove impossible. Such spatial/locational differences
may often prove important for policy purposes.

In the north, a decision was made to study villages in Zaria Province
of Kaduna State because of the body of research already undertaken in this
province by the Institute of Agricultural Research, Samaru, Ahmadu Bello
University. It was felt that such accumulated knowledge would be useful;
this was indeed the case, though, as it turned out, none of the villages
surveyed for this study had been involved in previous studies by the Insti-
tute. This was due to the nature of the selection process (to be described
shortly) for the villages. In the south, existing contacts with people
who could facilitate the research process was the basis for choosing Oyo
and Anambra States.

The selection of actual villages was done with the help of government
cooperative officers at the state and local levels. The author was inter-
ested in comparing cooperative society members' borrowing and production
activities with those of non-members of cooperative societies in the same villages. Because of this, only those villages in which cooperative societies had been active (i.e., received loans) for the year of interest became eligible for consideration. Among these villages, cooperative officers picked those in which the harvesting and selling of the crops for which loans had been received had been completed, and which were also accessible by some sort of motor vehicle. Accessibility was important because part of the survey was being done at the height of the rainy season (June and July). Three of the villages picked were easily accessible by motor cars, while two were more easily reached by motorcycles.

The Survey Villages: Common Village/Farmer Characteristics Important to the Study

Farming in the villages is carried out with the help of the traditional implements—cutlass (machete), hoe, and sickle. No animal or mechanical power was used by any of the farmers interviewed. A small quantity of artificial fertilizers was in use in the villages, especially in the north where some farmers also followed the traditional practice of using local (animal) manure to fertilize their fields. Most farmers used substantial quantities of hired labor, at an average fee of N3 - N3.50 per day, making labor the most important purchased farm input. Farming practices and the use of fertilizer will be important variables in Chapter Four, where the effect of credit on the techniques of cultivation will be examined.

Intercropping is the norm in all sample villages, and all the farmers interviewed grew together on most of their fields both food and what are commonly known as cash crops, e.g., cocoa, kolanuts, rice, and palm products.
in the south, and cotton, groundnuts, and tobacco in the north. The distinction between cash and food crops is, however, a tenuous one in this case, because most of the farmers also cultivated their food crops with the full intention of selling part for cash. The cash derived from crop sales forms a major part of the gross cash income measure, which is one of the more important variables developed and used in the study. Major crops grown in the southern villages were yams, cassava, plantains, rice, cocoa, maize, kolanuts, fruits (bananas, oranges), and vegetables. In the northern villages, guinea corn, millet, maize, yams, groundnuts, cotton, tobacco, sugarcane, pepper, tomatoes, and onions were more common.

Some of these crops, such as sugarcane and tomatoes, were grown on the well-irrigated, better manured lowlands or 'fadama' lands, while hardier crops, e.g., millet and guinea corn, were grown on the higher lying lands. Possession of 'fadama-land' was much valued because of the better crop yields. In addition, possession of livestock (a part of the valuation of the asset measure in the study) was much more common in the north. Most planting in both the north and south takes place in the early part of the rainy season (April, May/June), while by January/February most of the harvesting and selling of crops has been accomplished. Though government has taken charge of most land through the recent promulgation of the Land Use Decree,¹ farmers in the villages surveyed still operated along the lines of the traditional communal land tenure system, whereby a farmer can hire out

¹The Land Use Decree is dealt with only briefly in the study because it has not yet been operationalized in the villages; neither has it had any substantial effect on village land use patterns.
his fields or mortgage his crops, but cannot alienate the land from the community through land sales.

The pursuit of an occupation additional to farming is an important characteristic of the majority of farmers in these villages. Almost all farmers interviewed had an additional occupation throughout the year, but particularly during off-peak farming seasons. The most popular of these was trading. The extra sources of income increase the available gross cash income of the farmer, making his household more economically viable. However, because of large household sizes averaging 6.5 persons in the south and 13 in the north,\(^1\) large gross cash incomes oftentimes translated into small per capita gross incomes (see Chapter Four).

The level of western-type education among farmers in all villages was generally low. Approximately 81% of the farmers in the two southern villages had no education of this type whatsoever. This rose to 90% in the north, though every farmer there had received some degree of religious Koranic instruction. The importance of education levels is discussed in Chapter Four, where it is shown that possession of superior reading and writing skills enabled some people to be among the controlling group in the cooperative societies, and therefore enjoy attendant privileges.

\(^1\)This large difference is due to the practice in the Moslem north, of sons being 'in gandu' with their fathers, i.e., grown-up and married sons still living with their fathers and farming together, or it may be younger brothers with older ones. According to Samaru Institute of Agriculture researchers, this practice is gradually breaking down, and smaller family units are becoming more common. However, these large units were still the norm in the villages visited.
In all villages surveyed, farming was primarily a male activity. This was more so in the northern Moslem villages, where the practice of 'purdah' or wife seclusion is still common. It was less so in the two southern villages, where some women actually owned and operated their own farms or helped their husbands in the fields. In any case, most women (even those 'in purdah') were economically active, e.g., in petty trading, and generated incomes that augmented the household's resources. One of the deficiencies in the study is the non-inclusion (because of measurement problems) of female-generated cash in the calculation of gross cash incomes.

Brief Individual Village Profiles

Yakasai

Yakasai is a northern Hausa, Moslem village located nine kilometers from Zaria on the Zaria-Soba road (see Figure 1-1). It had an estimated 1974 population of 1900 (see Schultz, 1976, p. 114) and little or no modern amenities at the time of the study. It had no electricity or piped water (though some concrete wells had been built), and there was only one primary school. There was no dispensary, and no periodic market to which outsiders could come. A very small market existed in the village center. Farmers had fairly easy access by road to the Zaria markets, and there was very frequent daily contact between the village and Zaria town by motorcycles and bus-taxis.

Proximity to Zaria has brought periodic contacts with extension agents from Zaria and nearby Maigana, resulting in occasional provision of
improved seed varieties and increased awareness of artificial fertilizer use. However, no substantial changes have occurred in farming practices, and the traditional state of agriculture remains largely unchanged.

**Turawa**

Turawa is another Moslem Hausa village with an estimated 1974 population of 7400 (Schultz, 1976, p. 114). It is located 12 kilometers from Soba—the district headquarters—on a rough dirt road which becomes totally unmotorable when it rains. It was one of the two least accessible villages among those surveyed. Turawa also had few modern amenities at the time of the study, but was slightly better off than Yakasai in this respect.

There was no electricity or running water (there were concrete wells), but there was a dispensary, a primary school, a periodic market to which people from Soba and beyond came, and a cotton market as well. The farmers here could sell their agricultural produce in their own home market without worrying about transportation, but, according to them, this sometimes resulted in a glut in the market and much lower returns for the farmers than if they had been easily able to transport their goods to other markets.

Farmers here generally appeared to farm much larger fields than those in Yakasai. This is confirmed by the sometimes very large labor costs (as much as N1000 for the 1978/79 cropping season in one case) quoted by some farmers in the village, and their openly expressed need and desire for tractor-hire services to ease the labor constraint at peak farming periods.
Giwa

Located 28 kilometers from Zaria on the Zaria-Sokoto road, Giwa was the third village surveyed in the north. It has a more important standing than Yakasai and Turawa in that it is the district headquarters of Giwa district. At the time of the survey, there was a primary school, a secondary school, pipe-borne water, a dispensary, an agriculture office, and a post office. There was also a periodic market and a motor park (i.e., a taxi and bus station for off-loading and loading journeying passengers). All this contrives to give Giwa a more modern and prosperous outlook than the other two villages. As in Turawa, farmers here were highly concerned about the scarcity and high price of labor, and also expressed great interest in finding solutions to the labor constraints, e.g., tractor-hire services.

Araromi

Unlike Giwa in the north, full of vitality, Araromi in Oyo State, southern Nigeria, appears to be a village in decline. Located 40 kilometers from the city of Ibadan on an old, half-tarred road to Ijebu-Igbo, the village has a dual religious community comprised of Moslems and Christians. The Moslem women here, however, are not secluded like their counterparts up north. They, therefore, participate fully in economic activities outside their homes, such as farming. Araromi had, in 1979, two primary schools and a periodic market visited by buyers from nearby villages and from the city of Ibadan itself. Marketing of produce was therefore not much of a problem. There was no electricity or running water, but most people had access to concrete wells. Buildings (mostly mud houses with
galvanized iron roofs) were old and falling into a state of disrepair.

The outstanding characteristic of this village was the highly visible absence of young adults, most of whom had migrated to nearby Ibadan. Consequently, the farming population was relatively old. This old age is evident when the average age (50) of the sample of farmers interviewed in Araromi is compared with that of the other four study villages (37 to 43 years). The absence of young adults has created a labor shortage problem in the village. Like the farming population, the trees producing the major cash crop in the village (cocoa) also suffer from old age, resulting in lower yields. Attempts are underway by the state Ministry of Agriculture to encourage new cocoa plantings, and some farmers are responding. Thus, in Araromi, the people, the village, and the trees of the major crop appear to need urgent revitalization to facilitate future village growth.

Nomeh

Nomeh in Anambra State, also in the southern part of Nigeria, has a predominantly Christian community, as is attested to by its ten churches for a guess-estimated 1979 population of 10,000. In 1979 also, it had a periodic market, postal agency, police station, and four primary schools. A maternity center was being constructed by community effort. Though there was no electricity or running water, the village was adequately served (in terms of water) by three streams and numerous individually-built concrete wells. A major problem in this village concerned accessibility. Located 11 kilometers from the nearest tarred road at Nnewe, Nomeh is served by a dirt road that is most easily negotiated by motor-
cycles, even in dry weather. When it rains, the road may become completely impassable by any type of motor vehicle. A railway track from the farther eastern towns runs through the village on its way to the city of Enugu. However, train service is irregular, and therefore less reliable than transport by road. Like Turawa in the north, transportation difficulties in this village exacerbate the problem of economic returns from agriculture versus returns from other activities. This is because of the downward pressure exerted on prices as the bulk of produce is sold in the village market. Additional problems in this village at the time of the survey involved a slump in the village's major industry--rice growing, a slump caused by government imports of superior grain rice in an effort to dampen rice prices in urban areas.

The Survey Process

One hundred and fifty (150) farmers were scheduled to be interviewed for the survey. One hundred and forty-five (145) were finally interviewed, of which five were dropped from the study sample because of inconsistent answers, leaving 140 farmers. The small number of interviews scheduled (compared with the population of farmers available in the villages) was again, as with the number of villages surveyed, a result of the lack of research funds. The author conducted all interviews personally. (Research assistants were available only for translation services in the north and west.) The effort was therefore to obtain a detailed amount of information from a relatively small number of interviews, rather than a few pieces of information from a great number of interviews.
The farmers interviewed were heads of households, where a household was defined in a manner successfully used by Samaru researchers, as those 'eating out of the same pot.' For the bulk of its information, the survey concentrated on male farmers, because, as previously explained, farming in Nigeria is a predominantly male activity. Household heads are also generally male. The sample was, however, 8% female, because in the south a few women were encountered who, as well as being farmers in their own right, were household heads by virtue of being widows or by virtue of their responsibility for the feeding and care of their own small unit within polygamous households.

A minimum of twenty-five farmers were interviewed in each village, with the remaining forty interviewees being distributed by village, according to the general willingness of farmers in each village to answer questions. The sample (for purposes of comparison in the variables of interest) was divided between members of cooperative societies (coop members) and non-members of cooperative societies (non-coop members). Eighty-three coop members and fifty-seven non-coop members were interviewed by means of a prepared questionnaire (see Appendices). Again, the number of interviews with coop members is higher because of their greater willingness to cooperate with the author. ¹

There was an attempt to sample randomly within the two groups (except for the 3-5 cooperative society committee members who were compulsorily

¹The greater number of coop members interviewed may seem to create a sampling bias in favor of coop members. This, however, does little or no harm to the main purpose or results of the study, because the important issue is a comparison between the two groups of farmers, i.e., coop members and non-coop members.
interviewed in each village). This attempt at random sampling was fairly successful among the group of cooperative society members, but much less so in the non-coop member group. This was because in some villages, tax lists (from which samples could be drawn) were not made available by suspicious village chiefs. In other villages, uncooperative prospective interviewees had to be replaced by cooperative ones. In each village surveyed, the author obtained a foothold through introduction to the secretary or president of the village cooperative society by the government cooperative or loans officer in charge of that local area. The secretary or president of the cooperative then introduced the author and assistant to the village chief, to whom the purposes of the survey were explained.

The author and assistant, during the survey process, lived intermittently for periods of two days to a week at a time in three of the villages surveyed: Turawa, Araromi and Nomeh. In two of these villages, accommodation was provided by the cooperative society secretary in his compound, while in the third village, the village chief's nephew took responsibility for providing accommodation. For the interviews conducted in Yakasai and Giwa, the author commuted daily from Kaduna and Zaria to the villages, and spent 8-10 hours per day for a week and a half in each village. The long hours spent in the latter two villages, and the days and nights spent in the former three, provided a certain amount of checking and corroboration of interviewees' answers from key people in the village. It also enabled the author to familiarize herself with the lifestyles of the villagers. Farmers preferred to be interviewed early in the morning before going to the farm, or late in the afternoon on their return. Religious holidays in the north also provided an opportunity to interview many farmers.
Five farmers were interviewed as a test sample at the beginning of the interview process. The questionnaire, which had been prepared in Cambridge, was then revised in the light of their answers. For example, six questions on loan transactions costs were left out (except in the case of committee members) since all farmers who received loans had the loans delivered through the village cooperative society. Only committee members who negotiated the loans on behalf of their societies incurred transactions costs. Some additional "countercheck" questions on incomes and savings were also added (see Questionnaire in Appendix). The interviews lasted one and a half hours on the average.

Types of Data Collected and Variable Deficiencies

Seven major types of information were sought in the questionnaires for purposes of examining the validity of the assumptions and exploring the workings of informal rural financial markets. The categories of information sought were:

a) general information on age, education, dependents, acres farmed, etc.;
b) farm production and sales activities with cash sales being the key factor; income from non-farm sources (this would be used to develop a cash-income measure);
c) use of farm inputs--quantity used and amount spent on purchase;
d) borrowing and lending activities, including interest-rate charges;
e) savings activities;
f) opinions and preferences for informal versus formal institutions;
g) assets, i.e., livestock, bicycles, motorcycles, etc.
All questions pertained to the 1978/79 production season. The stress in gathering income information was on cash sales rather than total output, because the former measure would be more useful for study purposes, and also because sales would be more easily remembered. No specific questions were asked on consumption expenditures, since these are usually made on a daily basis, are highly variable, and therefore less easily remembered. In addition to the types of information listed above, data were also collected in a series of mini-interviews in each village from groups of women on their borrowing, savings, and income-generating activities, for use in the section of the study dealing with savings. Several variables were developed from the seven major pieces of information collected (see Chapter Four). Three of these variables—assets, income, number of acres farmed—suffer from deficiencies and therefore deserve further explanation.

**Income**

The income measure developed is a rather special one, and should therefore be treated with caution. It is gross cash income per respondent. That is, total cash income from farm and non-farm sources per respondent. It does not include cash income from other members of respondent's household, such as wives. This is largely because the respondents themselves found it difficult to give accounting of these incomes, and when some of the wives were interviewed, they had difficulty remembering total cash amounts generated, since for some of them, daily cash-in-hand is directly translated into goods for the family. The failure to include other household members' cash income presents a problem when mean per capita cash income is calculated, since this is done per respondent's household. That
figure, therefore, represents an underestimate. In poorer households, where wives' economic contributions are often important, the leaving out of female-generated income could be a significant deficiency (e.g., see Matlon, 1978).

The cash income figures are measured gross because, as previously mentioned, consumption expenditure figures were not obtained. It was felt that any attempt at specificity in these latter figures would result in untrustworthy estimates which could not easily be checked. The ideal research situation in this case would have been one where the author lived with the interviewee-households and recorded daily expenditures.

Because of the above difficulties, there is a problem in attempting comparisons between the income figures generated for the study and those of other researchers who have done work at the village level. One point in favor of the cash income measure, however, is that the farm sales component allows direct comparability in the marketable surplus to between interviewees who received credit and those who did not; and this comparison is of great interest in Chapter Four.

For most of the discussion in Chapter Four, respondents are divided into three gross (total) cash income groupings for purposes of comparison. The three groups are: ₦0-499, ₦500-1499, and ₦1500 and above, with the ₦0-499 group being regarded as the "poor-farmer-group." Other income groupings were tried to see what difference they would make to the figures and

1 Note that most farmers grow rather than purchase the bulk of their own food requirements. Whatever is not put aside for household consumption is oftentimes sold off in the market, along with such cash crops as groundnuts. Hence, cash farm incomes are very much related to the value of the marketable surplus available.
conclusions generated. In each case, the figures changed slightly, but the basic conclusions remained the same (e.g., see Appendix B); hence, the decision to go ahead and use the three income groupings in the discussions.

**Assets**

The asset measure, like that for income, has several deficiencies. The assets measured were livestock—goats, cows, chickens and other poultry, sheep, donkeys, and other animals; other valuable property (mainly vehicles), such as bicycles, motorcycles, and other motor vehicles. These were measured per respondent. Assets such as radios, watches, wives' sewing machines, and children in secondary school were not included. This may have resulted in a bias against the two southern villages, where investment in livestock is not so common because of animal diseases, but where investment in children's secondary education is more common. Land was also not included in the asset measure because in the majority of the villages land is not ordinarily saleable by those who farm it. Besides, as will be seen below, the land issue involves other measurement problems.

In order to quantify the asset measure, an assumption was made assigning an average size and age to each type of asset. This was done so as to make the quantification exercise manageable, but would, of course, result in under- and over-evaluations. Since prices vary from area to area and village to village, an average figure was calculated for each type of asset comprising the mean of the prices prevailing for that asset in the various areas at the time of the study. The number of cows, goats, bicycles, etc. was then weighted by the mean price calculated for the particular asset.
Acres

During the course of the interviews, the author visited some of the respondents' farms, but had neither the time nor the equipment to measure farm areas. Farmers, therefore, had to be relied upon to state the acreage farmed in the year of interest. In many cases, farmers were not familiar with the acreage measure and so could not answer this question. In some villages, e.g., Yakasai, farmers claimed that extension agents had shown them the approximate size of an acre, so they could measure their own farms against this. In Araromi, the villagers had their own land measurement system, which had been translated into acreage/hectarage sizes by the agricultural and loan officers in the area. In addition, some of the villagers were familiar with acreage measurement. Altogether, 24% of the sample could not tell the number of acres farmed. For those respondents who did, the number of acres farmed on average seems to match the cash income grouping (e.g., see Table 4-10, Chapter Four). That is, those in the highest income grouping appeared to have also farmed the highest number of acres on average. However, the author does not claim high reliability for the acreage figures given.

Methodological Decisions

Partly because of the data deficiencies discussed above, it was decided, for purposes of data analysis in the study, to use simple descriptive tables rather than other more sophisticated types of statistical analytical techniques. Comparisons of different groups in the sample, such as coop members and non-coop members, are carried out through the use
of difference of means tests (see Chapter Four). Despite the data problems, the variables developed in the study provide interesting insights into salient problems of credit policy and of rural financial markets in Nigeria.

In the next chapter, the theoretical underpinnings of the study are discussed.
CHAPTER TWO

SUMMARY OF THE LITERATURE AND DISCUSSION OF THE THEORETICAL UNDERPINNINGS OF THE STUDY

Introduction

There are four key concepts that pervade the discussion in this study of credit policy and its implications. These are credit, savings, rural financial markets (RFMs), and concessional (subsidized) interest rates. Each of these important concepts individually commands a substantial body of theoretical and empirical literature, which, if reviewed separately, could constitute an entire chapter in itself. Fortunately, as Chart 2-1 shows, the concepts are interrelated in a way that is important to the major issues raised in this study concerning the need for and usefulness of credit and the effect of interest rate policies on the credit and savings process in rural areas.

As seen in Chart 2-1, rural financial markets (formal and informal) collect savings from farm-households which have surplus financial capital. RFMs also channel credit to farm-households whose available financial capital is insufficient to support their economic activities. These farm-households may use the credit to purchase physical capital to enhance their agricultural or other economic activities. They may use the credit

1Concessional interest rates here are taken to mean rates of interest below the theoretical market rate. Very often in developing countries concessional interest rates are also negative rates, in real terms, because of high levels of inflation. In the literature, concessional interest rates are variously referred to as subsidized or low rates. These words will therefore be used interchangeably in this chapter.
INTERRELATIONSHIPS BETWEEN RURAL FINANCIAL MARKETS, CREDIT, SAVINGS, AND INTEREST RATES

Formal Rural Financial Markets

Affect Willingness to Lend and Mobilize Savings

Interest Rates in Formal Markets

Interest rates in formal markets are on average below interest rates in informal markets for those credit transactions which are explicitly economic.

Affect Willingness to Borrow and Save

Informal Rural Financial Markets

Affect Willingness to Lend and Ability to Mobilize Savings

Relatively Tenuous Links
to supplement their working capital or to support other non-directly productive activities. The credit is expected to be repaid later from savings made from the households' economic activities.

As can be seen in Chart 2-1, the willingness and ability of RFMs to channel credit to and collect savings from farm-households is affected by the prevailing level of interest rates in the financial markets. If, for example, interest rates on credit are low (i.e., below the theoretical market rate), then RFMs are presumed (in the literature) to be less willing to extend credit to farm-households, because such credit transactions are less lucrative. If interest rates on savings are low (compared to rates or returns from other economic activities), then RFMs are less able to collect savings from farm-households because these households are presumed to be less willing to save in financial forms.

Various aspects of these interrelationships are central to the assumptions examined in Chapter Four of this study, and to the empirical evidence presented on these assumptions. As such, in the review of literature in this chapter, the attempt will be to draw from the various sources on credit, savings, RFMs, and interest rate policies in such a way as to highlight the important points and concepts surrounding these interrelationships, particularly as they are connected with the assumptions discussed in Chapter Four.

In section I of this chapter, a look will be taken at the general role of capital and credit in economic development. This is important as a means of establishing a context within which to examine the specific role of credit in agricultural development. Following the discussion on the role of agricultural credit, a description will be undertaken, in
section II, of the implications, particularly for the rural-agricultural population, of concessional interest rates for credit and savings. In this section, popular arguments for concessional interest rates, and refutations of these arguments, will be discussed, as will the impact of concessional interest rates on the ability and willingness of formal RFMs to channel credit to and collect savings from farm-households. Since the issue of small-farmer access to formal RFMs is important in Chapter Four of this study, particular attention will be paid in this section on concessional interest rates to the issue of limited access of poor rural farmers to formal RFMs as a result of concessional interest rate policies.

Given that not all interested analysts agree on the disadvantages of low interest rates (and advantages of high interest rates) for rural farmers, dissenting viewpoints on high versus low interest rates will be presented in the third section of the chapter. In the final section, the major points raised in the analysis of the theoretical and empirical literature will be summarized.

The Role of Capital and of Credit

Most of the conventional wisdom on the role of credit in agricultural development owes its foundation to the earlier, neoclassical, and even classical, economic analysis on the role of capital in economic development. Before launching a discussion on credit, it is therefore worthwhile to examine what the essential elements of this view on the role of capital were.
For most conventional development economists, capital was a necessary, if not a sufficient, factor in the economic growth and development process. In order for a given economy to grow, there had to be a sufficient increase in the rate of capital formation to ensure productivity increases in the various sectors of the economy. To make the capital formation process possible, savings (which could be channeled into investment in capital equipment) had somehow to be made available. Jhingan (1976) summarizes this thinking:

The main purpose of economic development is to build capital equipment on a sufficient scale to increase productivity in agriculture, mining, plantations and industry. Capital is also required to construct schools, hospitals, roads, railways, etc. This is possible only if there is a rapid rate of capital formation in the country, that is, if a smaller proportion of the community's current income or output is devoted to consumption, and the rest is saved and invested in capital equipment.

(The Economics of Development and Planning, p. 202)

The major issue for those economists working on developing countries was the fact that capital formation depended on three aspects of savings that they felt were problematic in these countries. The three aspects were the availability of savings, the mobilization of these savings, and their investment (i.e., their effective utilization in productive activities) (Jhingan, p. 203).

Given the Keynesian emphasis on savings as a function of income, many development economists became more concerned with the supply side of the savings problem, that is, with the availability of savings itself. They felt that low per capita incomes in developing countries, coupled with high marginal propensities to consume out of incremental income, were chiefly
responsible for low levels of savings and capital formation in these countries. Such thinking manifested itself in the 'vicious circle' hypothesis, described by Nurkse (1967) as a "small capacity to save, resulting from a low level of real income. The low level of real income is a reflection of low productivity, which in its turn is due largely to the lack of capital. The lack of capital is a result of the small capacity to save and so the circle is complete." (Patterns of Capital Formation in Underdeveloped Countries, p. 5) The implications were that one way to break out of the 'vicious circle' would be to encourage the influx of outside aid to speed up the capital formation process in a given country.

While some 'supply-side' economists worried about ways of breaking out of the vicious circle, others noted that the problem was probably not so much the low income levels as the existence of large classes of non-savers in society. The reasoning behind this was that if the growth could be encouraged of those classes who were less apt to squander or consume increases in income, the savings process in the developing countries would be greatly facilitated. In this vein, Sir W. Arthur Lewis (1954, 1955) noted that the profit-making entrepreneurs were the significant savers in society, and that the lack of savings in many developing countries was a consequence of the limited numbers of the members of this class in society. Yet another school of thought on the supply-side of savings maintained that the major problem was that available savings in developing countries was invariably channeled into relatively unproductive investment, e.g., jewelry, land, houses, and stocks of commodities. (See Basch, 1970, p. 73.) This left little that could be directed towards investment in needed capital equipment.
The demand-side of the savings issue concerning the lack of investment also received some attention. Nurkse (1967) extended his vicious circle hypothesis to this aspect. According to him:

... the demand for capital is governed by the incentives to invest ... On the demand side, the inducement to invest may be low because of the small buying power of the people, which is due to low productivity. The low level of productivity however is a result of the small amount of capital used in production, which in its turn may be caused at least partly by the small inducement to invest.

(Problems of Capital Formation in Underdeveloped Countries, pp. 4-5)

Again, some increase in capital formation (perhaps aided by the exogenous introduction of savings) would enhance productivity, which would expand markets, and thus provide the necessary inducements to invest. Hence, the vicious circle would be broken.

It is apparent from the arguments presented above that regardless of what their major stress may have been, that is, the supply-side or the demand-side of savings, most of the development economists were in agreement on one point—that lack of savings and the attendant lack of capital formation were seriously retarding the growth and development process in many of the developing countries. There were, however, some dissenting opinions on this strong focus on the role of capital. Bauer (1971), for example, argued that the vicious circle hypothesis was not supported by empirically observed evidence showing rapid increases in the Gross National Product and exports of many poor countries in recent decades. (Dissent on Development, pp. 34-35) In fact, in Bauer's opinion, savings and capital formation might not even be the primary determinants of material progress.

Instead, according to him:
... economic achievement and progress depend largely on human aptitudes and attitudes, on social and political institutions and arrangements which derive from these, on historical experience, and to a lesser extent on external contacts, market opportunities and on natural resources. (p. 41)

Schultz (1956, 1964) had expressed similar dissenting opinions in earlier writings, stressing that attention to development of people as productive agents (that is, investment in human capital) may be a more productive way of achieving economic progress than investment in physical capital. Hirschman (1958) noted that many ingredients, among them entrepreneurship and the ability to save, were necessary for the development process. However, many of these ingredients were already latent in the developing countries, and the main task of planning, therefore, was combining and pacing these ingredients in a way that would facilitate the development process. (The Strategy of Economic Development, p. 6)

Despite these varying opinions, the mainstream of thought on the growth and development process has continued to stress the importance of capital formation. This may be because of the demonstrated increases in capital equipment that accompanied the growth process of the developed countries, and probably because action on the other ingredients of economic growth provide less visible and less immediate results than actions to bring in savings to stimulate capital formation.

If conventional economic wisdom was pessimistic about savings availability in the developing economies in general, it was even more so with regard to savings availability in the traditional, backward, rural-agricultural areas. There the typical peasant with an income level even lower than the average for the country as a whole was assumed to save
"little or nothing." (Buchanan & Ellis, *Approaches to Economic Development*, 1955, p. 301) Or, the peasant was regarded as thrifty but caught in a debt trap, which demanded the constant redirection of his savings into debt service. (Lewis, 1955) Consequently, little was left over for the capital-formation process.

As a continuation of this trend of thought, it would mean that if substantial economic progress were to be desired in this sector, that is, if agricultural modernization were to take place, it would be necessary to introduce aid from outside the rural sector to facilitate the agricultural development process. Hence, the rationale arose for the introduction of credit into the agricultural development process. These notions on the role of credit have been and are still very popular, particularly among developing country policy-makers. It is only very recently that new evidence, including that from this study, has poured forth, challenging old assumptions with regard to credit and savings in rural-agricultural areas, and cautioning that great care must be taken with regard to credit use. (This new evidence will be discussed further below.) The tide of popular opinion is, however, yet to be turned. In the following section, a closer look is taken at the role of credit in development of the rural-agricultural sector.

**Specifics on the Role of Credit**

The key to understanding the conventional role of credit in agriculture lies in the desire to 'modernize' the agricultural sector; that is, to transform traditional methods of production into new methods that would
not only increase farmer productivity, but would also increase the marketed surplus and farmer income. In a traditional type of agriculture, where the farmer is combining old and time-tested methods of production, credit needs are said to be very little or non-existent. However, when the farmer has to use new inputs, such as fertilizers, improved seeds, insecticides, and perhaps additional labor associated with these new methods, credit becomes a necessary factor. This is because of the presumed poverty of the average rural farmer who, as was pointed out in the above section, was deemed unable to save. Such a farmer, therefore, would have to "borrow to innovate" (Zandstra et al., Caqueza: Living Rural Development, 1979, p. 209).

The conventional role of credit is summed by Mellor (1966) for the general case, and by Osuntogun (1973) for the Nigerian case. According to Mellor,

.. early stages of modernization will create only small and short-term credit needs. As modernization proceeds, the financing required in the initial years of installation of new devices may put a heavy burden on existing credit facilities. Medium-term credit will be needed for rapid expansion of work animals, tools and equipment—wells and irrigation development will cause similar problems.

(The Economics of Agricultural Development, p. 127)

Osuntogun notes that for Nigerian agriculture, further improvements...

.. will require basic changes in the traditional techniques and organization of production. The application of advanced technology implied in this transformation will call for considerable investment of capital and thus increase demands for credit.

The role of credit in the transformation of Nigerian agriculture therefore becomes evident. Credit is needed for the production system including the payment of wages of hired labor, purchase of fertilizer, improved seeds and other requisites. Also, there is need for credit to meet the cost of marketing.

("Agricultural Credit Strategies for Nigerian Farmers," p. 1)
According to analysts of the role of credit, the need to provide credit (perhaps subsidized credit) for the poor rural farmers becomes even more imperative when the problems of the risks or uncertainties which they face in agricultural production are considered.

The farmer is always confronted with a number of uncertainties that lie largely outside his control. As they relate to his production activities, these uncertainties are attributable to the unpredictability of the quantity of the product that will be obtained, to the product price at the moment of sale, and to institutional uncertainties. These uncertainties are particularly hazardous to small farmers who may lack the means to continue their enterprise if they experience a serious financial setback.

(Zandstra et al., Caqueza: Living Rural Development, 1979, p. 195)

When these uncertainties are combined with those emanating from the greater yield and price variability of new technology packages, then rural farmers, close as they are already to the subsistence margin, may not innovate unless the incentive of outside help in the form of credit (possibly low cost credit) is available. Thus, credit functions then mainly as an innovative and risk-bearing aid. Credit may also function as a 'tiding-over' fund, ensuring the farmer's survival during that interim period between which he makes his new agricultural investments and the time in which the benefits of the investment start to pour in. More recently, other less conventional uses, especially of subsidized credit, have become evident. These will be described in a later section on subsidized credit.

Early discussions by agricultural economists on the role of credit often stressed the interdependence of credit use on other factors connected with the production process. Thus, Mellor (1966) noted that "Credit pro-
grams should be tied operationally with the other services provided to modernizing agriculture by either the government or private interests."

(The Economics of Agricultural Development, p. 130) Mosher (1966), in his well-known book, Getting Agriculture Moving, categorized the ingredients for agricultural development into what he termed 'Essentials' and 'Accelerators.' Essentials (transportation, markets for farm products, constantly changing technology, local availability of supplies and equipment, production incentives) were factors without which the agricultural development process could not proceed. Accelerators (production credit, education for development, group action by farmers, improving and expanding agricultural land, national planning for agricultural development) were useful in increasing the pace of the development process. Thus, the usefulness of accelerators such as credit was directly dependent on the presence of essentials. In Mosher's words:

There can and will be some growth in agricultural productivity wherever all the essentials are present but without all of them there will be none. The case is different with the accelerators. Each of them is important but not indispensable. There can be agricultural development without one or more of them. Nevertheless, most countries need as rapid agricultural development as possible and to achieve this each of the accelerators can be of great help. (p. 122)

Much of the literature on practical experiences with the introduction of credit shows that such linkages as are mentioned above between credit and other factors appear to have been forgotten or glossed over by development practitioners in their enthusiasm over the potentialities of credit as a transformation agent in rural agriculture. This enthusiasm was probably spurred on by the practitioners' reinterpretations of emerg-
ing literature citing financial services and instruments as possible active rather than passive agents in the development process. (See Patrick, 1966.) Given this, national and international agencies put together credit programs with little analysis of target population credit needs and practices, and with inadequate attention to the linkages between credit and other factors. Consequent to the disappointing results obtained from these credit programs, evaluations have been done in recent years of the credit experience in particular countries and particular agencies. (For example, see AID Spring Review 1973, FAO Credit Conference, 1975.) Such evaluations have redirected attention to the need to reassess the role of credit and credit policy in various developing countries.

One noticeable factor in the above discussion of conventional views of the role of credit is the tendency for analysts and policy-makers to view the essential function of credit as that of an input into the agricultural production process, specifically for the adoption of new technology. This tendency, of course, arises from the desire to ensure that increased output is indeed generated from the credit, and with it income increases sufficient to repay the loans. However, dogmatic belief in the theme of production credit has resulted, in the case of various developing countries, in misdirected credit policies, often with rather disappointing results.

Baker (1973), among others, has criticized the narrow conception of credit programs based solely on the need for production credit, since consumption and other types of credit may also constitute legitimate needs. One of the key questions raised in this study concerns the legitimacy, in the Nigerian context, of continued stress on production credit in the face of what appear to be relatively unattractive returns to agriculture com-
pared with other activities. Another question involves the inevitable linkage, in the minds of Nigerian policy-makers, of credit with the purchase of fertilizer inputs. The issue is: given the current features of Nigerian agriculture, such as labor scarcity, might it not be more fruitful to think of alternative, more productive ways of using credit to help agricultural producers?

**Credit and Concessional Interest Rates**

It has been the experience with national credit programs that government-owned or government-regulated credit has rarely been provided at market rates of interest. Most countries have adopted credit policies that have as a prominent feature the imposition of below-market ceilings on interest rates. Such concessional interest rates mean loans given at artificially low prices, and, in fact, depending on the rate of inflation in the country concerned, often at negative real prices.

Several recent theoretical and empirical studies (to be discussed below) have shown that many of the goals given as the basis for concessional interest rate policies are not really achieved by pursuing these policies. And, furthermore, subsidized interest rates on credit give rise to several harmful side effects, particularly as regards the performance of rural financial markets (RFMs) in serving poor rural farmers. The idea of a concessional interest rate policy is important to this study, because, as will be shown in Chapter Three, this is a central feature of Nigerian credit policy. More than half of the assumptions explored in the study relate to the effects of and reasons for concessional interest rates on
Reasons for Concessional (Subsidized) Interest Rates and Arguments to Counter These Reasons

Several reasons are cited in the literature for the prevalence and stability of concessional, frequently inflexible, interest rate policies in developing (as well as some developed) countries. Adams (1978), in his article, "Small Farmer Credit Programs and Interest Rate Policies in Low Income Countries," provides an excellent summary of the four major reasons. This section draws on his work extensively. The four reasons are: the need for concessional interest rates to enable farmers to adopt new technology, to act as compensation for production disincentives, to serve as an income transfer device, and to facilitate the driving out of village moneylenders.

Adoption of Technology

The most popular reason cited for concessional interest rates on credit concerns the presumed poverty and poor risk-bearing ability of farmers (discussed in the section on the role of credit above). Because of these two assumed characteristics of farmers, the argument is, in Adam's words, that:

...low rates are needed to induce farmers to adopt formal credit and to use same to purchase modern productive inputs. This adoption argument holds that small farmers will not borrow formal credit unless low rates are charged, that they will not adopt profitable new technology unless special inducements are given, and that low rates are necessary to offset the
uncertainties associated with adoption of new production activities. (p. 5)

Khatkhate (1978) provides a more general reason to account for this attitude on interest rates. He notes that "in the early years of debate on the problems of economic development, there had been a strong belief that the level of interest rates in countries [and we add sectors] aspiring to grow should remain low enough to induce new investment." ("False Issues in the Debate on Interest Rate Policies in LDCs," p. 1) Such reasoning could easily account for the attempts to induce further investment in "lagging agriculture" through low interest rates.

Adams cites research by Meyer (1977) and Tinnermeier (1977) showing that farmers may not need subsidized or even additional credit for increased investment in agriculture, because they either own or have access to enough liquidity to undertake profitable investments. Evidence from this present study suggests that when the income level is controlled for, the access to subsidized credit makes very little difference in fertilizer use (see Chapter Four) among groups of Nigerian farmers. Thus, empirical evidence fails to support consistently the technology adoption premise for low interest rates. As regards the risk-bearing situation of certain particularly vulnerable farmers, other less distorting (though admittedly administratively more complex) means, such as certain types of insurance programs, might be found to deal with the problem.

Compensation for Production Disincentives

A second, less conventional reason for subsidized credit concerns the need to use this credit to compensate farmers for various production and investment disincentives caused them by government economic policies.
According to Adams:

... low interest rates are needed on agricultural credit to compensate farmers for other economic policies which cause production and investment disincentives. These policies might include food price ceilings, over valued foreign exchange rates which depress prices for agricultural exports, various forms of taxes and policies which raise the prices of major inputs purchased by farmers. Some policymakers argue that low interest rates on agricultural loans are an easy and efficient way to compensate farmers for the production disincentives inflicted on them by these various policies. (p. 6)

A general argument against the use of subsidized credit as a compensation for other investment and production disincentives caused by government is that while the effect of these disincentives is felt by all farmers, access to subsidized credit (as will be discussed further below) may be available to only a limited number of farmers, and the well-to-do ones at that. Most farmers would thus be left uncompensated.

For example, in Nigeria where only 4-6% of rural-based farmers have access to subsidized credit in any given year, the use of credit as compensation for production and investment disincentives would be extremely difficult to justify. This is not, however, one of the main bases for a subsidized credit policy in Nigeria.

It could also be said that in many developing countries, for some of the farmers who do receive credit, the amount of credit received in any given year could prove to be an insignificant proportion of the loss suffered through various production disincentives in that year, so that greater amounts of credit would have to be given before the compensation effects could be justified. The fact is that, given further distortions caused by subsidized credit policy, the costs of using such a policy as a
compensation device far outweigh the benefits.

**Income Transfer Device**

The institution of a subsidized credit policy is also defended on the grounds of its use as an income transfer device to achieve government equity objectives. This is the third argument. In Adams' words:

Policymakers who feel compassion for the economic plight of the rural poor argue that low interest rates on agricultural loans are an easy way to transfer additional purchasing power to the rural poor. When interest rates are low, borrowers pay less for their loans and thus have more income to spend on other activities. A slight variation of this argument is that low interest rates are justified to help farmers ride out periods of low income due to disasters caused by war or weather. (p. 6)

Again, as in the counter-argument made above against use of subsidized credit as a compensatory device, its use as an income transfer device is argued to be equally ineffective. This is because it has been proven in country after country (e.g., see Gonzalez-Vega, 1976, 1977; Besser, 1979) that the bulk of the credit ends up in the hands of the better-off farmers. Gonzalez-Vega (1976), in particular, has argued that subsidized, and especially restrictive, interest rates on credit, by affecting the cost side of formal lenders' portfolios, causes them to favor large borrowers with small lending costs over small borrowers, thereby worsening the distribution of income. In his words:

Credit in general and subsidized interest rates in particular are very inefficient for income redistribution. Subsidized rates affect income growth potentials through their effect on the access to resources that different classes of farmers have and have a direct effect on income distribution. The grant transferred is directly proportional to the size of the loan. The larger the loan, the
greater the unrequited transfer. Since loan size and borrower size are positively correlated, the amount of the grant becomes a direct function of the borrower's wealth. The large borrowers receive large subsidies, while the small borrowers who constitute the target of the strategy receive, at best, small loans with their implicit subsidy. Non-borrowers—the smallest and the poorest farmers—receive no subsidy at all. This necessarily makes income distribution worse.

("Interest Rate Restrictions and Income Distribution," p. 975)

Along the same line of argument, it is clear that credit (subsidized or otherwise) will not help farmers to ride out periods of low income due to natural and other disasters if the majority of the farmers do not get the credit. Therefore, to handle such genuine cases of need, a revamping of credit policies to ensure better access for a greater number of farmers, or the instituting of various types of insurance programs, would be in order.

Desire to Be Rid of Moneylenders

Lastly, the fourth major argument for low interest rates on credit concerns the desire to be rid of the unwanted influence of moneylenders. Policy-makers in the Third World generally believe (and it is true in the rural areas of some developing countries) that a large proportion of the rural population borrow from moneylenders at very high rates of interest, payment of which keeps borrowers perpetually tied to lenders in an endless debt-repayment cycle. The channeling of low interest credit to rural

1Also, note that if farmers get the credit, the repayment and other terms should be very flexible in order for the credit to be genuinely helpful.
areas should therefore provide (according to these policy-makers) competition for moneylenders, and enable rural borrowers to escape the lenders' clutches. Adams (1978) notes:

It is widely held in low income countries that informal lenders apply usurious lending terms to their loans. These terms lead to either perpetual economic bondage of borrower to lender, or even, worse, turnover of borrowers' assets to the lender to satisfy debts. An objective of many small farmer credit programs is to provide inexpensive formal credit to rural households so they can escape the clutches of the moneylender. It is also often hoped that an increased supply of inexpensive formal credit will at least weaken the economic power of the moneylenders and hopefully even drive them out of business. (pp. 6-7)

One major argument offered in the literature against this preoccupation with the driving out of moneylenders justifies the activities of these lenders in the rural areas on the basis of the services they perform and the costs they face for these services. The research points out that programs aimed at driving out moneylenders may be unwise. Bottomley (1964, 1971), Long (1968), and others note that high lending costs in the rural areas probably account for and justify the bulk of the high interest rates charged by moneylenders. These lending costs may be substantial because of high default rates in rural areas (requiring high-risk premiums), greater (riskless) opportunity cost of capital in these areas, high inflation rates, and significant administrative and other costs. Barton (1977) and Singh (1968) add that moneylenders and other informal lenders in rural areas provide much needed credit services.

McKinnon (1973) and Gonzalez-Vega (1977) note that low interest rates on credit are, in any case, an ineffective way of dealing with exist-
ing moneylender problems. According to Gonzalez-Vega (1976), "... low interest rates cannot eliminate the monopoly of moneylenders in the rural areas of low income countries, since they restrict access to formal credit." (p. 975) This restriction of access—which stems from lender behavior discussed above—serves to drive rural borrowers back into the arms of the very moneylenders the governments seek to eliminate. Thus, the formal financial markets offer no effective competition to the moneylender.

In any case, the moneylender influence may need to be examined on a country-by-country and even region-by-region basis, because it is not at all clear that this influence is as uniformly pervasive as policy-makers believe. In the Nigerian case, for example, efforts to use subsidized credit to drive 'wicked' moneylenders out of business may be entirely misplaced if the majority of villagers do not obtain credit from moneylenders.

Other Justifications for Low Interest Rates for Credit

A possible reason for maintaining low interest rates for credit is that low rates help offset the high total borrowing costs that rural farmers normally face in their dealings with the formal system. Borrowing costs are made up not only of interest costs, but of transaction costs of getting credit, such as transportation costs, opportunity costs of time lost from the farm, etc. Because these costs are higher for rural farmers who have very little practice in dealing with formal financial systems, concessional rates of interest could be used to offset some of the transaction costs. Adams and Nehman (1977), however, have shown that interest costs constitute a very small proportion of borrowing costs for most rural
farmers. Therefore, lowering interest costs would compensate to only a small degree for high transaction costs of credit. A much more effective way of helping rural farmers would be to lower or eliminate the other substantial transaction costs of obtaining credit, while increasing interest costs by some margin so as to assure rural farmer access to credit.

Given the continuation in several countries of subsidized credit programs in the face of failure to achieve program objectives, many researchers have become convinced that subsidized credit may often be little more than a political tool used by governments for buying support.\(^1\) According to Dell Amore (1975), "governments may want to reduce interest rates on agricultural loans for political reasons; it is an easy measure and one that makes good publicity." (The Credit Markets of Africa, p. 103) Kane (1976) has warned, however, that the political use of interest ceilings—including the rationing it often involves—may backfire on a government, since "it could disastrously increase political and economic alienation among the less powerful members of society." ("Good Intentions and Unintended Evil: The Case Against Selective Credit Allocation," p. 68)

The difficulty governments would face in changing the direction of their credit policies would be the confrontation that might occur with people benefitting from subsidized credit programs. Of particular importance might be larger, more influential farmers, or perhaps the government bureaucrats administering credit programs. Some poor and rural farmers

\(^1\)Viewed more sympathetically, governments could also be said to be caught in a trap, in the sense that once the decision has been made to set up a rural credit program, it is politically difficult to announce high interest charges for "poor" rural farmers.
subject to "credit illusion" might even protest the reduction or abolition of subsidies on credit. This could be because the demonstration effect of seeing a fellow villager obtain credit in a given year may make them believe that even if they lacked access to subsidized credit in that one year, access would surely be theirs sometime in the future. Despite the certainty of some opposition, however, the lack of justification for most of the basic reasons given for subsidized credit programs, and the availability of other more effective means of achieving some of the goals frequently mentioned, dictate that governments re-examine their rationale for instituting credit programs.

Disadvantages of Low Interest Rate Policies for Credit

Not only can concessional interest rates for credit not be justified on the basis of the reasons given for instituting them, but several distortions in financial markets and in the rural sector actually arise as a result of the concessional interest rates. Some of these, such as the rationing that occurs in formal credit markets and the distortions in bank lending portfolios, have already been mentioned in the discussion above, and will be dealt with only briefly in this section. Most of the critique on the low interest rate policies in the literature center on the impact of such policies on rural financial markets and on savings. It will, therefore, be useful to carry on the discussion in this section under those major headings.
Impact of Concessional Interest Rates on Rural Financial Markets

There are several ways in which concessional interest rates affect rural financial markets. Concessional rates of interest could lead to decapitalization of lending institutions. They could and do lead to rationing of credit by rural financial markets and to capital market fragmentation. Concessional rates of interest affect the way rural financial markets transfer resources from one region to another (e.g., from rural to urban areas). All these impacts of concessional interest rates on RFMs are elaborated below.

Decapitalization

One of the possible effects of concessional interest policies is that lending institutions involved with agricultural credit may find themselves in a position where they may run short of capital with which to carry on their lending activities. This could occur if profit margins are low, and if interest payments on savings deposits are insufficient to attract domestic and foreign savings. This could leave the financial institutions in an unsatisfactory situation with regard to credit reserves. At the same time, these same institutions may experience loan repayment problems, due to the inability or unwillingness of certain borrowers to repay. Some influential borrowers, for example, may deliberately refuse to repay if they feel that they have enough political power to protect themselves against sanctions. Other borrowers (because of the low cost of credit) may divert borrowed funds to activities with low or delayed financial pay-offs, thereby hampering their ability to repay the loans (for examples, see Boakye-Dankwa, 1979). Given such situations, financial institutions may
find that they cannot maintain an internal revolving credit fund. At the same time, they cannot raise enough outside capital to continue granting loans. They may eventually have to shut down, unless the government keeps providing more capital for their operations.

Rationing

Below-market rates of interest on credit stimulate demand in excess of supply, resulting in the administrative rationing of credit, during which process these influential farmers with greater access to financial institutions are favored over and above poorer, less influential farmers. In such countries as Nigeria, where the interest ceiling on agricultural credit and the interest floor on savings are such as to leave a very small profit margin for rural financial institutions, these institutions have an added incentive in rationing to concentrate their credit portfolios on large and influential borrowers. As Shaw (1973) puts it:

"... effective low ceilings on real loan rates intensify risk aversion and liquidity preference on the part of intermediaries. Banks and others keep a privileged place in their portfolios for established borrowers, especially trading firms with a long record of stability. They have little incentive to explore new and less certain lending opportunities."

(Financial Deepening, p. 86)

Such policies, as has been mentioned earlier, elbow out small rural borrowers, and even result in a worsening of the distribution of income.

Inter-regional Resource Transfer

Just as concessional interest rates on agricultural credit lead to the concentration of loans in the hands of well-to-do borrowers, they may encourage the transfer of any available rural savings from the rural to
the urban areas. This could occur if, with very low to negative real rates of interest, financial institutions find investment opportunities in the urban areas far more lucrative and less risky than those in the rural areas. Adams (1978) cites research in Thailand, Bangladesh, and Jamaica that shows that concessional interest rates may indeed be responsible for, or at least be reinforcing, inter-regional resource transfer by rural financial markets.

Capital Market Fragmentation

The effects of concessional interest rates in fragmenting financial markets has been persuasively argued by Shaw (1973) and McKinnon (1973). Since small, often rural, borrowers are excluded from the formal market by the rationing that results from low interest rates, they have to find credit in the informal market. There they face different costs from those obtaining in the formal market. A dual credit market is thereby perpetuated, with people facing differential and preferential prices and costs for credit, depending on which market they participate in. Such dualism results in some people getting too much credit, some too little, while others who may have productive opportunities get none at all. This state of affairs represents a misallocation of resources and retards economic development.

Furthermore, some of those with access to relatively unlimited amounts of credit may over-invest in capital as compared with labor. In an economy where rural unemployment or underemployment poses a problem, such investment will represent further resource misallocation. Other people with too much credit may engage in 'non-productive' consumption (e.g., buying
Mercedes-Benz cars), thereby 'wasting' the borrowed resources. Concessional interest rates thus reinforce the weaknesses in rural financial markets instead of building up the strengths.

**Effects of Concessional Interest Rates on Savings**

Low interest rates paid by borrowers are said to have a detrimental effect on the mobilization of savings in rural financial markets because they lead to equally low or lower interest payments to savers. Two reasons account for the persistence of low interest charges on savings deposits. The first reason (the foundations of which were discussed at the beginning of this chapter) has to do with the conventional notion of low savings capacities in rural areas. Because of the belief that rural savings are negligible in any case, policy-makers see no need to raise interest rates for savers. The second reason involves the continuing debate on the interest elasticity of savings supply. Since there are empirical uncertainties about the responsiveness of savings to interest rates, policy-makers again feel no pressure to raise rates to attract deposits.

On the issue of savings availability and savings capacities in rural areas, evidence continues to mount contradicting the conventional notions. Ong et al. (1976), Lee et al. (1977), Roberts (1972), and Okonjo (1978) have shown empirical evidence in the cases of Taiwan, Korea, Zambia, and Nigeria confirming the availability of cash savings in rural areas. The general trend indicated by these findings is underscored by Shaw's (1973) statement that evidence on curb (informal) market activities "impress one with the vigor of the propensity to save even under trying
circumstances. The savings they [the curb markets] attract along with other savings that escape from the low returns of organized finance into inventories of real assets and foreign assets must be a multiple of savings that flow on a voluntary basis to repressed monetary systems." (Financial Deepening, p. 136)

Concerning the issue of savings response to interest rates, debate continues. Houthakker (1965) and Williamson (1968) present econometric evidence that suggests insignificant or negative relationships between savings and real interest rates. Gupta's (1970) work on India contradicts this with its evidence that "saving responds positively to real interest rates in both urban and rural sectors, though their qualitative and quantitative importance is much greater for the urban than for the rural sector." ("On Determinants of Rural and Urban Household Saving Behavior," p. 583) Khatkhate (1978), however, notes that "Gupta's results are biased by the misspecification of an interest rate variable." ("False Issues in the Debate on Interest Rate Policies in Less Developed Countries," p. 9) As such, Gupta's conclusions have less credence. Khatkhate also critiques the statistical techniques used in other research (e.g., Emery, 1970) on savings and interest rates, and remarks that such studies "succeed only in showing that interest rates influence the form of saving and not its level." (p. 9)

Despite these diverse results, the general (although largely unsubstantiated) opinion in the literature appears to be that both the level and form of savings can be positively influenced by the level of real interest rates. Some researchers (e.g., Ruozzi et al., 1977) argue, though, that in some cases (especially in Africa), other motivating factors for savings,
such as the need for insurance and for credit, or the response to social obligation, will count as much if not more in savings decisions as interest rate levels. Von Pischke (1978) adds that in rural areas, where most people may not have deposit accounts,

... the supply of deposits is initially more 'service-elastic' than interest elastic. The potential advantage for rural people of the use of financial services is convenience in terms of safety and liquidity management ... .

At some later stage of financial development when basic access to deposit services of some sort have been largely solved, interest rates will play a more forceful role in influencing the level of rural liquidity and investment in financial assets.

("Towards an Operational Approach to Savings for Rural Developers," pp. 53-54)

In the manner elaborated by U Tun Wai (1972), therefore, the physical availability of financial institutions and services could be extremely important.

One point that virtually all researchers are agreed upon is that concessional interest rates do more harm than good when savings mobilization is considered. This is because concessional interest rates are partly responsible for the relative lack of intermediation in rural areas. According to Von Pischke (1974), 'low' lending rates make it difficult, if not impossible, for any financial intermediaries to venture into rural areas without incurring losses. This means that

... rural savings in the form of cash cannot conveniently be converted into interest-bearing financial assets and that rural saving potential remains untapped and unstimulated. The lack of deposit facilities in rural areas results in low levels of rural deposits, reinforcing the belief that rural people are indeed
poor and deserving of (subsidized) credit for developmental purposes.

("A Critical Survey of Approaches to the Role of Credit in Smallholder Development," p. 11)

Concessional interest rates also result in low rewards to savers, particularly rural and small savers whose only chance to participate in formal financial markets may come in the use of deposit facilities.

Low rates force rural households to accept erosion of the real value of their financial savings or to hold their savings in other asset forms. This also results in rural households receiving a lower rate of return on their total assets. Savings activities are, as a result, made less attractive to the household and the opportunity cost of consumption lessened. Said another way, poor rural households are induced to consume more and save less through low interest policies.

(Dale Adams, "Small Farmer Credit Programs and Interest Rate Policies in Low Income Countries," 1978, p. 9)

From these remarks, it appears that the pursuit of a positive higher rate of interest policy on savings may be in order. Although the response of savings to higher interest rates is by no means certain, setting higher and real rates of interest on savings may encourage increased financial intermediation. It could also reward small savers, lead perhaps to increases in the volume of mobilized savings, and further correct the misallocation of savings by RFMs.
Dissent on High Interest Rate Policies

The policy prescription of high positive real rates of interest is not one that sits comfortably with some analysts. One of the issues that arises is the fact that high positive market rates of interest will exclude some poor people, who cannot afford to pay such rates, from the credit market. The question, then, is whether high real rates of interest will confer more costs than benefits on poorer farmers as a whole than would an alternative, administratively-rationed system. There is a presumption in the literature that the benefits would be greater than the costs since, as practiced in most countries, fewer poor people would be excluded under the market or near-market mechanism than under a bureaucratically administered system. Furthermore, there would be less resource misallocation in the economy as a whole, and farmers would benefit from higher rates on savings. As to the very poorest farmers, other more direct methods of aid, such as grants, might be considered.

One other issue that frequently arises when positive high rates of interest are discussed is: How high is high? In some countries where inflation runs extremely high, positive rates of interest might mean absurdly high nominal rates, such as 100% and upwards. In such cases, it appears that the initial step would be for the government to work on the reduction of the inflation level before redirecting its interest rate policies.

For other (intermediate inflation) countries, some researchers, e.g., McKinnon (1973) and Lipton (1976), have mentioned real rates of 15% to 25% as being (if not exactly market rates) at least high enough to induce better
performance in rural financial markets. Other researchers, e.g., Adams, suggest flexible interest rate policies, while others, e.g., Khatkhate (1978), advocate that the rate charged should be based on the rate of return to investment in the agricultural sector. The problem with this latter suggestion is that since credit is fungible, it could still be diverted to other sectors if rates of return elsewhere were higher. It would seem that no one interest rate or method of setting interest rates can be mandated across the board for all countries since economic and cultural conditions differ. What can be suggested is that governments move increasingly towards a policy of positive high rates of interest in order to reduce biases in rural financial markets.

Finally, other questions raised about a policy of high real rates of interest concern some adverse effects on indigenous entrepreneurs that would occur from the increased financial intermediation resulting from high interest rates. Bhatia and Khatkhate (1973) argue that in some African countries where indigenous entrepreneurs face a higher risk environment than foreign ones, increased financial intermediation may have the negative impact of allocating mobilized savings away to the foreign favored customers. They state that "the emphasis on high-interest rate strategies could yield only partial results; they might, at best, help to bring about a mobilization of resources with the financial institutions, but they would not ensure the optimum use of the resources." ("Financial Intermediation Savings Mobilization and Entrepreneurial Development: The African Experience," IMF Staff Papers, p. 134) This opinion on resource allocation is directly contrary to that espoused for high interest rates. The situation described by Bhatia and Khatkhate would arise if differen-
tial rates between higher risk and lower risk enterprises were not allowed. Should higher rates for riskier enterprises be permissible (and politically feasible, since the division in this case is between foreign and indigenous enterprises), then the lending institutions' costs would be covered in this regard, and technically there would be no resource misallocation in terms of banks' lending portfolios. However, the government would still be left with the problem of how to help indigenous entrepreneurs catch up with foreign ones who have derived an initial advantage from their colonial foundations. The government could, in this case, again provide direct grants or various other types of direct (rather than indirect) subsidies to indigenous entrepreneurs. The government could also, as Bhatia and Khatkhate have suggested, provide direct technical and managerial services to aid indigenous entrepreneurs in running their enterprises.

**Summary and Conclusion**

It has been shown in this chapter that the conventional notions on the need for credit and the absence of savings in rural areas are being increasingly challenged by new evidence. In the light of the new evidence, the emerging consensus appears to be that concessional interest rate policies have to be evaluated and changed in order to avoid biases in the behavior of rural financial markets. High real rates of interest promise to aid resource allocation, and economic development in general. They may aid savings mobilization. This does not mean, however, that higher real rates of interest are a panacea for the agricultural sector's problems,
or even for problems involving rural financial markets. Other institutional factors, such as appropriate prices in input and product markets, have to be taken into account in policy-making, while solutions have to be found for those farmers too poor to participate in a more efficient credit market. In the next chapter, a look is taken at credit policy in the Nigerian context.
CHAPTER THREE

ESSENTIAL ELEMENTS OF PAST AND PRESENT CREDIT POLICY IN NIGERIA

Introduction

In Chapters One and Two of the study, the reasons for ongoing interest in the role of agricultural credit in Nigeria and other developing countries were presented. In Chapter One, the poor performance of the agricultural sector in Nigeria was given as the immediate reason for the current upsurge of interest in agricultural credit in that country. In Chapter Two, more fundamental theoretical and practical reasons were discussed for the continuing interest in the role of agricultural credit in Nigeria and other Third World countries. For example, one reason cited is the belief by many interested analysts in the underlying poverty and low savings capacity of the rural-agricultural population in most developing countries.

Given that the major reasons for interest in credit have been presented in the two previous chapters, in this chapter attention will be directed to a description of past and present credit policy in Nigeria, as a means of providing a more complete background on credit activities and policy in that country. During the discussion in this chapter, an attempt will be made to highlight further the pervasiveness—in the Nigerian context—of the conventional notions on credit need and use discussed in Chapter Two. This will serve to underscore the bases for the assumptions, outlined in Chapter Four, as underlying Nigerian credit policy.
This chapter is organized in three main sections. The first section consists of a brief description of early attempts by the government to introduce credit into Nigerian agriculture and the reasons for these efforts. This discussion leads, in the next section, to descriptions of the major formal institutions created and currently charged with distributing credit to the agricultural sector. The third section deals with the essential elements of present Nigerian credit policy.

**Formal Agricultural Credit in Nigeria: A Brief Historical Look, 1930s to Late 1960s**

Though the heightened interest in agricultural credit, and the increase in its volume (relative to previous years), are fairly recent phenomena in Nigeria, the introduction of credit into the agricultural sector dates back to the 1930s.¹ Nigeria was then under British colonial rule. This first instance of formal credit provision in the 1930s involved the extension of loans by the Native Authority in the north of the country to participants in a mixed farming scheme. This was to enable each of them to buy and use a plough, a pair of bullocks, and a cart in their farming operations. The idea was to encourage a move away from 'less productive' farming based on shifting cultivation to 'more productive' practices involving the use of animal power and manure derived from work animals kept on the farm. Forde (1946) noted that the results from

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¹This section draws on the descriptions by Ilori (1975), Ijose and Abaelu (1973), Osuntogun (1973), and the Consortium for the Study of Nigerian Rural Development (CSNRD) (1966).
the loan and mixed farming efforts were encouraging, because mixed farming units had increased in number, from three in 1928 to 2,000 units supporting 10,000 people in 1941 (p. 174). Assessments of the scheme by later authors, e.g., Teriba (1972), are less optimistic, for they consider the rate of increase in new units too slow. The loan scheme for mixed farming was later taken over from the Native Authority by the Ministry of Agriculture and Natural Resources. This ministry extended it to cover other types of agriculture, horticulture, fisheries, and the supply of chemical fertilizers at subsidized rates.

By the early 1940s, the cooperative movement had been set up in the country, partly as a group marketing device, but also as a means of getting credit at lower cost from the government organizations to the rural farmers. The movement was supposed to have a thrift component, which would help mobilize funds internally among members. The cooperative movement, as will be seen later, has not had much success in reaching rural farmers in large numbers.

In 1946, the Nigeria Local Development Board was established as a national loan institution, ostensibly catering to farmers and small businessmen. It functioned until 1949, when its activities were taken over by the Regional Development Boards, based on the four major geographical and political divisions—North, West, East, and Colony—in the country at that time. The Regional Development Boards, however, gave

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1The Colony later became the Federal Territory of Lagos and no longer a region, while the midwest region was carved out of the old western region. The four regions in the country, by 1964, became West, Midwest, North, and East. These four regions were divided into 12 States in 1967, and further into 19 States in the early 1970s. There are currently 19 State governments and a Federal government in the country. All
very little emphasis to agriculture. Only 10% of the ₦ 4,992,356 total loans granted from 1948/49 to 1954/55 went to agriculture. A sizeable amount—47%—went to industries and transport equipment, while public services received 31%. (Ilori, 1975, p. 4)

Because of the slight emphasis given to agricultural credit, a 1954 International Bank for Reconstruction and Development (IBRD) mission recommended the establishment of separate agricultural loans boards, within the Regional Boards, to meet the credit needs of agriculture. This recommendation was followed by a spate of institution building for agricultural credit. The Western Region Finance Corporation was created in 1955, and was charged with responsibility for agricultural and industrial credit in the west. It was succeeded by the Western Nigeria Agricultural Credit Corporation (WNACC) in 1964. In 1963, the counterpart of the WNACC had already been set up in the eastern region of the country as the Fund for Agricultural and Industrial Development (FAID), while in the midwest, the Mid-western Nigeria Agricultural Credit Corporation was established in 1964. In the north at this time, agricultural credit was handled through a program operated by the government registrar of cooperative societies. The government guaranteed loans from Barclays Bank—a major commercial bank—to cooperative societies, mainly for produce purchase, but also for some pre-season production loans. The Ministry of Agriculture, as previously noted, in addition, operated some loans for mixed farming in the north.

of these will usually be collectively referred to as the government in the study. Where there is a differentiation as to which particular government is being referred to, this will be made clear.
During this period of institution building, two government cooperative banks (mainly for agriculture) were set up in 1954 in the eastern and western regions of the country. They were supposed to channel credit to and receive deposits from cooperative societies. In 1962, these banks became commercial banks, accepting deposits and making loans outside the field of cooperatives. Like other commercial banks at the time, their loans to agriculture consisted mainly of short-term produce purchase (marketing) advances to cooperative unions or societies. Very little attention was paid to loans for purposes of agricultural production, and certainly not to the production needs of small-scale rural producers.

It cannot be said, despite the activities described above, that during the period of the 1930s to the 1960s, the Nigerian government had any consistent overall goal or policy for agricultural credit. There was definite interest in credit activities; however, this manifested itself in separate regional attempts to introduce credit into the agricultural sector. There was, as well, a great deal of institution building, but in actual fact, the institutions disbursed very little agricultural credit.

Volume of Credit

It is very difficult to obtain an overall picture of the volume of credit to the agricultural sector during the period of the 1930s to the 1960s. Evidence is scattered and fragmentary, and often the figures quoted as being available to the various public formal institutions for disbursement differ widely from amounts actually disbursed. What all writers seem to agree upon, however, is that the credit volume in absolute and relative terms was generally low during these years.
For example, as reported earlier in the chapter, only ₦ 496,952, or 10% of the ₦ 4,992,356 granted by the Regional Development Boards from 1948/49 to 1954/55 went to agriculture. (See Table 3-1.) The various specialized credit institutions that took over from the Boards did not do much better. Ugoh (1973), in a study of the Fund for Agriculture and Industrial Development (FAID) (set up in 1963 to take over from the Board in the eastern region), noted that a total of ₦ 1.8 million\(^1\) was available to the Fund for disbursement from government and private sources. Of this total, he calculated that ₦ 1.2 million was the proportion destined for agriculture. Between 1963 and 1967, according to his figures, 280 loans totalling ₦ 615,000 (or 51% of the amount available to agriculture) had been approved. However, only ₦ 331,766\(^2\) for 267 loans had actually been disbursed by 1967. This figure represented 28% of the total amount available to agriculture. From 1963 to the beginning of 1967, FAID received a total of 1,907 applications for loans. As of January 31, 1967, only 950, or 50%, had been processed (pp. 4-5). The Fund, therefore, showed fairly poor performance in credit disbursement to agriculture and, in general, processing of loan applications.

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\(^1\)These figures were converted from his dollar figures to ₦ by using the exchange rate, which he reported he used: $US 2.80 to ₦ . Then, they were further converted to the new Nigerian denomination Naira (₦) by multiplying by 2. This is to maintain consistency in the currency used in this study.

\(^2\)These figures are higher than those quoted by the Consortium for the Study of Nigerian Rural Development (CSNRD), 1966. The latter source quotes ₦ 1 million as the total amount available to FAID, and notes that only ₦ 106,000 in total had been disbursed by 1966, with 700 applications outstanding at this time.
### TABLE 3-1

**SUMMARY OF CREDIT AVAILABLE AND DISBURSED TO AGRICULTURE FROM VARIOUS FORMAL (GOVERNMENT) INSTITUTIONS**

<table>
<thead>
<tr>
<th>Institution</th>
<th>Period</th>
<th>2 Total Amount of Loans Disbursed to Agriculture (₦)</th>
<th>3 Total Amount of Credit Available (₦)</th>
<th>4 Column 3 as % of Column 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regional Development Boards</td>
<td>1948/49-1954/55</td>
<td>496,952</td>
<td>4,992,356</td>
<td>10</td>
</tr>
<tr>
<td>Fund for Agriculture and Industrial Development (FAID)</td>
<td>1963-1967</td>
<td>331,766</td>
<td>1,200,000</td>
<td>28</td>
</tr>
<tr>
<td>Western Nigeria Agricultural Credit Corporation (WNACC)</td>
<td>1964-1966</td>
<td>384,000</td>
<td>N.A.</td>
<td>N.A.</td>
</tr>
<tr>
<td>Midwestern Nigeria Agricultural Credit Corporation (MNACC)</td>
<td>1964-1966</td>
<td>0²</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Northern Nigeria Ministry of Agriculture Mixed Farming Program</td>
<td>1962-1968</td>
<td>400,000³</td>
<td>3,000,000</td>
<td>13</td>
</tr>
</tbody>
</table>

N.A. = Not Available

1. This was credit available not just for agriculture, but for other economic sectors, such as industry, for which the Boards also had responsibility.

2. There were no funds available to this institution during the period; hence, no loans were made.

3. This was the amount disbursed by 1966.

The Fund's counterpart in the west, the Western Nigeria Agricultural Credit Corporation (WNACC), made approximately 740 loans to agriculture, totalling ₦384,000 from 1964 to 1966. It had, however, 13,000 loan applications outstanding in 1966. (CSNRD, 1966, p. 26) Another specialized credit agency, the Midwest Nigerian Agricultural Credit Corporation (MNACC), created in 1964, had made no loans by 1966. This was due to lack of funds. In the north, the Ministry of Agriculture's mixed farming program (see earlier section in the chapter) had been able to appropriate and disburse by 1966 only ₦400,000 of the ₦3 million said to be made available to it in the 1962-1968 national development plan. Finally, between 1962-63 and 1966-67, the various governments of Nigeria devoted barely 4% of their ₦83.86 million capital allocation for agriculture to agricultural credit.

The figures presented above certainly suggest that the volume of credit to the agricultural sector was relatively small in the various periods, compared to other sectors' credit, and compared to agriculture's contribution to the national economy. The 10% share of loans allocated by the Regional Development Board to the agricultural sector in 1948/49 to 1954/55, for example, is disproportionately small when placed alongside agriculture's contribution of over 70% to Gross Domestic Product during the same years. Similarly, the amounts actually disbursed as agricultural credit by the various specialized credit agencies are miniscule when compared with the potential demand for credit from these agencies during the various years.

This poor performance by the credit agencies with regard to agriculture did not go unnoticed by policy-makers and academics; and the reasons for it are discussed below. The picture on credit volume, as noted in
Chapter One, has, however, been changing in the 1970s as more credit in real terms has been made available from government sources. These changes will be discussed further in the third section of the chapter on present-day credit policies.

Interest Rates

Interest rates on agricultural loans in the 1950s and 1960s do not appear to have differed much from what they were in the 1970s. They were perhaps slightly higher in nominal terms, and certainly in real terms, considering the lower levels of inflation in the earlier days. There was a multiple rate structure varying by size and type of loan, as well as by type of borrower. Direct borrowers from commercial banks enjoyed lower interest charges than indirect borrowers, say, through cooperatives. This may have been mainly because of the higher risk of lending to the cooperative society members, and because loans administered through the cooperative movement probably incurred additional charges for cooperative movement administrative and other costs. Government credit institutions and the cooperative (turned commercial) banks charged nominal per annum rates of interest—5 to 10%—for direct loans. Loans to cooperative unions for onlending to their member societies were charged from 7½ to 10% per annum. The cooperative unions, in turn, lent this money to their member cooperative societies at 12 to 15% per annum, while the societies lent to the ultimate rural farmer-borrower at 18 to 20%. (CSNRD, 1966) A farmer who could obtain a loan directly from a government credit institution or a bank enjoyed much cheaper rates (barring high loan transactions costs) than through a cooperative society.
The government was concerned, at this time, with maintaining fairly low rates of interest on agricultural loans as a means of combatting the 'fabled' high moneylender rates in the rural areas.

Problems with Government Credit Institutions

In the section on credit volume above, it was shown that the government credit institutions were not very successful in getting agricultural credit to the farmer. Neither were the commercial banks much interested in agricultural transactions, other than in very short-term commercial advances for the purchase of produce. The poor performance of the public credit institutions was regarded with a sense of failure and frustration by policy-makers and academics (e.g., see Osuntogun, 1973; Ijose and Abaelu, 1973). Several reasons were advanced for this poor performance—the most frequently mentioned having to do with administrative constraints.

The specialized government credit institutions were said to have failed in adequately performing their duties because of their complicated, time-consuming procedures for loan approval and disbursement. Often, these institutions were said to have been overcentralized and lacking in trained personnel capable of handling the loan approval and disbursement process.

The institutions were also reported to have suffered from political interference, resulting in bribery, corruption, and, in some cases, mismanagement of loan funds. Financial difficulties were another category of problems faced by the institutions; most important of these was a serious loan repayment problem. For example, Teriba (1972) reported that of a total of ₦3,514,406 loaned to the agricultural sector by the West-
ern Region Finance Corporation from 1956 to 1964, N 2,431,434, or 69%, was in default in 1964 (p. 168). Osuntogun (1973) notes that only N 112,396, or 37%, of the N 305,710 loaned out by the Western Nigeria Agricultural Credit Corporation (WNACC) in 1965 was repaid (p. 5).¹ Political patronage and the tendency of some borrowers to regard government loans as loans from an extended family member (and therefore probably not to be repaid in a hurry, or at all) have been blamed for the low loan repayment ratios. Poor timing of loan delivery and the consequent redirection of loans to consumption purposes by borrowers have also been cited as reasons for defaults.

In addition to the loan repayment problem, some institutions like the WNACC suffered from high overhead costs as a result of the duplication of personnel and because of the hiring of staff with no specialized training for the job.

Other general reasons mentioned as constraints on the performance of the government specialized credit institutions were the traditional farming techniques used in Nigerian agriculture, and the communal land tenure system. The latter, it was said, prevented farmer-borrowers from offering the land farmed as collateral for loans. Very little attention was given to the role of product prices in affecting farmers' incentives to invest. Neither was the effect of low interest rates on the lenders' ability to meet lending costs adequately considered. It has been mentioned in Chapter One, and it will become clearer in Chapter Four, that these factors matter if a credit program is to be useful or successful.

¹The authors do not provide an exact definition of "default."
The disappointment with the performance of the credit institutions of the 1950s and 1960s led to recommendations that a new nationwide credit institution, capable of overseeing the distribution of agricultural credit in the entire country, be created. The Nigerian Agricultural and Cooperative Bank (NACB) was set up in 1973. This institution, along with other present-day credit and savings institutions in Nigeria, will be described in section II below. Before doing this, however, it is worthwhile to consider briefly the reasons for the interest in credit and in institution building for credit during the early (and even later) years of Nigeria's economic development, as these reasons help to underscore the basis for the assumptions examined in Chapter Four.

Interest in Credit and the Role of the Informal Sector

Although most Nigerian farmers were not reached by agricultural credit during the 1930s to the 1960s, there was government interest in credit for the agricultural sector during that period. There were several reasons for this.

One reason, apparently, was related to the concern during the colonial period (before the 1960s) for continued and increased export crop production. Underlying the concern for production of export crops was the theme of the poverty and subsistence level of the Nigerian farmer (e.g., see the work of Perham et al., 1946), and the possible effects of this on export crop production. One line of thought on the relationship between poverty and production of export crops concerned the fact that the Nigerian farmer spent an enormous amount of energy on farming food crops, and
he had little capital to invest in energy-saving equipment or processes that would leave him more time and energy for export crop production. Hence, one way to ensure continued and increased production of export crops was to provide credit to enable the farmer to obtain energy-saving equipment. According to Forde (1946):

The need for raising the levels of output among the rural population of northern Nigeria is abundantly clear. The release of a larger proportion of the labor effort from food production and an increase in the output, and value of, marketable crops are essential for raising levels of consumption through internal production and exports. The more efficient production of the subsistence element of household needs would release energy both for the production of other goods locally required and for an increased output of exportable products.

("The Native Economies," p. 170)

Partly because of this line of reasoning, the colonial Agricultural Department decided to set up, through the Native Authority in the north, the mixed farming scheme described at the beginning of this chapter. In this scheme, credit was to be provided for farmers to purchase a pair of bullocks, a plough, and a cart to enable them to cultivate a larger number of acres with much less energy expenditure.

A second line of thought on the connection between poverty and export crop production involved the fear of a high level of indebtedness of farmers and the possible seizure of their crops by creditors as compensation for loans. Farmers were thought to be very poor, and consequently constantly indebted. Some farmers were known to have pledged their export crops—particularly cocoa tree crops in the south—as security or as interest payments for loans taken from informal sources. Such pledging was alleged to have a detrimental effect on cocoa production,
because the creditor who could harvest the trees only until the loans were paid would have no incentive to make permanent improvements on the farm. Likewise, the debtor-owner of the farm would have no incentives to undertake improvements, or even simple weeding, since the creditor would benefit from the undertakings. The idea was that the level of indebtedness might be such as to cause disincentives to production, and government credit to the farmers for the relief of their debt burden might be in order.

Partly to help ascertain this, a large-scale study of the economics of cocoa farming was ordered for the western region in the mid-1950s. The study was completed by Galletti et al. in 1954, and one of the major sections of the study concerned indebtedness. The researchers found that in June 1951 and 1952, approximately two-thirds of the 615 families interviewed were indebted (p. 496). However, when the burden of debt was compared with the cash value of the farm families' possessions, and to their cash income, the debt burden appeared moderate. In Galletti's words, "The situation of the Yoruba cocoa farmers in 1951/52 appears to have been comfortable in that for most of the families surveyed the total debt outstanding was only a moderate fraction of a year's cash income and much less than the liquid resources in hand." (Nigerian Cocoa Farmers, 1956, p. 513) Galletti, therefore, recommended that debt relief was not necessary. However, some additional credit to cocoa farmers would be in order.

Though Galletti pointed out that farmers were not as badly off as was generally supposed, more prominence was given in discussions of the study to his findings on the extensive role played by informal sources in borrowing and lending activity in rural areas. The major sources of
loans then (as now—see Chapter Four) were friends, relatives, and neighbors. Other sources were traders, produce buyers, moneylenders, and temporarily withheld payments to farm laborers.

Nigerian policy-makers and academics (after independence in 1960) seemed to take this large role of the informal sector somewhat adversely. In particular, the role of the moneylender took on a great significance, since Galletti had reported that:

Those who took to money-lending as a trade were apparently not too scrupulous or compassionate. To make a considerable income from a limited capital they practised usury and took advantage of borrowers' necessities. They operated principally in towns (where impecunious civil servants were often in their clutches) but found many clients among the cocoa farmers of the villages. (p. 509)

Nominal per annum interest rates by registered moneylenders of 60% for secured loans, and 150-240% for unsecured loans, were quoted by Galletti to support the above statement. Nominal rates of up to 300% per annum, charged by unregistered moneylenders on unsecured loans, were also quoted.

Because of the dramatic nature of the moneylenders' interest charges, and because of Galletti's feelings that moneylenders were a source of danger (given their aim of securing borrowers' property after squeezing them dry with extortionate interest), his other findings on moneylenders paled into insignificance. He had also noted that moneylenders were not so numerous, and that they were responsible for only 10-12% of the loans outstanding among all the survey families in June 1951 and 1952, respectively. He remarked that they faced considerable risk in the business, particularly if they were unregistered (p. 529).
Anti-moneylender feelings, and even anti-informal sector feelings in general, became the second major basis (in addition to the poverty theme) for advocating government interest and participation in credit provision for rural farmers. Such feelings had been expressed as far back as 1938, when the Moneylenders Ordinance was passed. The ordinance required registration for every moneylender and nominal interest rates of not more than 18% per annum on secured loans, or 58% on unsecured loans. The Galletti research project of 1950-1954 and that of Vigo in 1958 in the north of Nigeria served to rekindle and refuel the anti-moneylender feelings and stir up the poverty theme. These feelings have persisted in one form or another until the 1970s and form much of the basis for the thrust of present Nigerian credit policy.

For example, in his 1972 article on rural credit in Nigeria, Teriba stressed the role of outside credit in breaking the 'vicious circle' of low incomes and low productivity existing in rural areas. He also remarked that credit could serve other purposes, e.g., as a means of bringing about change in the rural sector. In the same article, he noted correctly that pegging interest rates below the theoretical equilibrium rate would exaggerate the excess of credit demand over supply. However, he later went on to suggest that cheap credit should be provided to the rural sector by monetary means (through the Central Bank). This would help change, in his opinion, the status quo in agriculture. It would induce farmers to borrow more and invest more.

In a 1973 paper prepared for the AID Spring Review on Small Farmer Credit, Ijose and Abaelu continued the theme of low income and savings in the rural areas, and the consequent constraint on agricultural production
Agricultural production is constrained in the western state by lack of financial capital. Cocoa farmers need funds to purchase spraying equipment and to pay for the substantial costs they incur on weeding and harvesting labor. Food farmers, also need working capital to purchase planting seeds and hire labor for major seasonal tasks. Because their personal savings are so limited, farmers commonly borrow to finance their production and often-times consumption expenditures.

("Institutional Credit for Smallholder Farmers: A Case Study of the Western Nigeria Agricultural Credit Corporation (WNACC)," p. 1)

Osuntogun (1973) carried on the notion of the hard-heartedness and pervasiveness of moneylenders in the rural areas. According to him:

Merchant-moneylenders constitute the chief source of rural credit in Nigeria. Even though the merchant-moneylenders provide the bulk of the credit needs of the farmers, yet a number of short-comings characterize their operation. These include the fact that the terms of the loans are often too hard on the producers and consequently result in deleterious effects on agricultural production and marketing.

("Agricultural Credit Strategies for Nigerian Farmers," p. 3)

In the 1979 Seminar on Rural Banking in Nigeria held at Ile-Ife, the themes of the vicious circle of poverty, the difficulty of obtaining credit in the rural areas, and the need to introduce credit from outside the rural

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1 This remark is not substantiated by the author with any evidence. It runs contrary to Galletti's findings, which showed neighbors and laborers (withheld wages) as the major source of credit (55%). Moneylenders were responsible for 12.3% of indebtedness. If the various produce buyers, wholesale and petty traders are added to this, the total comes to 40.3%, still less than 55% and certainly not the bulk of credit. Ijose and Abaelu, in their survey of 612 farmers in 1971, found only 5% of credit obtained from moneylenders. Similarly, evidence in this study shows very little actual moneylender influence in rural borrowing among the sample surveyed (see Chapter Four).
sector are repeated in paper after paper presented (e.g., see papers by Awosika and Nwoko, Oyatoye, Ijere, etc.). In addition, these papers also stress the need to build institutions to mobilize savings in the rural areas.

It is important to reiterate that these types of analyses of rural credit by academics and practitioners, coupled with the poor performance of the agricultural sector described in Chapter One, inform the decisions of present Nigeria credit policy. This policy attempts to increase the amount of concessional or low-interest credit going to the agricultural sector. More recently, the policy has also aimed at increasing the number of institutions for savings mobilization in the rural areas. The increased efforts at stimulating savings can be said to be ancillary to the concern over credit, because the government maintains an interest rate structure very much in favor of borrowers as opposed to savers.¹

The assumptions explicitly set out and examined in Chapter Four as underlying credit policy are based on the preceding analysis of agricultural credit problems by Nigerian academics, practitioners, and policy-makers. They are also based on the government's actions in the financial sector, actions that appear to rely heavily on and reflect the opinions of the above analysts of the Nigerian rural credit and savings situation.

In the last section of this chapter, the government's actions in the financial sector with regard to credit policy are discussed. In the

¹Indeed, the government appears to have accepted the untested hypothesis put forward by the Committee on the Nigerian Financial System (1976), that savings are highly interest inelastic. Therefore, extremely high rates of interest will be needed to induce additional savings, particularly from small farmers.
section below, a description is presented of the present apparatus for
the channeling of agricultural credit and the mobilization of savings in
Nigeria.

Formal Institutions Involved in the Distribution
of Credit and Mobilization of Savings
for Nigeria's Rural Areas

The drive in the 1950s and 1960s for building agricultural credit
institutions was discussed above. The disappointment with the performance
of these institutions and the pressure to build new ones were also mentioned.
These pressures, coupled with the continued belief in the need for agricul-
tural credit in the rural areas, have resulted in increased agricultural
credit legislation by the Nigerian Central Bank. They have also resulted
in the formation of the Nigerian Agricultural and Cooperative Bank (NACB).

The Central Bank and the NACB will be described below. Other insti-
tutions to be described are shown in Chart 3-1. They are the Ministries
of Agriculture and Cooperatives and State agricultural finance agencies,
the cooperative societies, the Federal post office savings bank, the gov-
ernment production companies and commodity boards, and the commercial and
merchant banks. Each description will be intended to explain the institu-
tion's role in the credit distribution system and the type of financial
services it provides for the rural-agricultural sector. Descriptions of
these institutions are necessary because the institutions are an essen-
tial part of the present Nigerian rural savings and credit picture.

Furthermore, the effectiveness of some of the institutions in reach-
ing rural farmers, particularly poorer rural farmers in the villages, is
an important issue explored in Chapter Four.
CHART 3-1

FORMAL RURAL FINANCIAL INSTITUTIONS IN NIGERIA

GOVERNMENT
(wholly government-owned)

Central Bank

The Nigerian Agricultural Bank

Ministries of Agriculture and Cooperatives and Government Finance Agencies

Cooperative Societies

Government Production Companies and Commodity Boards

Federal Post Office Savings Bank

MIXED GOVERNMENT AND PRIVATE
(government may or may not own majority of shares)

Commercial Banks

Merchant Banks

Others
The Central Bank

The Central Bank of Nigeria was established only as recently as 1958. It is Nigeria's major financial institution with headquarters in Lagos and branches throughout the country. It performs typical central banking functions, such as control of the nation's money supply. The Central Bank regulates and supervises all formal financial institutions in the country—both government and private. The regulatory function is performed, for the private and for the mixed private and government sector, through the issue of a yearly Monetary Policy Circular. This circular, issued regularly since 1969/70, describes national monetary policy objectives and issues guidelines on banks' activities in accordance with these objectives.

The Central Bank does not have direct financial dealings with the rural-agricultural sector, though it makes marketing credit available to government commodity boards for purchase and marketing of various crops, such as cotton and cocoa. The Central Bank does, however, have extensive influence on the rural sector and on agricultural credit through its control of the activities of formal financial institutions. For example, through the Monetary Policy Circular it legislates the interest rates to be charged on agricultural and other types of credit. It provides guidelines for yearly maximum expansion of credit in the banking sector and stipulates the percentage share of credit for each economic sector and subsector.

Most of the above is done in a bid to help the government's 'preferred' or 'favored' sectors (such as agriculture, residential construc-
tion, and export) obtain greater shares of credit on more favorable terms. Recently, the Central Bank has also stipulated a certain number of bank branches to be opened by each commercial bank in designated rural areas. This is expected to bring financial intermediation closer to the rural people.

The legislative efforts of the Central Bank with respect to the rural sector will be discussed in greater detail in the section on current credit policy.

The Nigerian Agricultural and Cooperative Bank (NACB)

The Nigerian Agricultural and Cooperative Bank (NACB) was set up as a result of the frustrations and disappointment with regional and specialized credit institutions in the 1950s and 1960s (see section above). It was built as an apex (that is, the top institution in a hierarchy of agricultural credit institutions) nationwide agricultural credit institution, and is currently the Federal government's most important channel for agricultural credit in the country. The Bank began operations in April 1973 from its headquarters in Kaduna in the northern agricultural belt. It has ten offices in various state capitals, and more are planned in the future.

The structural set-up of the NACB permits it only a credit-channeling function, with technical aid to projects as an ancilliary function. The Federal government sees the Bank as a way of directly aiding agricultural production and marketing, particularly as carried out by small-scale farmers. However, though the Bank was set up with a particular bias towards aiding small-scale farmers, it has no direct individual dealings with such farmers. It lends credit to this category of farmers through
a series of 'on-lending' agencies (that is, agencies that channel credit to the farmers) (see Chart 3-2), which are mostly state ministries of agriculture and state credit finance agencies. These latter are then responsible for reaching the farmer through the government-supervised cooperative societies. Before receiving loans, 'on-lending' agencies that have dealings with the NACB must provide a guarantee of some sort that the loan given them will be repaid. The Bank also lends money directly to larger scale farmers, cooperative societies, or other bodies who can present it with viable projects and adequate security to cover their loans. The NACB is not permitted to mobilize deposits from the farming population it serves or from elsewhere. It is therefore wholly dependent on Federal government and Central Bank financing, and has to compete with other institutions and sectors for government funds. Such a dependence on government funds means yearly fluctuations in available finances and could be problematic if and when the Federal government experiences financial difficulties.

The NACB, like other financial institutions in the country, is stipulated to charge very low rates on agricultural loans. Its nominal per annum rate of interest on agricultural production loans is 3-5%, while it charges 7% for marketing loans. These rates apply to the Bank's direct borrowers. The small-scale farmers, who receive their loans through on-lending agencies and cooperative societies, may be subject to higher rates to be decided by their cooperative societies. Despite the low rates of interest, the NACB has slightly more flexibility in terms of profit margins than the commercial banks. This is because it receives its funds virtually free from government sources.
CHART 3-2
NACB'S LENDING SCHEME

NACB

Larger scale farmers and other farming bodies

Very rare occurrence

Ministries of Agriculture Coop Division

Technical Cooperation

State Credit Finance Agencies

Cooperative Unions

Primary Coops

Individual Farmer Members
The NACB's lending rates prevent it from increasing its volume of loanable funds through recourse to non-domestic sources. For example, at a time when government seemed willing for the NACB to seek additional funds from outside the country—specifically, from the World Bank, the arrangement proved unworkable, since the World Bank was willing to release the funds at 8%, while NACB could only lend at 3-5%.1 These interest rates, coupled with its mandate not to mobilize savings, effectively restricts the NACB's ability to serve, to its full capacity, the rural-agricultural sector.

In terms of credit volume, the government has been able to use the Agricultural Bank fairly successfully to increase its injection of credit into the agricultural sector. In the 1970-74 plan period, a total of ₦22.7 million, or an average annual rate of ₦5.7 million, was assigned by the governments (Federal and state) to agricultural credit. Within a comparable period of operations, 1973-78, the NACB approved loans totalling ₦286.3 million, and actually disbursed ₦124.4 million (₦24.9 million on average per annum).2 (NACB, Annual Report, 1977/78, p. 5)

Of the total amount of ₦124.4 million disbursed between 1973 and 1978, ₦90.3 million, or 72.5%, went to small-scale farmers in on-lending marketing and production loans. This would appear to be a significant

1Personal communication from Bank management.

2The disbursements were not evenly spread out in practice. For example, in 1975/76, the Bank disbursed approximately ₦20 million. This amount went up to ₦40.5 million in 1976/77, a 100% nominal increase, or 78% increase in real terms. In 1977/78, the amount disbursed was further raised by ₦12 million, to ₦52.5 million, giving a smaller nominal increase of 29.6%, or 5.2% in real terms. (NACB, Annual Report, 1976/77, p. 7, and 1977/78, p. 5)
improvement over the performance of the specialized credit agencies in
the 1950s and 1960s. However, if the amount disbursed is viewed with
regard to the potential demand for credit in the country, NACB's achieve-
ments become much less significant. For example, the total amount of
₦ 90.3 million disbursed to small-scale farmers represents an approximate
amount of ₦ 2.3 per farm family per year. With farm families (really house-
holds) in the survey sample spending an average ₦ 21 per acre farmed in
the study year, the ₦ 2.3 amount becomes fairly insignificant. NACB itself
claimed, in its 1976/77 annual report, to have reached 135,853 farming
families. It was not clear whether this was just for the year in question
or all the years of operation. If the figure is taken to be the number
of farm families reached in 1976/77, then it means that only 1.7% of the
nation's farm families received credit through NACB's on-lending scheme
that year. This, again, could be said to represent a very small number of
farm families.

When the Bank's loan disbursement record, however, is compared with
that of previous government credit agencies, it would seem to have made
tremendous strides. The government expects to continue to use the NACB
as a key institution in its strategy of improvement of agricultural sector
performance through the use of credit. Because the NACB does not deal
directly with rural-based or small farmers, its impact on reaching these
farmers is not directly examined during the testing of the assumption on
the efficacy of the credit distribution system in Chapter Four. The coop-
erative societies and the commercial banks are the institutions looked at
because of their supposed direct contact with rural farmers.
State Ministries of Agriculture and Cooperatives
and State Finance Agencies

The credit function of the Ministries of Agriculture and the state finance agencies has been mentioned in connection with the NACB lending scheme described in Chart 3-2. The ministries, of which there is one at the Federal level, and one each in the nineteen States of the federation, have other functions in addition to credit channeling. They carry on agricultural extension work, direct production of various crops, infrastructure development, livestock, forestry and fisheries projects, among others.

With regard to the credit function, the ministries can borrow money from the NACB or from commercial banks to 'on-lend' to small farmers in their states. The borrowing is often done through the ministry's cooperative division (headed by the Registrar of Cooperatives). The cooperative division then lends the money to cooperative unions and thence on to farmers through their cooperative societies. Some states (e.g., Oyo State, Anambra State) have, in addition to the ministry, a state agricultural finance agency. In the case where such an agency exists, it handles the financial side of any loan transactions, while the ministry provides needed technical and logistical support in the field, in terms of agricultural officers, extension agents, etc.

In some cases, the state may decide to guarantee bank loans for cooperative societies, and the banks may then disburse these straightaway to individual cooperative unions and societies.
The actual amount of cash credit disbursed by the cooperative divisions of the ministries or the state finance agencies varies yearly and by state. The amount depends on how much the state has been able to borrow from the various banks, and on how much supplemental credit it can generate from its own sources. Most states are usually not able to satisfy the demand for loans from their cooperative unions and societies. For example, in Kaduna State, with loan applications totalling approximately N 5 million from its cooperative societies and unions for the 1978/79 cropping season, the Ministry of Agriculture found itself able to raise (from outside and inside sources) and disburse only N 2.7 million for production and marketing loans. This left a substantial shortfall of N 2.3 million for that season. As such, many farmers could not obtain loans for that cropping year, while others received small amounts relative to their requests.

Though the ministries are not always successful in mobilizing and disbursing the total amount of funds needed by farmers in their states, they have managed to maintain more of a rural/small farmer bias in their loan functions than other institutions, e.g., commercial banks.

The ministries have managed to do this through the use of government-aided, supervised cooperative societies at the village level. Because the cooperative societies are the formal sector's main institution for contact with small-scale farmers in the rural areas, they merit separate discussion as to their organization and influence.

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1 Personal communications with cooperative officer Mallam Mohammed Aminu Umar.
The cooperative movement has been in existence in Nigeria for almost 40 years. During this period, it has been the formal sector's most widely used means for getting credit into the hands of rural farmers from government and other loan institutions. During the period also, it has been the subject of varying degrees of government attention and interest. Recently, there has been renewed interest in the activities of cooperative societies because of the government's desire to use them as vehicles for getting more credit down to the rural areas. To this end, the Nigerian Agricultural and Cooperative Bank (NACB), which started out originally as the Nigerian Agricultural Bank (NAB), was renamed to emphasize the government's intended focus on cooperative societies.

Cooperative societies are important in this study because they are one of the formal institutions whose credit distribution activities are investigated in Chapter Four. As such, there will be a somewhat detailed description of their organization and activities below.

The cooperative movement in Nigeria has been much studied. One of the most interesting research efforts is that of Roger King on northern Nigeria cooperatives. Most of the following condensed description of the movement's organization and structure comes from King's study. (See King, 1975.) Although King's work was confined to one part of the country, this author's investigations in the north, west, and east of the country indicate that his description is applicable in general (if not in specific details) to most cooperative organizations in the country.
Broadly, the cooperative movement was seen by government as a way of mobilizing farmers' managerial abilities to help promote government agricultural development policies, given the shortage of personnel capable of reaching large numbers of geographically dispersed farmers. More specifically, cooperative societies were seen as a means of channeling credit to the small farmer at lower cost, mobilizing farmer-members' savings as an additional pool of money from which loans could be drawn for members, making available improved farming practices and inputs to small farmers, as well as collectively marketing farmers' produce. Various kinds of cooperative societies were envisaged and set up: for example, multipurpose societies dealing with produce marketing, credit allocation, and savings mobilization, consumer products sales to members, etc.; single purpose societies dealing with one activity or the other; and even lately, some cooperatives undertaking joint agricultural production. The societies visited during this research project were mainly concerned with credit allocation and savings mobilization. The latter are the types of societies of particular interest in this study.

Any group of ten people over eighteen years of age from an area (e.g., a village) can be registered by the State Registrar of Cooperatives as a primary cooperative society, eligible to receive government loans for members and to carry on other cooperative activities such as those mentioned above. "Membership is voluntary and open to all farmers subject to the approval of existing members. A condition of membership is purchase of a minimum number shares in the society. No member can purchase more than 20% of the total share issued." (King, 1975, p. 197) Most farmers appear to pay on average N 10 to N 12 as deposit or purchase of minimum number
of shares at initial joining. (This was ascertained during the study survey process.) A few, desirous of purchasing more shares, pay as much as ₦30 to ₦40. In theory, a cooperative member also becomes entitled to share in any profits arising from the society’s activities. A proportion of such profits must be deposited with the society’s 'reserve fund' but the rest is distributed on the basis of business done (bonus) or shares held (dividends).

A primary society is usually run by a committee comprising a president, secretary, treasurer, and two or three other members. The committee is elected by the membership. According to observations from various studies (e.g., King, 1975), village cooperative committee members sometimes appear to be the more influential members of the village society at large. At least one member of the committee, the secretary or treasurer, has to be literate, so as to be able to sign documents on behalf of the society and record transactions for internal use as well as for the occasional inspection of visiting cooperative officials. Usually, two or three other committee members are also literate.

The committee is very active in the sharing out of loan funds, deciding with the membership what criteria are to be used: amount of land available for farming for that season, ability to repay, past repayment records, etc. A group of primary societies in one area may join together to form a secondary society or a union. Such a union may provide its members additional loan funds, help market their produce, and perform other helpful functions. Chart 3-3 shows how a cooperative credit society is theoretically supposed to function and be organized. It is supposed to be able to generate its own funds internally and add this to credit obtained from
outside sources as a pool of loanable funds for its members. In practice, however, cooperative credit societies really function as depicted in Chart 3-4, with little attention to their savings mobilization and financial intermediary roles and with almost total focus on their roles as disbursers of direct government loans or loans from government guaranteed sources.

As regards interest rates, variations may exist between rates charged cooperative societies for their loans and charges ultimately paid in different states by farmer-members. The cooperative division at ministry headquarters, or the state credit finance agency, receives state government guaranteed loans at the prescribed preferential nominal rate of 6% per annum for production loans. The loans are passed on to the unions at a higher rate. The unions loan the money to the primary societies at an even higher rate, and by the time individual farmers get the loans, they could end up paying considerably more than the original 6% rate of interest. In fact, among the societies surveyed by the author, farmers paid nominal per annum interest rates ranging from 12 to 20% for their loans. No real justification has been given by the ministries or unions for the large difference in interest charges to farmers. Presumably, the difference goes to cover large loan administrative costs, default risks, and an inflation element.

There is, again, no real explanation for the variations in interest charges paid by farmers in different parts of the country. The author found that while farmers in an eastern village paid 12% per annum nominal rates for their cooperative loans, those in the west paid 18%, and in the north 20%. These differences cannot be justified by differing opportunity
In consultation with the Cooperative Division, the State Government decides the total loan going to cooperatives for the season, how much will be generated internally, and how much will be guaranteed from outside sources.

Bank receives information on the loan which will be guaranteed by the government for each union.

Area office estimates its loan requirements.

Area office supervises repayment through union.

Repayments are passed to area offices.

Individual farmer-members receive loans at a meeting arranged by the area officer.

Individual farmer-members make repayments to elected officials.

Source: Adapted from King, 1975, p. 201.
costs of capital, since all the ministries and state finance institutions receive their loans at the same preferential rate. Neither can they be accounted for by different sized loan bureaucracies in the states, because these states' administrative apparatus is usually at par. Variations in default risks cannot really be held accountable either, because within a broad geographical area (north and south), risks due to agricultural conditions and/or cultural attitudes toward loans are broadly similar. A plausible explanation for the different rates paid by farmers could be differential demand conditions. That is, in those states where the demand for loans is relatively high, the ministries and cooperative unions use higher loan rates as a rationing device to reduce loan demand. Anecdotal information from ministry and cooperative union officials in the different states, however, does not support this view. Given the lack of explanations for variations in loan rates paid by cooperative members in different states, there would appear to be much existing horizontal inequity in the rates charged by the credit distribution system at the rural cooperative level.

With their flexibility in charging members higher rates, it would be presumed that cooperative societies or unions would individually be frequently willing to borrow directly from commercial banks and other sources to augment their loanable funds. This is not the case. Cooperative societies or unions are not usually aggressive in seeking additional loan funds. They are attuned to waiting for credit to be handed down from or through the government hierarchy. Furthermore, commercial banks do not make it especially easy for these societies or unions to borrow individually, because they (the banks) do not benefit in any way from the high rates charged members by these societies. The banks can only
receive the government-mandated rates on agricultural loans, which, for cooperative societies borrowing directly, varies from a low of 4% per annum to a high of 6%. Moreover, for the banks, the usual state guarantee of loan repayment (their hedge against risk) would be missing from such individual transactions.

How effective has the cooperative movement been in reaching small farmers with credit and mobilizing savings among its members? Given the movement's long existence in Nigeria, the results, as elsewhere in the Third World, are rather disappointing. In 1966, the number of farmer-members of cooperative societies was estimated at 300,000, or 4\% of the farm family population (CSNRD, 1966). In 1975, the Federal government put total membership in all cooperative societies in the country at 450,000, or 6\% of the farm family population (Third National Plan, p. 319). Given that not all members of the societies were rural people, the 6\% figure is really an overestimate of rural participation. However, taking this latter figure as an upper bound, it is clear the movement reaches few farmers, and has made little progress in increasing its membership over the years. In fact, an inequity that has thus far gone unrecognized is built into the virtually static membership situation of the cooperative societies. Given that membership in cooperative societies does not vary much from year to year, it means that virtually the same set of farmers receive government loans in each year they are available. This gives them an edge over other farmers in the village. Since the cooperative society members may, on the average, have been the more well off people in the village to begin with, the inequity in access to credit is further compounded. This point is further explored in the discussion on the
efficacy of the credit distribution system in Chapter Four.

Cooperative societies acquired a reputation in the past for defaulting on loans. This has hurt their image with the commercial banking system, and perhaps (along with the fact that they receive preferential rates on loans) partially accounts for their poor record in raising extra loans for their members. The default on loans in the past was largely due to the political patronage and interference in the loan system discussed earlier in this chapter. Cooperative society members came to believe that loans received were a form of reward for their support of local politicians, and they could therefore regard the loans as grants not to be repaid. Even at that, cooperative societies were often better than other government organized institutions at loan repayment (e.g., see Osuntogun, 1973, p. 6). The loan repayment picture of cooperatives has been changing in most states because there has been no political interference in recent years. Furthermore, any defaulting society or union is penalized by being given no government loan the next season in most of the states. Only one of the four finance agencies/ministries visited during the survey process for this study mentioned loan repayment problems with cooperative societies in one part of the state. And this, they acknowledged, was due to the fact that farmers were having difficulties selling their rice crop, given increased government imports of superior quality rice.

Cooperative societies have not been very successful in mobilizing savings. In fact, this function has been neglected, while they have concentrated on disbursing government credit. Available statistics on cooperative society savings are fragmentary, outdated, and sometimes unclear. From what can be pieced together (see Table 3-2), accumulated net savings
TABLE 3-2

ACCUMULATED NET SAVINGS OF COOPERATIVE SOCIETIES BY STATE, 1970-1975\(^1\)
(FOR ALL TYPES OF COOPERATIVE SOCIETIES), FOR SELECTED AVAILABLE STATES\(^2\)
(\(\text{N} '000\text{s}\))

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</thead>
<tbody>
<tr>
<td>Benue-Plateau</td>
<td>65.1</td>
<td>68.1</td>
<td>Unc.</td>
<td>N.A.</td>
<td>N.A.</td>
<td>N.A.</td>
</tr>
<tr>
<td>Kano</td>
<td>90.3</td>
<td>90.3</td>
<td>92.2</td>
<td>93.4</td>
<td>N.A.</td>
<td>N.A.</td>
</tr>
<tr>
<td>Lagos</td>
<td>308.0</td>
<td>786.8</td>
<td>743.3</td>
<td>2,194.9</td>
<td>2,463.4</td>
<td>N.A.</td>
</tr>
<tr>
<td>Bendel</td>
<td>N.A.</td>
<td>487.4</td>
<td>613.3</td>
<td>806.7</td>
<td>924.5</td>
<td>528.6</td>
</tr>
<tr>
<td>North Central</td>
<td>52.0</td>
<td>101.4</td>
<td>N.A.</td>
<td>159.0</td>
<td>N.A.</td>
<td>N.A.</td>
</tr>
<tr>
<td>North Eastern</td>
<td>--</td>
<td>N.A.</td>
<td>N.A.</td>
<td>N.A.</td>
<td>N.A.</td>
<td>N.A.</td>
</tr>
<tr>
<td>South Eastern</td>
<td>N.A.</td>
<td>1,360.6</td>
<td>892.9</td>
<td>1,889.9</td>
<td>2,035.8</td>
<td>N.A.</td>
</tr>
<tr>
<td>Western</td>
<td>9,628.4</td>
<td>10,833.7</td>
<td>3,827.9</td>
<td>3,703.1</td>
<td>N.A.</td>
<td>N.A.</td>
</tr>
</tbody>
</table>

Unc. = Unclear  
N.A. = Not Available

\(^1\) 1975 is the latest year for which the Abstract of Statistics gives figures.

\(^2\) Some of the names indicated here for the States have since changed. See Figure 1-1 for an explanation of current (1979/80) names of States.

in many states have either grown slowly or have even declined in both nominal and real terms over the years. In some states, e.g., in the west, the cooperative societies appear to have drawn down their deposits without any replenishment. Societies visited during the survey appeared not to be mobilizing savings, even though members seemed aware that this was supposed to be one of the societies' functions. No reason was given for this omission, although plans were being proposed for the contribution of small weekly amounts in the future. The neglect by the cooperative societies of the savings mobilization function is a serious issue, because it stunts the growth of the societies themselves through depriving them of possible additional funds. It deprives farmers who would like a medium for savings deposit of such a facility, and it paints the cooperative movement (in the eyes of farmers) as nothing more than a receptacle for government funds. All three factors obviously detract from the usefulness or attractiveness of the movement.

Given the difficulties of the cooperative credit and thrift movement in Nigeria, it is perhaps surprising that the government continues to stress its importance in its credit schemes. The government presumably continues to believe in the efficacy of cooperatives in reaching the poorer of the rural farmers. Whether the movement effectively helps poorer farmers is a subject to be explored in Chapter Four.
The Federal Savings Bank

Although the Federal Savings Bank, formally known as the Federal Post Office Savings Bank, has no credit functions, it is one of the institutions the government relies on to provide financial services to the rural-agricultural population. Its major mandate since its establishment in 1923 has been to mobilize small savings in both rural and urban areas. It operates out of 600 post offices and postal agencies throughout the country and has state offices in five locations. It is obviously not a new institution like the Nigerian Agricultural and Cooperative Bank, but like the cooperative movement, it has recently been in the limelight due to the government's desire to improve credit and savings facilities for the rural-agricultural population.

As a financial institution geared toward small savers, the Federal Savings Bank (FSB) seemed ideal for providing the type of savings facilities needed by small-scale farmers. For one thing, it started with a sensible policy of allowing savers to open accounts with a very small minimum deposit of 10 Kobo (₦ 0.1). Secondly, it would pay savers a 5% nominal rate of interest, which, though low, was (prior to 1978/79) 1% more than the rate allowed other savings institutions, such as commercial banks. (The rates are now, as of the 1978/79 fiscal year, equalized.) In spite of these measures, the Bank has proved relatively unpopular over the years, as can be seen by the overall decline in its deposits from 1964 to 1975 (Table 3-3)—at a time when deposits in other institutions were growing in real terms. These deposits have picked up recently. However, a few more years of data are needed in order to ascertain whether the increased
### Table 3-3

VOLUME AND REAL GROWTH RATES
d of Deposits in the Federal Savings Bank
Compared to Commercial Banks, 1964-1977

<table>
<thead>
<tr>
<th>Year</th>
<th>Deposits in Federal Savings Bank (₦ million)</th>
<th>Deposits (Time and Savings) in Commercial Banks (₦ million)</th>
<th>Real Growth Rate of Deposits Federal Savings Bank (%)</th>
<th>Real Growth Rate of Deposits Commercial Banks (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1964</td>
<td>5.9</td>
<td>102.0</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>1968</td>
<td>4.9</td>
<td>183.6</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>1969 (December)</td>
<td>5.1</td>
<td>215.4</td>
<td>-7.4</td>
<td>+7.1</td>
</tr>
<tr>
<td>1970 (December)</td>
<td>4.9</td>
<td>336.7</td>
<td>-16.9</td>
<td>+42.5</td>
</tr>
<tr>
<td>1971 (December)</td>
<td>4.6</td>
<td>371.8</td>
<td>-23.4</td>
<td>-5.7</td>
</tr>
<tr>
<td>1972 (December)</td>
<td>4.3</td>
<td>456.9</td>
<td>-7.6</td>
<td>+20.3</td>
</tr>
<tr>
<td>1973 (December)</td>
<td>4.5</td>
<td>582.3</td>
<td>+0.5</td>
<td>+21.8</td>
</tr>
<tr>
<td>1974 (December)</td>
<td>4.7</td>
<td>973.2</td>
<td>-9.9</td>
<td>+54.6</td>
</tr>
<tr>
<td>1975 (December)</td>
<td>8.0&lt;sup&gt;2&lt;/sup&gt;</td>
<td>1,572.4</td>
<td>+39.1</td>
<td>+27.9</td>
</tr>
<tr>
<td>1976 (December)</td>
<td>6.9&lt;sup&gt;2&lt;/sup&gt;</td>
<td>1,979.2</td>
<td>-36.0</td>
<td>+3.8</td>
</tr>
<tr>
<td>1977 (December)</td>
<td>8.0&lt;sup&gt;2&lt;/sup&gt;</td>
<td>2,225.1</td>
<td>+6.1</td>
<td>-17.6</td>
</tr>
</tbody>
</table>

<sup>1</sup> The growth rates were calculated using the International Monetary Fund (IMF) International Financial Statistics Consumer Price Index, with 1975 = 100.

<sup>2</sup> It has not been possible to find out exactly what accounted for these large fluctuations in the deposits in the years 1974-1977. However, Ijere (1979, p. 35) notes that the transfer of deposit accounts of local government bodies to indigenous banks, the deterioration in export earnings, and the legal limitation on withdrawals from the FSB to only ₦ 10,000 may have accounted for some fluctuations.

growth in deposits is a permanent phenomenon.

There are several reasons for the FSB's relative unpopularity. First, in many rural areas it takes several days for a depositor to be able to make a withdrawal from his/her account. Many times, customers in the villages have been told to wait for clearance and delivery of money from the nearest state headquarters. This has happened for sums of money sometimes as little as N 25. Such waiting periods have been known to last from 3-5 days. For a small rural farmer urgently in need of money, such procedures mean not only great inconvenience, but, in fact, arouse suspicions as to the money's safety.

Second, the FSB does not grant any loans. This makes it less attractive than many rural informal savings and credit institutions, most of which perform both functions. Ojo (1976) has noted that in extending banking facilities to non-urban areas:

> ... it is not sufficient to offer savings facilities alone. Credit facilities are also necessary in order 1) to make people utilize the banking facilities and make savings more effective and 2) to increase the productive capacity in the areas, as well as the savings capacity of the people, and banking business itself. (The Nigerian Financial System, p. 32)

Ijere (1979) has further remarked that without the credit function, the FSB just serves to draw away the pool of savings from rural areas. Such savings may be invested in safe government bonds or treasury bills. However, rural people may not obtain additional benefits from the extra money in government hands. The government Committee on the Nigerian Financial System (1976) recommended, after its inquiries (and the government accepted the recommendation), that the FSB not disburse credit, because this would mean competition with the commercial banks. Given that the
FSB has an edge over commercial banks in reaching more rural areas, such a policy appears contradictory to the government's aim of increasing the amount of credit available to the rural-agricultural sector.

Third, though the FSB has 600 branches and reaches many more rural areas than the commercial banks, its branch network, with a ratio of only one facility per 133,333 people, is still small. Many rural communities are left unserved. A case in point is Nomeh, one of the survey villages. With its enterprising population of rice growers and traders, Nomeh has no post office savings facilities, and the FSB obviously loses the many possible deposits that could have been made in the area.

The Committee on the Nigerian Financial System recommended that the FSB, whenever possible, hire its own personnel (instead of using post office workers) and aim to acquire an image distinct from that of the post office. This would help speed up transactions. While the recommendation is sound, more reform is needed to make the FSB attractive and thereby tap its full intermediary potential at the same time.

Commodity Boards and Government Production Companies

Commodity boards and production companies are not actual financial institutions in the sense that they channel no credit and mobilize no savings among the rural population. They are worth mentioning only for the fact that they constitute one further means through which government directs money into the agricultural sector. Direct government production companies employing wage laborers are as yet new and few in number, so that their impact on the rural farm population cannot as yet be judged.
However, such companies do divert funds away from the small farmer to the government, and government companies may not necessarily be more productive in the sense of obtaining more yield per acre.

Commodity boards replaced the old marketing boards. They deal with the purchase and marketing of crops—especially export crops such as cocoa and cotton. They receive direct Central Bank loans for their operations, and their revenues go directly to the government. Sometimes, the commodity boards employ cooperative unions and individuals to act as their Licensed Buying Agents (LBAs) for their operations. These agents are essentially middlemen buying from the farmer and making the produce available to the commodity boards. Some of the individual agents—themselves wealthy farmer-traders from the villages—have been known to advance loans to farmers for the planting season against a promise by the farmer to repay in kind with his produce delivered to the LBA. Farmers are often said to lose in such arrangements, since, by repaying in kind, they may obscure their payment of very high real rates of interest for the loan. Two LBAs were encountered during the course of the survey for the present study. Unfortunately, none of the farmers surveyed claimed to have received a loan from an LBA during the 1978/79 cropping season. (This may be because the loans from LBAs may also have been classified by the farmers interviewed as loans from friends.) As such, it was not possible within the scope of the survey to determine the extent of their influence on the credit situation of the rural farming population.
Commercial Banks

Next to the Central Bank, Nigerian commercial banks perhaps constitute the second most important set of institutions in the country's financial sector. They command over 80% of the consolidated assets of that sector. Three of these banks (First Bank, Union Bank, and United Bank for Africa, Ltd. [UBA]) together form a very powerful bloc, accounting in 1976 for 65% of all commercial bank loans and advances, 69% of all deposit liabilities, and 80% of the banking system's reserves. (Report of the Committee on the Nigerian Financial System, 1976, p. 16) As of December 1977, there were nineteen commercial banks in Nigeria, with a total branch network of 492 branches. (Central Bank, Annual Report, 1977) This network is expected to increase to almost 600 by 1980, since the Central Bank has mandated the opening of 195 new branches in rural areas by that date.

Commercial banks in Nigeria have been traditionally known to show less interest in the financing of the agricultural sector than in that of various other sectors, such as manufacturing, trade and construction, personal and professional loans. Therefore, though the absolute amount of loans and advances to the agricultural sector has been increasing substantially in real terms over the years (see Table 3-4), the government has been concerned with the poor relative performance of agriculture's loan share. This poor performance is visible when that loan share is compared to the share of other sectors, and when it is compared to the government's stipulated loan ratio for the agricultural sector.

Loans to the agricultural sector from all commercial banks rose (in 1966 prices) from ₦ 29 million in 1966 to ₦ 359.5 million in 1977 (see
### TABLE 3-4
COMMERCIAL BANK LOANS AND ADVANCES TO THE AGRICULTURAL SECTOR IN 1966 'CONSTANT NAIRA 1966-1977'

<table>
<thead>
<tr>
<th>Year</th>
<th>Value of Total Loans &amp; Advances (N '000s)</th>
<th>Value of Loans &amp; Advances to the Agricultural Sector (N '000s)</th>
<th>Agricultural Loans as Percent of Total Loans</th>
</tr>
</thead>
<tbody>
<tr>
<td>1966</td>
<td>1,541,352</td>
<td>29,012</td>
<td>1.9</td>
</tr>
<tr>
<td>1967</td>
<td>2,864,344</td>
<td>47,371</td>
<td>1.7</td>
</tr>
<tr>
<td>1968</td>
<td>2,752,040</td>
<td>43,821</td>
<td>1.6</td>
</tr>
<tr>
<td>1969</td>
<td>2,327,240</td>
<td>41,644</td>
<td>1.8</td>
</tr>
<tr>
<td>1970</td>
<td>2,649,255</td>
<td>57,052</td>
<td>2.2</td>
</tr>
<tr>
<td>1971</td>
<td>3,769,905</td>
<td>86,511</td>
<td>2.3</td>
</tr>
<tr>
<td>1972</td>
<td>4,547,298</td>
<td>105,920</td>
<td>2.3</td>
</tr>
<tr>
<td>1973</td>
<td>5,080,306</td>
<td>152,800</td>
<td>3.0</td>
</tr>
<tr>
<td>1974</td>
<td>5,756,047</td>
<td>179,769</td>
<td>3.1</td>
</tr>
<tr>
<td>1975</td>
<td>5,791,219</td>
<td>160,831</td>
<td>2.8</td>
</tr>
<tr>
<td>1976</td>
<td>8,346,609</td>
<td>275,663</td>
<td>3.3</td>
</tr>
<tr>
<td>1977</td>
<td>9,177,188</td>
<td>359,504</td>
<td>3.9</td>
</tr>
</tbody>
</table>

Table 3-4). This amounted to an average annual increase of 28.6%. This growth rate for agricultural loans was somewhat higher than the 20.3% figure for total loans and advances over the same period. The total value of agricultural loans from commercial banks during various years has been higher than the value of government agricultural credit during those years. For example, the government budgeted approximately N 23 million for agricultural credit for the 1970-74 plan period. The total amount of agricultural credit going to the agricultural sector from commercial banks in 1970 alone was N 57 million. This makes the commercial banking sector an extremely important source of finance for the agricultural sector. However, several problems exist with this seemingly impressive performance of the commercial banking sector.

First, as was remarked earlier in the chapter, the bulk of the commercial banks' loans have gone to government agencies or large marketing companies for the very short-term marketing of export produce. While the marketing function in the agricultural sector is important and cannot be ignored, the commercial banks have tended to over-concentrate in this relatively safe lending area, to the detriment of loans for agricultural production.

Moreover, from anecdotal information obtained during the survey, it appears that the remainder of the loans that have not gone for marketing have mostly been given for ancillary agricultural activities, such as food processing, import of food items, agricultural transportation, etc. All of these have been classified as agricultural loans, with the result that the banks' lending picture with regard to that sector is made to look better for government inspection purposes. As the Committee on the
Nigerian Financial System (1976) noted, classification of loans according to sectors is at the discretion of the bank managers. They can, therefore, reclassify loans that might otherwise seem to belong to other sectors into agriculture to make their loan percentage to the agricultural sector appear greater. In this process, agricultural production, for which the government is primarily interested in getting commercial bank support, suffers. The banks make it seem as if great efforts are being made on their part to obey the letter of the government's laws to help agricultural production, while in actual fact it is not clear that they are fully observing the intent of these laws. The effects of these commercial banks' actions on rural, small-scale farmers is one of the issues examined in Chapter Four.

Another problem with the performance of the commercial banking sector is that, even though the absolute value of loans going to the agricultural sector has increased, that sector's relative share of loans remains fairly low. This is visible in Table 3-4, where the share of agricultural loans as a percent of the total has moved gradually from 1.7% in 1966 to a still low level of 3.9% in 1977. In no year since the government established lending quotas for agricultural loans, have the banks met the required minimum quota for agriculture. For example, the prescribed minimum quota for agricultural loans from 1972 to 1974 was 4%. The banks lent between 2.3 to 3.1% of their funds to agriculture. In 1975, the prescribed minimum figure increased to 6%. The banks have still not met that minimum, even though their performance in this regard has been improving. The improvement has been due to stricter Central Bank surveillance and to the enforcement of penalties for non-compliance.
At the same time that the commercial banks have underperformed in meeting the lending requirements for agriculture, they have in most years overperformed in other sectors bearing higher interest charges, such as Miscellaneous loans. In 1972/73-1974/75, for example, when the Central Bank prescribed ratio of loans for this latter subsector was 3%, 6.7% of all commercial bank loans went, in fact, to the Miscellaneous subsector. (Committee on the Nigerian Financial System, p. 29) It would therefore seem that funds which could have gone to the agricultural sector may have been diverted to other sectors.

Apart from their relative performance with regard to loan volume, the commercial banks' disinterest in the rural-agricultural sector is often illustrated by the lopsided spatial distribution of their branch network. In 1976, over 54% of all commercial bank branches were to be found in Lagos and the State capitals. These cities contained, at the time, less than 20% of the country's population. Furthermore, while metropolitan Lagos had a ratio of 1,800 people per bank, rural Gongola State had a ratio of as much as 400,000 people per bank (Ijere, 1979, p. 14). Such scanty networking in the rural areas has partly been responsible for poor commercial bank services in terms of credit disbursement and savings mobilization in these areas. The Central Bank has recently resorted to legislation to force the banks to set up branches in designated rural areas. It has also set up the Agricultural Credit Guarantee scheme (to be described later in the chapter) to help persuade the banks to lend more to the agricultural (particularly small-scale production) sector.

What accounts for the commercial banks' reluctant attitudes toward the rural-agricultural sector? Part of the explanation lies in the com-
mercial banking sector's traditional methods of operation. Commercial banks insist on some kind of collateral or security for their loans, and the majority of Nigeria's rural dwellers do not possess the type of collateral (real estate, insurance policies, etc.) that would be attractive to the banks. Furthermore, the bulk of the banks' deposits are short-term, and they are reluctant to tie up these funds in agricultural projects which may be fairly long-term.

The historical domination of the banks by foreign 'metropolitan' interests may also be partially responsible for some of the banks' attitudes, due to their focus on loans for export-import trade. However, the major explanation offered in this study has to do with the margin of profitability with which the banks operate in the agricultural sector. This is a key issue explored in the next chapter.

Merchant Banks

Merchant banks are financial institutions whose main functions comprise wholesale banking, medium- and long-term financing, equipment leasing, debt factoring, investment management, issue and acceptance of bills, and management of Unit Trusts. (Committee on the Nigerian Financial System, p. 36) As such, their clientele is almost exclusively corporate. There are currently six such banks in Nigeria, and they constitute a relatively new phenomenon—the majority of them having started operations in 1975. Given the above background (clientele, functions, and relative newness), it is difficult to see this category of banks as an integral part of the credit distribution system to the rural-agricultural sector.
Nevertheless, the government expects the merchant banks to play a role in the channeling of credit to the rural sector. Like the commercial banks, the merchant banks have been asked to assign a certain percentage (currently 5%) of their total loans and advances to agriculture. The banks are even expected to participate in the Agricultural Credit Guarantee Scheme, which seeks to make government-guaranteed loans available to the small farmer.

Merchant banks are also subject to the low government-imposed interest rates of 4-6% per annum on agricultural loans. Perhaps the government hopes that the merchant banks will assign some of their medium- and long-term financing to the agricultural sector, which is sorely lacking in this type of financing. If this is the case, then such hopes may not materialize, since by 1975, over 80% of merchant banks' loans and advances were due to mature in one year. (The reason for this has been given to be the short-term nature of their deposits.) It may be that some of the remaining 20% for medium-term loans went to agriculture. However, not much can be said about this, since there are no figures available on loan maturity by sector.

What can be said, however, is that so far the merchant banks are underperforming, like the commercial banks, in meeting the Central Bank's prescribed ratio for agricultural loans. They are doing this for much the same reasons as the commercial banks, i.e., greater attractiveness/profitability of other sectors compared to agriculture. In 1976, they allocated 1.7% of their loans to agriculture, compared with the then prescribed ratio of 6%. In 1977 this went up to 2.9%, a much better performance. However, considering the misgivings expressed by officials of
three merchant banks visited during this study's survey process about lending to agriculture (partly as a result of lack of familiarity with that sector), not much should be expected from these institutions in the future in terms of agricultural lending. The question also arises as to whether these banks can really be expected to participate fruitfully in agriculture as it now exists in Nigeria, given their structure and primary functions.

Other Institutions

Another set of institutions in the formal sector which might be channeling credit to the agricultural sector in the country is the insurance companies. This would appear to be the case from directives in the latest (1979/80) Central Bank Monetary Policy Circular, requiring insurance companies to report their lending activities to all sectors, including agriculture. This same circular makes these companies subject to almost the same lending rates as the commercial and merchant banks. At this point in time, very little can be said about insurance companies' dealings with the agricultural sector because there is virtually no information available on the subject. Perhaps, as reports are forwarded to the Central Bank in the future, more can be said about this possible source of finance for the agricultural sector.

An effort has been made in the previous sections to describe the current important financial institutions that make up Nigeria's credit distribution and savings mobilization system. Most of government legislation directed at agricultural credit is made with the performance of
these institutions in mind. As such, the institutions play a key role in agricultural credit policy, underscored by their mandate to carry out government instructions. In the next and final section, the essential pieces of agricultural credit legislation and other aspects of current government credit policy are discussed.

**Essential Elements of Present Nigerian Credit Policy**

In section I of this chapter, a description was given of past attempts to inject credit into the agricultural sector through a variety of government institutions. It was noted that these attempts did not really constitute a credit policy, since the attempts were fragmented and regionalized and since there was no clear nationwide perception by the government of the role it wanted agricultural credit to play. Moreover, there were only relatively weak attempts made during the period of the 1930s to the 1960s to involve commercial banks consistently in the channeling of credit to the agricultural sector.

The picture with regard to the emergence of an overall credit policy began to change in the 1970s as agricultural sector performance started to decline. The government began to speak more consistently of agricultural credit as one of the important means of turning agricultural sector performance around. This perception was bolstered by the feelings, discussed earlier in the chapter, that lack of credit was an important constraint on rural farmers' productivity, and that needed credit could only be obtained at prohibitive costs in the rural areas. To this end, the government set up in 1973 a national agricultural bank, the NACB, to
distribute credit nationwide. The government also increased in real terms its volume of credit to the agricultural sector. This was done generally through the agricultural bank.

More importantly, the government undertook a series of legislative actions designed to improve commercial banks' credit performance in the agricultural sector. All these policies were consistently directed at increasing the volume of credit going to the agricultural sector, particularly to small-scale rural farmers. The government saw the use of credit as a means of improving agricultural sector productivity, the surplus marketed, and the incomes of the rural-agricultural population. As of 1979, the government also began to pay increased attention to the issue of savings mobilization in the rural sector. The government's nationwide drive with regard to credit in the 1970s, unlike that of the 1950s and 1960s, presents a clear overall picture concerning its intent in the agricultural credit sector—a picture that can be more formally described as a credit policy.

The three major elements of this policy are the government-supplied increase in the volume of credit to the agricultural sector, institution building, and legislation related to the banking sector of the economy. These three elements will be described below.

Government Credit to the Agricultural Sector

An indication of the amount of government credit to the agricultural sector can be obtained through the various development plans and other government documents, as well as through research papers analyzing govern-
ment performance in the agricultural sector. From the various sources, it appears (as noted in section I of this chapter) that from 1962/63 to 1966/67, N 3.3 million, or 4% of the estimated N 83.9 million government capital expenditure for agriculture, was directed to credit. In 1970-74, the amount allocated to credit was N 22.7 million, or approximately 6.8% of the planned capital allocations for agriculture during that period.

Allocations for agricultural credit during the 1975-80 plan period rose to N 184.6 million, 1 or 8.4% of planned agricultural capital expenditures. (Third National Development Plan, 1975, Vol. 1; Essang and Olayide, 1975, p. 251; Awosika and Nwoko, 1979, p. 7) In 1970 prices, therefore, the increase in government allocations to credit between the last two plan periods represented a 330% increase. Most of the credit (N 150 million, or 81% of the total) allocated for the 1975-80 period was to be disbursed through the Nigerian Agricultural and Cooperative Bank (NACB). 2

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1 This figure represents allocations by the Federal and State governments. While the Federal government makes its allocation of N 150 million clear, the State governments sometimes lump their credit allocations together with those for other farm inputs. It is, therefore, very difficult to decipher the amounts to be spent by these States. Through a detailed analysis of the plan, Essang and Olayide (1975) arrived at the N 184.6 million figure above. Awosika and Nwoko (1979) report a figure of N 165 million.

A further point to note about the figures is that planned allocations for a period may not equal the actual amount of expenditures at the end of the period.

2 It should be noted that the figures for agricultural credit underestimate the total volume of finances going into the agricultural sector. For example, government production companies and agencies (described at the end of section II above) undertake direct production of food crops and livestock, and their activities are financed by the Federal and the various State governments. For the livestock sector alone, the government allocated, during the 1975-80 plan period, a total of N 344 million, the bulk of this to be spent on government ranches and other direct gov-
The planned government credit allocation of ₦184.6 million during the 1975-80 period may be small when compared with the potential demand for credit in the country, and when viewed alongside amounts disbursed in other much smaller developing countries. However, it becomes significant when considered in terms of relative increases over past periods. It signifies the government's determination to use credit as an important tool in the solution of the agricultural sector's problems. The increased allocation to credit underscores the need to examine, as is being done in this study, the fundamental bases for such allocations before they become of greater significance in credit policy in the future.

Government Legislation of Banking Sector Activity

An even more important element of credit policy than direct government allocations of credit is the government's regulation of banking sector activity with regard to agricultural credit. This regulation, which began seriously only in the early 1970s, is one of the prime responsibilities of the Central Bank. It is mostly achieved through the annual publication of a Monetary Policy Circular, designed to steer the activities of commercial

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1For example, in the Dominican Republic, with a population of about 5 million, over $140 million (₦83 million) was disbursed as agricultural credit in one year (1976/77) (Adams, 1978, p. 15). This can be compared with the planned average annual figure of ₦37 million for Nigeria over the five-year period, 1975-80.
and merchant banks (and recently, insurance companies) in the direction of government monetary and financial policy objectives, including increased agricultural credit. The Circular contains some major regulations and guidelines that can be regarded as constituting a part of government's policy toward agricultural credit. These are the sectoral guidelines on credit, the guidelines on rates of interest chargeable on agriculture and other sectors, and credit ceilings on the Bank's aggregate expansion of credit.

**Sectoral Credit Guidelines**

The sectoral credit guidelines stipulate the percentage of total bank loans and advances to go to agriculture and other sectors. The prescribed ratios for sectors are revised periodically in line with government's priorities. Table 3-5 shows the prescribed ratios for commercial banks from 1972 through 1980. Ratios for merchant banks are broadly similar. The prescribed ratio for agriculture was 4% of each bank's total loans and advances from 1972 to 1975. It was revised upwards to 6% in 1976 and has remained at that figure to date. This ratio for agriculture is a minimum ratio, as are those for other sectors and subsectors that the government terms 'preferred' in any given year. This means that these sectors are the priority sectors for that year. Agriculture has consistently been one of the preferred subsectors. Others for 1979/80 are the production sector, with all its subsectors, the services sector, and the export subsector. For the 'less-preferred' sectors and subsectors, such as general commerce and others, the prescribed ratios are maxima.
### TABLE 3-5

**CENTRAL BANK PRESCRIBED RATIOS FOR COMMERCIAL BANK LOANS AND ADVANCES**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PRODUCTION</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture, forestry, fishing</td>
<td>4.0</td>
<td>6.0</td>
<td>6.0</td>
<td>6.0</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>30.0</td>
<td>30.0</td>
<td>30.0</td>
<td>36.0</td>
</tr>
<tr>
<td>Mining &amp; Quarrying</td>
<td>4.0</td>
<td>2.0</td>
<td>2.0</td>
<td>2.0</td>
</tr>
<tr>
<td>Real Estate Construction</td>
<td>7.0</td>
<td>10.0</td>
<td>10.0</td>
<td>9.0</td>
</tr>
<tr>
<td><strong>SERVICES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public Utilities</td>
<td>3.0</td>
<td>2.0</td>
<td>2.0</td>
<td>2.0</td>
</tr>
<tr>
<td>Transportation &amp; Communication</td>
<td>8.0</td>
<td>8.0</td>
<td>8.0</td>
<td>9.0</td>
</tr>
<tr>
<td><strong>GENERAL COMMERCE</strong></td>
<td>32.0</td>
<td>32.0</td>
<td>30.0</td>
<td>24.0</td>
</tr>
<tr>
<td>Bills Discounted</td>
<td>2.0</td>
<td>2.0</td>
<td>2.0</td>
<td>2.0</td>
</tr>
<tr>
<td>Domestic Trade</td>
<td>10.0</td>
<td>12.0</td>
<td>12.0</td>
<td>11.0</td>
</tr>
<tr>
<td>Exports</td>
<td>10.0</td>
<td>8.0</td>
<td>6.0</td>
<td>5.0</td>
</tr>
<tr>
<td>Imports</td>
<td>10.0</td>
<td>10.0</td>
<td>10.0</td>
<td>6.0</td>
</tr>
<tr>
<td><strong>OTHERS</strong></td>
<td>12.0</td>
<td>10.0</td>
<td>12.0</td>
<td>12.0</td>
</tr>
<tr>
<td>Credit &amp; Financial Institutions</td>
<td>1.0</td>
<td>3.0</td>
<td>3.0</td>
<td>3.0</td>
</tr>
<tr>
<td>Governments</td>
<td>2.0</td>
<td>2.0</td>
<td>2.0</td>
<td>2.0</td>
</tr>
<tr>
<td>Personal &amp; Professional</td>
<td>6.0</td>
<td>4.0</td>
<td>4.0</td>
<td>4.0</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>3.0</td>
<td>1.0</td>
<td>3.0</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>TOTAL:</strong></td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

As is obvious from the above, the ratios are designed to influence (reduce or increase) the amount of credit going to different sectors. Commercial banks have never strictly obeyed the ratios for every sector. In the case of agriculture, the banks have not in any one year met the minimum requirement (see the description of commercial bank activities in section II above), though their performance has improved in the past couple of years. This improvement is due partly to the imposition and enforcement by the Central Bank of penalties for non-compliance with the minimum ratios in the case of agriculture and residential construction.

Since the banks have to send monthly statements on their ratios (and other activities) to the Central Bank, any bank not complying in the case of the two subsectors mentioned above has to deposit the shortfall at no interest with the Central Bank. In the case of agriculture, the Central Bank then passes the funds to the NACB for use. Furthermore, the refund of the credit to the defaulting bank may not be automatic, even if they meet the required ratio in the future.

It is not exactly clear how the Central Bank decides on the percentage shares of each sector. Government priorities, of course, play a part; but the other factors taken into account to determine specific ratios are not clear. However, it seems that the opinions of banking sector leaders as to how much credit they feel a sector can absorb probably plays a large part.

In the case of agriculture, such opinions may work to keep the ratio down below what it might be, given the interest rate disincentives to agricultural lending. That is, banking sector leaders may (because of the relative unprofitability of agricultural lending) downplay the propor-
tion of total credit which they feel the agricultural sector can absorb.

Credit Ceilings

Ceilings on the expansion of aggregate credit by the banking sector represent more of a monetary policy tool to help curb inflation. However, the policy on ceilings is worth mentioning for the fact that the agricultural sector (along with residential construction) is excluded from the ceilings on the expansion of credit. So, for example, in the 1979/80 Monetary Policy Circular, banks were told not to expand their aggregate credit to the economy for the fiscal year beyond an extra 30% (for large banks) and 40% for small ones. However, any loans granted to the agricultural sector above the government's prescribed minimum ratio were to be excluded from this policy. So were loans for residential construction, purchase of shares of foreign companies by Nigerians, and loans for buying motorcars by workers in the public and private sectors. The exclusion of agricultural and other types of loans indicates the government's desire to encourage credit expansion to those activities.

Interest Rate Structure

The Central Bank's prescription of interest rates chargeable on various loans represents one of the single most important aspects of credit policy. Its importance has been continually brought out in every chapter of this study, because of its influence on banks' activities in agricultural credit and also because of its possible influence on the desire to save for current and potential savers. Interest rate policy, unlike the other policies above, was designed explicitly with the borrower in mind. The policy is aimed at helping the rural-agricultural
sector by favoring the borrower (who is charged low rates) over the lender. One question asked in Chapter Four of this study is whether the policy really helps the small rural borrower (whom the government has in mind), or in fact favors other types of borrowers.

There is a multiple rate structure in the agricultural sector with varying rates, depending on the type of agricultural activity, the type of borrower, and the type of financial institution. This interest rate structure is set out in Table 3-6, along with the rates payable on savings. Nominal rates are shown in the table. These nominal rates can be converted to approximate real rates by deflating the figures by the annual rate of inflation in the year of interest (1978). Deflating the figures by the IMF International Financial Statistics inflation rate of 24% for 1978, or by the Nigerian Federal Office of Statistics rate of 16.6% for the same year, results in highly negative (as conventionally defined by economists) real rates of interest on loans and on savings.¹ For example, if the 6% nominal per annum rate of interest paid by direct borrowers for agricultural production loans is deflated by the above inflation rates, negative real rates of interest of -18% (for the IMF figure) and -10.6% (for the Federal Office of Statistics inflation figure) are obtained. This means that, in this case, the interest rate paid banks by borrowers lies far below the rate of inflation. Banks, however, also get to pay highly nega-

¹Note that this conventional definition by economists of negative real rates of interest does not really consider the issue of alternative returns to capital for lenders, for example. Lenders could be happy to lend at negative real rates of interest if alternative uses of their capital would result in lower returns than could be earned through lending.
TABLE 3-6

INTEREST RATES CHARGEABLE ON AGRICULTURAL LOANS
AND PAYABLE ON SAVINGS DEPOSITS (1978/79)

<table>
<thead>
<tr>
<th>Type of Institution, Loan, and Borrower</th>
<th>Nominal Per Annum Rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>1) Commercial &amp; Merchant Banks</strong></td>
<td></td>
</tr>
<tr>
<td><strong>A. Loans</strong></td>
<td></td>
</tr>
<tr>
<td>Agricultural Production Loans (Direct Borrowers)</td>
<td>6</td>
</tr>
<tr>
<td>Agricultural Production Loans through the Agricultural Credit Guarantee Scheme (Direct Borrowers)</td>
<td>6</td>
</tr>
<tr>
<td>Agricultural Credit Guarantee Scheme Production Loans (Farmers' Groups or Cooperative Societies)</td>
<td>4</td>
</tr>
<tr>
<td>Other types of agricultural loans</td>
<td>9 (maximum rate)</td>
</tr>
<tr>
<td>Agricultural Production Loans taken out by Rural Farmers from their Cooperative Societies</td>
<td>12 to 20</td>
</tr>
<tr>
<td><strong>B. Savings</strong></td>
<td></td>
</tr>
<tr>
<td>Savings Deposits (minimum rate)</td>
<td>5</td>
</tr>
<tr>
<td>Deposits with 7 days notice</td>
<td>4</td>
</tr>
<tr>
<td>Time Deposits (1 month to 12 months)</td>
<td>4.5 to 5.5</td>
</tr>
<tr>
<td><strong>2) Nigerian Agricultural Bank</strong></td>
<td></td>
</tr>
<tr>
<td>Agricultural Production Loans (Direct Borrowers)</td>
<td>3 to 5</td>
</tr>
<tr>
<td>Marketing</td>
<td>7 to 9</td>
</tr>
<tr>
<td><strong>3) Insurance Companies</strong></td>
<td></td>
</tr>
<tr>
<td>Agricultural Production Loans</td>
<td>6</td>
</tr>
<tr>
<td>Other types of agriculture</td>
<td>7 to 9</td>
</tr>
<tr>
<td><strong>4) Interest charges on other 'less-preferred' sectors, e.g., General Commerce</strong></td>
<td>7 to 11</td>
</tr>
</tbody>
</table>

---

1. It was not possible to elicit the specific method by which the Central Bank arrives at the rates for each sector. However, interest rates are tied to the Central Bank's minimum rediscount rate. When this rate moves up or down (in response to monetary policy objectives), most other rates in the economy move with it. The minimum rediscount rate set in 1978/79 is 5%.

2. The Agricultural Credit Guarantee Scheme is a special credit scheme for agricultural production set up by the government through commercial and merchant banks. It is described further on in the chapter.

**SOURCES:** Central Bank of Nigeria, Developments in the Nigerian Economy During the First Half of 1978, p. 42; field surveys.
tive real rates on savings deposits, so that the only issue with regard to the profitability of their operations becomes the margin of difference between the two sets of rates.

One noticeable point about the interest rate structure is the variation that exists between the rates direct borrowers pay and those paid by farmers receiving loans through the cooperative societies. While direct borrowers (those who can obtain the loan directly from the banks themselves) and cooperative societies enjoy very low rates (as was noted earlier for the 1950s and 1960s), farmers who receive their loans from the cooperative societies pay much higher rates. Though the high rates of the cooperative societies can be justified by the higher risk (because of no collateral requirements), etc. of loans to these rural farmers, the system of differential rates between direct and indirect borrowers may result in some horizontal inequities. This is because a farmer—small or large—who can obtain a loan directly from a bank (barring high loan transactions costs) enjoys a much higher subsidy on his loan than an equivalent farmer who receives the same loan amount through a cooperative society. Given that larger or wealthier farmers (who may not necessarily be better risks) are likely to have more direct access to the banks, the system may also result in some vertical inequities.

A third point about the interest rate structure is that rates chargeable on non-agricultural 'less-preferred' sector loans are higher than on agricultural loans and more favorable to the commercial banks. They will, therefore, be inclined to try and lend more to these sectors. Some potential agricultural loans might get diverted to these sectors in this way.
As well as stipulating the interest rates banks can charge on loans, the Central Bank also stipulates the method for calculating these rates. According to the Monetary Policy Circular for 1977/78, only the reducing balance method can be used to calculate interest charges on loans payable by installments. Any other method, such as the straight-line (discount or simple interest) method, is disallowed because it results in higher rates than the mandated ones. This additional regulation came about because some banks had contravened the interest rate ceilings by using various methods of interest rate calculation that resulted in higher effective rates than the Central Bank's prescribed ones.

Finally, as touched upon at the beginning of this section, attention should be drawn to the minimum rates on savings, which, because of the low

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1 In the reducing balance method, banks would subtract previously repaid amounts from the loan principal before calculating the amount payable as interest for a given year. This would not be the case with the straight-line method, where the amount of interest would be calculated on the full loan principal each year, without regard to amounts already repaid. Both methods may apply the same nominal rate of interest (e.g., 10% per annum) on a loan that is repaid in installments. But, given a loan period of, say, five years, the reducing balance method would result in lower effective interest charges than the straight-line method, because the nominal rate of interest would have been applied to successively reduced principal loan amounts each year.

Note that the nominal rate of interest agreed upon by a borrower on a loan may differ from the rate the borrower effectively pays, because of different methods of loan repayment, different methods of calculating interest payments (as above), or because of additional costs of borrowing imposed on the borrower by the lender.

2 The reducing (or declining) balance and straight-line methods are more commonly associated with the depreciation of assets by firms than with the calculation of interest rates.
rates on credit, are also low. The probable effects of this on potential savers is explored in the next chapter.

Other Facets of Government Credit Legislation

Apart from the major Central Bank guidelines described above, the government pursues other policies to influence bank behavior with regard to agricultural credit. This may be done through special schemes, such as the Agricultural Credit Guarantee Scheme, or through legislation separate from what is available in the Monetary Policy Circular. These two further aspects of credit policy are described below.

The Agricultural Credit Guarantee Scheme

The Agricultural Credit Guarantee Scheme (ACGS) was set up by the Federal government in 1977 to encourage an increased volume of loans from the commercial and merchant banking sector to agricultural production, particularly to small rural farmers. The scheme has an authorized capital of N 100 million, of which 60% is to be subscribed by the Federal government and 40% by the Central Bank.

Under this scheme, 75% of bank loans to agricultural production are guaranteed by the government and the Central Bank. Eleven million Naira in guaranteed loans had been disbursed from the fund at the end of 1978. The government hopes that, given the security provided by the guarantee, banks will increase, within a short period, the volume of loans to agriculture, especially to small farmers. The performance of commercial banks under this scheme (which bears even lower 4-6% interest rates than the norm) is one of the issues discussed in Chapter Four.
Government Equity Participation in the Commercial and Merchant Banking System

As a means of directly influencing the decisions of the banking system, the government has tried to acquire an increased number of shares in those banks in which it had little or no participation. It passed the Nigerianization decree, by which at least 60% of the equity participation in the banking system was to be made Nigerian. By 1976, the government had itself acquired a 30 to 40% share in most major banks that were not indigenous (Nigerian) or government-owned. The government has been considering acquiring a controlling (51% or more) share in the same banks to increase its power to influence the banks. The Committee on the Nigerian Financial System (1976) dubbed this latter move as unnecessary for the government's purposes, given the already existing methods for influencing bank behavior.

The government's aim in increasing its participation in the banking system is primarily to ensure that its directives on increased credit disbursement to priority sectors, such as agriculture, are obeyed. The government has indeed been able to influence the choice of managers and directors for the major banks, and this has probably had an impact on getting increased compliance to directives on the agricultural and other sectors. The exact impact of increased direct government control and participation on bank behavior, however, is difficult to measure.

Legislation on Establishment of Bank Branches

The latest piece in the legislative effort of the government towards the rural-agricultural sector concerns its attempts to increase by fiat the number of bank branches in the rural areas. As discussed in section II of
this chapter, the commercial bank branch network is highly concentrated in urban areas. The government feels that this serves to frustrate its efforts to improve financial services (particularly credit availability) to the rural sector. Lately, the savings mobilization function of the banks in the rural areas has also been stressed, though, as was earlier remarked, it is not clear that it has the same priority in the government's agenda as credit.

The legislation requiring compulsory establishment of bank branches was passed in 1977. The Central Bank apportioned the 195 new rural branches to be set up for the different banks, based on the proportion of their branches concentrated in urban areas and on their size. The government expected all the branches to be set up by the end of 1980. It has given some incentives to the banks, such as certain tax deductions, to encourage a rapid opening up of these branches.

While the new legislation will certainly serve to increase the physical presence of intermediaries in the rural areas, it is not certain that intermediation services to rural people will increase significantly, given the traditional banking practices of the commercial banks and the disincentives implicit in the government's interest rate structure. In fact, if these aspects of bank operations are not changed, the proliferation of commercial banking institutions might even serve to drain away from the rural areas whatever savings is mobilized. The question also remains as to whether the commercial banking system can effectively serve more remote rural areas. It might be that some alternative or supplementary mode of intermediary services are needed to reach such areas.
Comment on the Government's Regulation of the Banking Sector

The legislative aspects of credit policy, e.g., use of credit controls described above, have broad welfare implications, the discussion of which lies outside the scope of this study. These implications have been well documented elsewhere (e.g., see Johnson, 1974) and include the gross losses and gross gains in consumer surplus of sectors forced to grow at slower or faster rates as a result of these policies. Of importance to this study, however, are the narrower implications of the policies for banks' profitability and the indirect effects of these policies on service to the rural-agricultural population.

One thing seems clear; that is, the government's legislation appears to be having some effect on the commercial banking sector in terms of increasing its volume of credit to the agricultural sector (see Table 3-4). The question is whether these increases are ultimately effective, in the sense of reaching the rural population about whom the government is concerned, and whether the increases are productive in the sense of increasing production and the marketed surplus in the agricultural sector. These and other issues are explored in Chapter Four.

Institution Building

The final major element of government credit policy deserves only brief mention, because it has been more extensively discussed in section II of this chapter. This is the drive at institution building as a means of improving the allocation of credit to the agricultural sector. This drive has been responsible for the setting up of the Nigerian Agricultural
and Cooperative Bank (NACB) in 1973, and accounts for the renewal of interest in cooperative societies and other credit-channeling institutions. These institutions play a key role in the allocation of credit to the agricultural sector. Many of their current operations are based on old, established procedures. This presents some difficulty in their ability to discharge their functions effectively. Again, the efficacy of certain institutions of the credit distribution mechanism is a subject for discussion in the following chapter.

Summary and Conclusion

In this chapter, a broad look has been taken at overall credit policy in Nigeria. In section I, a historical look at past government credit efforts (including the bases for these efforts) was undertaken. In section II, the major public and private institutions for channeling credit to and mobilizing savings in the rural sector were described. In the last section, the concerted effort being made by government to influence the volume and direction of credit flow was explored. What seems evident is that a clear government policy in favor of agricultural credit increases has emerged and taken hold in the country. The main task in the next chapter is to examine the fundamental premises for the present government credit policy.
CHAPTER FOUR

CREDIT POLICY IN NIGERIA:
AN EXAMINATION OF THE VALIDITY OF UNDERLYING ASSUMPTIONS

Introduction

In Chapter Three, the discussion centered on the essential elements of past and present credit policy in Nigeria. In that chapter, it was noted that the major objectives of present credit policy are a) to facilitate increased agricultural production, particularly of the marketable surplus, and b) to improve the incomes and living standards of poor farmers. Underlying credit policy in general, as discussed in Chapter Three, and objectives of credit policy in particular, as outlined above, are a set of assumptions—many of which are never explicitly acknowledged or examined by policy-makers as being of crucial importance to decision making in the credit area. Failure to examine the validity of these assumptions means continuation of a credit policy that not only falls short of achieving its main objectives, but actually contributes to distortions in the behavior of rural financial markets (RFMs)—distortions which prove to be detrimental to the provision of financial services to the poor farmers whom the government

1 Since rural farmers obtain the bulk of their livelihood from agricultural production, government officials tend to assume that the only (or the major) way to improve the incomes and living standards of farmers is through improving agricultural production. This may not necessarily be the case. Farmers may find other, more economically attractive ways (e.g., trading) to improve their incomes. This could influence their use of agricultural credit, thereby creating some conflict between the two goals of improving agricultural production and improving farmer incomes. It becomes apparent in later discussion in this chapter that such a conflict does occur.
has expressed interest in helping.

The major objective of this chapter is to explicitly set out these underlying assumptions, and then to attempt to throw some light on their validity, with the aid of data collected in the sample surveys described in Chapter One. Such an exercise will lead to a reformulation of the assumptions; and the reformulated assumptions will, in turn, provide in Chapter Five a guide towards the discussion of alternative credit policies that would hopefully better achieve the objectives set out by the government. The list of assumptions to be provided here may not be exhaustive, in the sense that other assumptions may be apparent to readers from the discussion in Chapter Three. However, the six assumptions outlined are certainly the most important in terms of their effect on the shape and structure of credit policy; and, as is evident in Chapter Two, these assumptions appear to be the same as those implicit in credit policies in various other developing countries.

The assumptions have to do with the behavior and desires of rural farm households, as well as institutions—formal and informal—that deal with the channeling of agricultural credit. They also concern the nature and constraints of agricultural production in Nigeria. These assumptions are:

1) Rural farm-households face credit shortages, particularly for agricultural credit.

2) Such credit as is needed is not readily available in the rural areas, or is available at prohibitive costs from usurious moneylenders.
3) The existence of credit shortages prevents the adoption by farm-households of modern technological inputs that would ensure increases in output.

4) Such credit as is provided by the formal system must be given at low or concessional rates of interest in order to persuade farmers to borrow, because their demand for credit is highly interest elastic. (That is, a slight percentage increase in the price of credit will induce a much greater percentage drop in the quantity of credit demanded by farmers.)

5) The current distribution mechanisms for credit can, with little or no modification, be effective in reaching poorer farmers.

6) Lack of credit is the most important problem related to financial services in the rural areas. Savings mobilization, in particular, is relatively unimportant, since savings capacities are quite low. Given this, there is little need to revise the interest rate structure in favor of savings.

Testing the Validity of the Assumptions

Assumption (1)

Rural farm-households face credit shortages, particularly for agricultural credit.

It appears true that rural farmers face credit shortages. Table 4-1 shows that of the 83 cooperative society members in the study sample who obtained loans from the formal system (coop members), 30 of them (or 36%) also felt a need to borrow from informal sources. Fifty-four percent of those who had no formal system loans (non-members of cooperative societies)
TABLE 4-1
INDEBTEDNESS TO THE INFORMAL SECTOR

<table>
<thead>
<tr>
<th>Region</th>
<th>Cooperative Society Members (% Indebtedness)</th>
<th>Non-Members of Cooperative Societies (% Indebtedness)</th>
<th>Coop and Non-Coop Members (% Indebtedness)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northern Villages</td>
<td>15.7 (13)</td>
<td>19.3 (11)</td>
<td>35.0</td>
</tr>
<tr>
<td>Southern Villages</td>
<td>20.5 (17)</td>
<td>35.1 (20)</td>
<td>55.6</td>
</tr>
<tr>
<td>Total Category</td>
<td>36.2</td>
<td>54.4</td>
<td></td>
</tr>
</tbody>
</table>

1Numbers in brackets represent numbers of respondents borrowing in each category.

SOURCE: Field surveys.

also borrowed from the informal system in the study year. Southern villagers tended to be more indebted to the informal system than their northern counterparts, probably because of the lower incomes found among these villagers, and also because of the greater availability in the south of informal institutions, such as Rotating Credit Associations (Roscas) and Non-Rotating Credit Associations from which loans can be obtained.

Although a substantial number of farmers borrow, signifying their need for credit, what is not so apparent is whether this credit need is solely, or even predominantly, for agricultural production purposes, as government officials seem to assume.

Given the fungibility of money, the nature of the farm-firm-household, and its complex decision making processes, involving consumption, production, and investment (Adams, 1978; Baker, 1973; FAO, 1971),
it is difficult to make definitive statements about the particular purpose to which any given amount of credit will be put. This may be in spite of claims made by borrowers at the time of obtaining a loan, consigning the loan to a particular purpose. Since one of the government's objectives for credit policy is increasing agricultural production, its expectations or desires with regard to credit is that recipient farmers increase agricultural investment by the amount of credit received. This situation is depicted in graph (A) of Figure 4-1.

FIGURE 4-1

DESIRED AND ACTUAL SITUATIONS WITH REGARD TO USE OF AGRICULTURAL CREDIT

AGRICULTURAL INVESTMENT (A)

CONSUMPTION AND ALL OTHER INVESTMENT ACTIVITIES (I.O.)

AGRICULTURAL INVESTMENT (B)

CONSUMPTION AND I.O.

AGRICULTURAL INVESTMENT (C)

CONSUMPTION AND I.O.
In this situation, the farmer's original equilibrium position is at point $I_1C_1$ with given amounts of agricultural investment, consumption, and investment in all other activities. The reception of credit shifts the farmer's budget constraint outwards in the manner shown, permitting him to attain higher activity levels on the new indifference curve. Government officials, however, assume that all new activity will involve an increase in agricultural investment $I_2$, while the farmer maintains his original position with respect to consumption and all other investment activities $C_1$.

While some farmers, especially larger, better-off farmers, may follow the scenario depicted in graph (A), the more typical situations are those shown in graphs (B) and (C), where farmers spend in varying proportions some of the credit received on agricultural investment and the rest on other activities, or they spend all the credit on other activities, while maintaining the previous agricultural investment level $I_1$. This viewpoint is supported by figures in Table 4-2, which show formal credit recipients or cooperative society members (coop members) and non-members of cooperative societies (non-coop members) spending, on average, approximately the same amounts on farming, despite higher mean amounts borrowed by the coop member group from formal, and in some cases informal, sources.

If we take the farm expenditure figures by non-coop members to be what coop members would have spent had they had no formal credit, for instance, it becomes clear that some of the formal credit received goes into activities other than agricultural investment. This situation tends, on the average, to be more applicable to the 64% of coop members in the two lower total cash income groups ($\text{N} \ 0-499$ and $\text{N} \ 500-1499$) than to the
### TABLE 4-2

**MEAN FARM EXPENDITURES (1978/79) AND MEAN AMOUNTS BORROWED:**

**COOPERATIVE SOCIETY MEMBERS AND NON-MEMBERS OF COOPERATIVE SOCIETIES COMPARED BY INCOME GROUPS**

*(All Money Values in N)*

<table>
<thead>
<tr>
<th>Income Group</th>
<th>Mean Farm Expenditures</th>
<th>Number of Respondents Borrowing</th>
<th>Mean Amounts Borrowed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cooper Members Only</td>
<td></td>
<td>Informal</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>$118.0</strong></td>
<td></td>
<td><strong>$70.0</strong></td>
</tr>
<tr>
<td></td>
<td><strong>329.0</strong></td>
<td><strong>129.4</strong></td>
<td><strong>18 out of 18</strong></td>
</tr>
<tr>
<td></td>
<td><strong>500-1499</strong></td>
<td><strong>200.7</strong></td>
<td><strong>172.1</strong></td>
</tr>
<tr>
<td></td>
<td><strong>345.0</strong></td>
<td><strong>35 out of 35</strong></td>
<td><strong>205.7</strong></td>
</tr>
<tr>
<td></td>
<td><strong>782.5</strong></td>
<td><strong>280.0</strong></td>
<td><strong>459.1</strong></td>
</tr>
<tr>
<td></td>
<td><strong>1112.8</strong></td>
<td><strong>30 out of 30</strong></td>
<td><strong>248.0</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total Cash Income Group</th>
<th>Mean Farm Expenditures</th>
<th>Number of Respondents Borrowing in Each Category</th>
<th>Mean Amounts Borrowed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cooper Members</td>
<td>Non-Coop Members</td>
<td></td>
</tr>
<tr>
<td><strong>0-499</strong></td>
<td><strong>118.0</strong></td>
<td><strong>92.7</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>329.0</strong></td>
<td><strong>129.4</strong></td>
<td><strong>5 out of 18</strong></td>
</tr>
<tr>
<td><strong>500-1499</strong></td>
<td><strong>345.0</strong></td>
<td><strong>200.7</strong></td>
<td><strong>14 out of 35</strong></td>
</tr>
<tr>
<td></td>
<td><strong>782.5</strong></td>
<td><strong>280.0</strong></td>
<td><strong>11 out of 30</strong></td>
</tr>
<tr>
<td><strong>1500 and Above</strong></td>
<td><strong>1112.8</strong></td>
<td><strong>30 out of 30</strong></td>
<td><strong>5 out of 17</strong></td>
</tr>
</tbody>
</table>

**NOTE:** Changing the income groupings changes the figures slightly, but the basic conclusions remain the same. See calculations in Appendix B.

**SOURCE:** Field surveys.
36% of coop members in the total cash income group above this. There are, however, indications that even in this highest group, recipients have also invested some credit in non-agricultural activities.

Evidence on a demand for credit for purposes other than agricultural production comes from the answers of 26 respondents replying to questions pertaining to activities undertaken in addition to or in place of further agricultural investment because of the availability of formal credit. Table 4-3 shows the low priority accorded consumption in these activities. Instead, investment in other non-farm business activities, particularly trading, appears to have been more popular. This signifies the importance of possibly higher and quicker returns to be obtained by participation in trading rather than in current agriculture.

TABLE 4-3
EVIDENCE OF DIVERSION¹ OF FUNDS BY FORMAL SYSTEM BORROWERS

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Number of Respondents Diverting Funds</th>
<th>Percent of Total Number of Respondents Diverting Funds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trading</td>
<td>13</td>
<td>50.0</td>
</tr>
<tr>
<td>School Fees</td>
<td>5</td>
<td>19.2</td>
</tr>
<tr>
<td>On-Lending to Other Farmers</td>
<td>4</td>
<td>15.4</td>
</tr>
<tr>
<td>Consumption</td>
<td>4</td>
<td>15.4</td>
</tr>
<tr>
<td>TOTAL</td>
<td>26</td>
<td>100.0</td>
</tr>
</tbody>
</table>

¹The diversion referred to in the table indicates that the respondents used some, if not all, of the formal agricultural loans received for the non-agricultural purposes stated in the table.

SOURCE: Field surveys.
A look at supposed purposes for borrowing from the informal market (Table 4-4) shows that although farming predominates as a reason, at least 42.5% of the purposes stated were non-farm-related. Again, non-farm investment activities, such as school fees for children, trading, building, etc., appear important.

What emerges from the above discussion is that although credit for agricultural production may be important, the demand for credit for non-agricultural activities, especially non-farm-related investment, is significant and cannot be ignored. For some farm-households at least, as long as these non-farm-related activities appear more important or more profitable than agricultural production, credit intended by authorities to be used to increase agricultural production will be diverted by these households to activities which increase the household's overall welfare level more than agricultural investment would. While this is perfectly rational in an economic sense, it points to the fact that while credit may be used as an instrument for increasing the welfare of recipient households, given present prices and the state of technology in Nigerian agriculture, other means or additional means must be found to induce such households into further investment in agriculture.

Assumption (2)

Such credit as is needed by farmers is not readily available in the rural areas, or is available at prohibitive costs from usurious moneylenders. In the discussion on the validity of assumption (1) above, it was noted that borrowing from the informal sector is very important. Of the
<table>
<thead>
<tr>
<th>Purpose</th>
<th>Coop Members</th>
<th>Non-Coop Members</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of Loans</td>
<td>Number of Loans</td>
</tr>
<tr>
<td>Farming</td>
<td>38</td>
<td>18</td>
</tr>
<tr>
<td>Trading</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Farming &amp; Ceremonies</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Farming &amp; Trading</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Farming &amp; Feeding</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Farming &amp; School Fees</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>Trading &amp; Feeding</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Feeding &amp; School Fees</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Blacksmithing</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Vehicle License</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>School Fees</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Illness</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Funeral</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Ceremonies</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Weaving</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Household Food</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>Building</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>73</strong></td>
<td><strong>37</strong></td>
</tr>
</tbody>
</table>

**NOTE:** Percentages may not add up to 100.0 due to rounding.

**SOURCE:** Field surveys.
sample of farmers surveyed, at least 44% took one loan from an informal source during the study year. Of those who had no access to formal loans, 54% borrowed from the informal sector, and 36% of those who received formal loans also obtained loans from informal sources. Table 4-5 sets out borrowing from the informal sector by source. It is clear from the table that loans are, as has been noted elsewhere, available from a wide variety of sources.

### TABLE 4-5

INDEBTEDNESS TO THE INFORMAL SECTOR BY SOURCE

<table>
<thead>
<tr>
<th>Source</th>
<th>Percent of Loans Borrowed from Source</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total Sample</td>
</tr>
<tr>
<td>Rotating and Non-Rotating</td>
<td>20.5</td>
</tr>
<tr>
<td>Savings and Credit Organizations</td>
<td></td>
</tr>
<tr>
<td>Moneylender</td>
<td>1.42</td>
</tr>
<tr>
<td>Patron</td>
<td>2.7</td>
</tr>
<tr>
<td>Relatives</td>
<td>45.2</td>
</tr>
<tr>
<td>Friends</td>
<td>30.2</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100.0</td>
</tr>
</tbody>
</table>

1 Total number of loans for entire sample = 73. Number of loans in the north = 26. Number of loans in the south = 47.

2 The remarkably low percentage of loans from moneylenders will be discussed in more detail later in this section of the chapter.

SOURCE: Field surveys.
Studies on Nigeria (Okonjo, 1978; King, 1976; Ojo, 1976; Ijere, 1979) show that relatives and friends are the most important sources of credit or financing for activities in rural areas. In addition, in the south, where rotating and non-rotating savings and credit organizations—known locally as "esusus" and "safes"—are widely available and very strongly established, these prove to be a source of credit even more important than relatives. The range and mean amounts borrowed from these various sources, and mean amounts borrowed from informal sources as a whole, by income group, are displayed in Tables 4-6 and 4-7.

The figures in Table 4-6 suggest that fairly large amounts are available from all the credit sources in the rural areas. However, large loans between N 300-1000 are fewer in number than small ones, and the tendency is towards small- and medium-size loans, thereby making mean amounts borrowed smaller than would be expected from the sizeable amounts at the upper end of the loan range.

In Table 4-7, upper-income farmers appear able to borrow larger amounts than lower-income farmers, probably because of their greater credit-worthiness and their larger expenditures. Poorer farmers, however, fare better than do more well-off ones, from the viewpoint of the percent of these farmers who borrow from informal sources. When Table 4-7 is compared with Table 4-8, informal sources do almost as well as formal ones (namely, the cooperative societies) in terms of mean amounts loaned out. Poorer farmers seem to obtain larger loan amounts from the formal than the informal system once they gain access to the former. However, the percent of poor farmers served by the formal system is lower than that for the informal.
### TABLE 4-6
RANGE AND MEAN AMOUNTS BORROWED FROM THE INFORMAL SYSTEM BY SOURCE (N)

<table>
<thead>
<tr>
<th>Source</th>
<th>Range of Amounts</th>
<th>Mean Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Savings Organizations</td>
<td>20 - 500</td>
<td>146</td>
</tr>
<tr>
<td>Moneylender</td>
<td>500 (1 loan)</td>
<td>N.A.</td>
</tr>
<tr>
<td>Patron</td>
<td>260 - 400 (2 loans)</td>
<td>330</td>
</tr>
<tr>
<td>Relatives</td>
<td>10 - 1000</td>
<td>158</td>
</tr>
<tr>
<td>Friends</td>
<td>14 - 700</td>
<td>168</td>
</tr>
</tbody>
</table>

N.A. = Not Applicable  
SOURCE: Field surveys.

### TABLE 4-7
BORROWING FROM INFORMAL SOURCES BY INCOME GROUP

<table>
<thead>
<tr>
<th>Income Group (N)</th>
<th>% Informal Borrowers</th>
<th>Average Amount Borrowed (N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 499</td>
<td>39.3</td>
<td>88.5</td>
</tr>
<tr>
<td>500 - 1499</td>
<td>32.8</td>
<td>182.5</td>
</tr>
<tr>
<td>1500 and Above</td>
<td>27.9</td>
<td>381.8</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

SOURCE: Field surveys.
TABLE 4-8

COMPARISON OF MEAN AMOUNTS BORROWED AND MEAN FARM EXPENDITURES FOR FORMAL SYSTEM BORROWERS (COOP MEMBERS)

<table>
<thead>
<tr>
<th>Income Group</th>
<th>Number Borrowing</th>
<th>% Total Borrowers</th>
<th>Mean Amount Borrowed (N)</th>
<th>Mean Farm Expenditure (N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 499</td>
<td>18</td>
<td>21.7</td>
<td>129.4</td>
<td>118</td>
</tr>
<tr>
<td>500 - 1499</td>
<td>35</td>
<td>42.2</td>
<td>200.7</td>
<td>329</td>
</tr>
<tr>
<td>1500 and Above</td>
<td>30</td>
<td>36.1</td>
<td>280.0</td>
<td>1112.8</td>
</tr>
<tr>
<td>TOTAL</td>
<td>83</td>
<td>100.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SOURCE: Field surveys.

It would have been instructive to compare amounts borrowed from informal sources with total expenditures of farm-households. However, as explained in Chapter One, it was not possible to obtain figures for consumption and non-farm business expenditures for the study year. Nevertheless, comparing the mean farm expenditure figures in Table 4-2 with mean amounts borrowed from informal sources, it is apparent that farmers in the two lower-income groups who have access to informal loan sources should, on average, be able to borrow from these sources substantial proportions of their current farm expenditures.

One problem remains, however, and that concerns the percent of farmers needing loans from the informal sector who cannot obtain such loans. Hard statistics are not available, but anecdotal information obtained during the survey suggests that during the peak farming months, when expenditures for all farmers are highest and when credit demand for both production and consumption is also highest, informal loan sources within
some villages may not be adequate to meet the demand of all farmers needing credit in those villages. And, with the fragmentation of the informal market, loan sources that may be available in the next village, only a mile or two away, are not accessible to borrowers outside of that village.

In summary, a wide variety of informal credit sources are available in rural areas. Informal sources are more important and more effective than formal sources, with regard to the percent of poorer farmers served; and in terms of loan amounts for this latter group, informal sources compare favorably with formal sources. However, during certain peak credit demand periods, and within certain villages, informal sources may be inadequate to meet all farmers' credit demand, thereby indicating the need for extra outside credit sources.

Table 4-9 shows the per annum interest charges (nominal) in the informal sector. It is noticeable that the bulk of loans from the two most important credit sources (relatives and friends) incur no monetary interest charges. However, such loans do bear a non-quantifiable 'social charge,' one example of which is the obligation of the borrower to be ready to reciprocate the action towards the lender, should this become necessary even in the immediate future. Of the loans that do incur charges from the three most important credit sources (savings organizations, relatives, and friends), the per annum nominal rates of 17.4 to 34.2% are not that much higher than the 12, 18, and 20% nominal rates charged by government cooperative societies in the villages surveyed.

The 60% nominal interest charge on the single moneylender loan stands out above the rest. Though this interest charge may be viewed by some as "usurious," it will be argued later on in the discussion that,
TABLE 4-9

MEAN PER ANNUM INTEREST CHARGES IN THE INFORMAL SECTOR BY SOURCE

<table>
<thead>
<tr>
<th>Source</th>
<th>Number of Loans Incurring Interest Charges out of Total Number of Loans from Each Source</th>
<th>% of Loans Incurring Interest Charges</th>
<th>Mean Per Annum Interest Charge (%) for Loans Incurring Charges (Nominal)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Savings Organizations</td>
<td>11 out of 15</td>
<td>73.3</td>
<td>29.3</td>
</tr>
<tr>
<td>Non-Registered Moneylender</td>
<td>1 out of 1</td>
<td>100.0</td>
<td>60.0</td>
</tr>
<tr>
<td>Patron</td>
<td>2 out of 2</td>
<td>100.0</td>
<td>N.A.</td>
</tr>
<tr>
<td>Relatives</td>
<td>2 out of 33</td>
<td>6.1</td>
<td>17.4</td>
</tr>
<tr>
<td>Friends</td>
<td>5 out of 22</td>
<td>22.7</td>
<td>34.2</td>
</tr>
</tbody>
</table>

N.A. = Not Available

SOURCE: Field surveys.

given certain circumstances surrounding the moneylender's operations (e.g., expected high risk of default by borrowers on loans), such rates may be justified. High per annum nominal interest charges by moneylenders have also been found in other studies on Nigeria (e.g., see Okonjo, 1978; Galletti and Baldwin, 1956). In the 1977-1978 study conducted by Okonjo in the rural town of Ogwashi-Uku in Bendel State, Nigeria, nominal interest charges of slightly over 300% were found for the relatively few loans made by unregistered moneylenders in that community.

Bottomley (1964, 1971) and Long (1968) have discussed possible reasons for the high interest charges by village moneylenders. Their arguments are mentioned in Chapter Two and need not be repeated here. Of the components of high interest charges that they list (opportunity cost, administrative
costs and risk), this author feels that a high expected risk of default on loans largely accounts for any high interest charges that may be encountered from moneylenders or other sources in the rural areas. This is attributable to the uncertainties and vagaries of life in the rural areas. In any given year, it is not uncommon for some farmers to have bad luck with their crops, and thus experience temporary money shortages which may hamper their ability to repay a loan.

In addition, the degree and extent of personal relationships between the moneylender (or other lenders) and the borrower are important in determining the expected risk of default, and hence the level of interest charges. If a borrower has relatively close relationships with a prospective moneylender, the borrower is likely to encounter low or zero monetary interest charges on the loan, because the moneylender feels adequately secure in his/her ability to get the principal back. Furthermore, indirect 'social interest' is obtained by the lender, due to the obligation of the borrower to reciprocate the lender's action—perhaps in a non-monetary form—whenever called upon to do so.

If, on the other hand, the personal relationships between the borrower and the moneylender are either non-existent or tenuous, then the expected risk of default becomes greater, the obligation on the borrower's part to reciprocate the lender's action in the future is lower, and thus the monetary interest charges on the loan are likely to be much higher. The risk is further aggravated for the majority of moneylenders operating in the rural areas because they operate without the required government authorization. If a borrower were to default on a loan, therefore, it would be virtually impossible for them to bring the case to court because of their
own illegal status.

With regard to the inflation rate (another potential component of nominal interest charges), borrowers and lenders are aware of inflationary conditions and sometimes make investments to take advantage of these conditions—for example, investing in livestock and reselling at a later date. However, it is difficult to judge the extent to which inflation figures into the lender's interest calculus, and it is safe to say that the expected risk of default discussed above is far and away the most important factor.

What is perhaps more interesting than the rates of interest charged, or even the magnitudes of loans obtained from informal sources, is the remarkably small role of the moneylender\(^1\) among the list of informal lenders in the study. This seems to belie the widespread belief of policymakers concerning the pervasive influence of village moneylenders. Only one loan out of 73 in the study is attributable to a moneylender. In the 1977-1978 study of Ogwashi-Uku cited above, two loans out of 39 were attributable to moneylenders; and in a 1972 study by Aluko et al., cited by Ojo (1976, p. 77), approximately 2.9% of financing by owners of small-scale enterprises in a survey of four States in Nigeria came from money-

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\(^1\)The question on sources of loans in the survey listed a variety of sources, one of which was the moneylender. Respondents were also free to mention sources not included on the list. No special care was taken to ensure that moneylenders were not excluded from borrowers' lists of sources, because there was no reason why respondents should leave out moneylenders as a source. Borrowers are not prosecuted for taking loans even from unregistered moneylenders. Respondents talked freely about the existence of moneylenders. However, the majority of them had not taken any loans from these moneylenders in the study year.
lenders. In his own survey of sources of finance in urban and non-urban areas of Ekiti Division, Ojo found that moneylenders were a source of finance for only 9% of the respondents in the non-urban areas (p. 62). In contrast, Akpabio (1979) found, in a case study of small-scale farmers in Cross-River State, that 55% of their loans came from moneylenders.

Some of the reported variations may arise from varying definitions of who and what moneylenders are, with some patron-client and other types of relationships defined as moneylender-borrower relationships, thereby broadening the scope of those considered. In this study, moneylenders have been defined as villagers engaged in lending money at agreed 'in-kind' or cash rates of interest to relatives or non-relatives alike, and who are perceived by their fellow villagers as moneylenders in the community. Despite the difficulty of generalization, what seems suggested by the data in this study, and in the other two cited above, is that relatively few people do borrow from moneylenders. Thus, excuses for low or negative interest rate credit policies as a means of driving out or reducing the influence of moneylenders in Nigeria may be self-deceptive, because the phenomenon of poor villagers in the clutches of these moneylenders appears to be relatively rare.

In any case, several Nigerian writers (Ojo, 1976; Igben, 1978) have argued the merits of moneylenders in Nigeria's rural areas as an extra source of timely credit in the community. Certainly, moneylenders themselves feel their role in the community to be an important one. They feel that they are obligated to lend money to farmers in need, even when they do not want to. This was the case with two unregistered moneylenders interviewed in one of the northern villages. They both stated that at
times when they were short of money for lending, they felt obligated to
go out and borrow money in order to take care of the needs of those who
came to them. The moneylenders see themselves as indispensable members
of the community playing a significant part, and feel that rather than
being antagonistic, government officials should make more resources avail-
able to them to enable them to better carry out their role. Though the
lenders may have an exaggerated sense of their own importance, they do
make the valid point that without them a few farm-households might have
to do without the credit that is perhaps necessary for their survival in
any given year.

In their concern with interest rates and loan sources in the informal
financial market, policy-makers tend to lay less emphasis on a point that
is perhaps of greater importance to the farmer-borrowers—and that is the

1The moneylenders interviewed were both wealthy farmer-traders who
had started in the moneylending business seven and ten years ago, not
because they wanted to make money from fellow villagers, they said, but
because their fathers had been lenders "helping" villagers out before them,
and they had to continue the tradition. They claimed that they charged
little or no interest, since Islamic law is clearly against this. When
taxed with the issue of how they could carry on this 'generosity' yearly
with little in return, they both admitted that some borrowers did pay
interest in cash, and that giving out loans allowed them tremendous influ-
ence in the community so that they could and did, in fact, call on borrow-
ers to render one or several days' labor services in their vast fields.
In many cases, this was the interest charge (often higher than would have
been the case had it been a straightforward cash transaction) and was
clearly understood by the borrowers as such.

The two moneylenders kept loan records, one in Arabic and the other
mentally. They were very flexible as to their clientele, though they pre-
ferred people they were very familiar with, or those who had easily sale-
able property, such as livestock. The lenders did not really inquire as
to loan purposes, although they were again more enthusiastic toward loans
taken for farming or trading. Both lenders noted that because of monetary
resource constraints, in any given year, they could fulfill only a few
of the loan requests received. In the study year, one lender granted six
out of 15 loan requests he received.
duration of informal sector loans. Of the 55 loans whose durations were
given in the sample survey, 50.9% were for a 6-12 month period. This is
comparable to the 6-9 month duration of government cooperative loans. A
substantial 36.4% of the 55 loans, however, were for a period of five
months or less, while only 12.7% were given for a period of over 12 months.
Compounding this problem of the short-term nature of the loans is that
of the uncertainty of the loan period agreed upon. That is, rural borrow-
ers stressed that before the end of the agreed-upon loan duration period
had been reached, lenders could, and frequently did, call on borrowers to
repay the loan. This might occur if the lender suddenly experienced cir-
cumstances requiring immediate or large monetary expenditures. In fact,
when asked to compare government and informal sources of loans, one of the
points in the government's favor, mentioned frequently by those surveyed,
is that once given the government (cooperative) loan, there is no fear of
being bothered about repayment until the agreed-upon loan period is up.

The short-term nature and the uncertainty of loan durations from
informal sources means that borrowers desiring loans for possible longer-
term agricultural or other types of investment—one to two years perhaps,
cannot rely on the informal financial market for such loans. Neither, at
present, can they rely on the formal system, because most of the loans
forthcoming from that source are only for a period of 6-9 months. It
appears, then, that there is a financial service gap (definitely felt by
some of the farmers surveyed) which formal loan sources can better fill.
The existence of this gap might be one of the problems that could be
meaningfully handled by a formal credit program in an effort to increase
small farmer agricultural production.
One of the salient facts that has emerged from the exploration of this assumption on availability, size, source, and costs of credit in the informal sector is that some credit is available to farmers in the various income categories. Moreover, credit can be obtained in sizeable enough amounts to cover a substantial proportion of current farming costs, should borrowers be interested in using their loans for this purpose. However, during the peak farming periods and within certain villages, outside credit sources may be necessary, as the informal financial market may not be capable of coping with the credit demand of all needy farmers.

Another important fact is that with regard to interest charges, a substantial proportion of informal sector loans do not incur monetary costs. For those that do, the charges are not necessarily high or exorbitant when compared with nominal interest charges of formal cooperative loans, and when other economic factors, such as high expected risk of default and high opportunity cost of capital, are considered. It also appears that the typical source of a loan in the rural areas is not the village moneylender, who, despite what people may feel are his shortcomings, serves a useful purpose as an extra source of credit in the community. Finally, the short-term nature and uncertainty of loan duration of informal sector loans presents a real problem to rural borrowers, especially those desirous of making potentially profitable longer-term investments in agriculture or other enterprises.
Assumption (3)

The existence of credit shortages prevents the adoption by farm-households of available modern technological inputs that could increase output.

It has been argued in the two sections above that at least some farmers can satisfy their credit needs from informal sources, and that farmers may not necessarily be interested in credit for purposes of agricultural investment. This implies that deficiencies in agricultural investment may not necessarily be due to lack of capital, but may stem from other more intractable problems, such as lack of profitability of agriculture, which could then be responsible for the disinterest in agricultural investment beyond the minimum necessary for farm-household survival. However, the belief in credit shortages as a major factor in input adoption and output increases in Nigerian agriculture is a deep-seated one and therefore merits further exploration.

Of the few modern inputs available in Nigeria's rural areas, fertilizer is the more common, and even then in some villages there are many farmers who have neither used it nor heard about it (e.g., see Okonjo, 1978).

Table 4-10 (columns 1, 2, and 3) show fertilizer use among different income groups of coop members (formal system, cooperative society borrowers) and non-coop members (non-members of the cooperative society) who had no formal system loans. The figures show that coop members tend to have a higher frequency of fertilizer use than non-coop members, and, in almost every instance, they spend twice as much as non-coop members on
### TABLE 4-10
FERTILIZER AND LABOR USE: COOP MEMBERS AND NON-COOP MEMBERS COMPARED IN THREE INCOME GROUPS
(All Money Values in N)

<table>
<thead>
<tr>
<th>Income Groups</th>
<th>(1) Number Using Fertilizer</th>
<th>(2) % Using Fert.</th>
<th>(3) Mean Fert. Exp.</th>
<th>(4) Mean Farm Exp.</th>
<th>(5) Fert. as % of Farm Exp.</th>
<th>(6) Mean Labor Exp.</th>
<th>(7) Labor as % of Farm Exp.</th>
<th>(8) Mean Farm Income</th>
<th>(9) Mean Total Income</th>
<th>(10) Mean Off-Farm Income</th>
<th>(11) Mean Farm Income as % of Total Income</th>
<th>(12) Mean Farm Exp.</th>
<th>Mean Number of Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-499</td>
<td>13 out of 18</td>
<td>72.2</td>
<td>7.1</td>
<td>74.2</td>
<td>118.0</td>
<td>6.0</td>
<td>62.7</td>
<td>296.9</td>
<td>346.0</td>
<td>49.1</td>
<td>2.5</td>
<td>6.8</td>
<td>124</td>
</tr>
<tr>
<td>Coop Members</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>20.7</td>
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</table>

*Numbers in parentheses in column (12) refer to number of respondents for whom this information was available.

**Source:** Field surveys.
fertilizer. This relationship holds even when controlled for region, as in Table 4-11 (columns 1, 2, and 3). The figures imply that there is truth in the belief that reception of subsidized credit leads to higher fertilizer use.

Other very plausible explanations, however, exist that could also account for the higher incidence of fertilizer use by coop members, and these throw doubt on the validity of a causal relationship between receiving of credit and higher fertilizer usage. Fertilizer is a commodity whose distribution is very much government-controlled, and therefore it is not freely or easily available on the open market. Cooperative society members often have fertilizer at subsidized prices delivered to their societies along with cash credit, thereby making purchase of the commodity much easier for them. In fact, in some cases—as was encountered in one of the survey villages, Araromi in the south—cooperators are made to sign agreements upon receiving cash credit that they will spend a certain amount of the credit on the purchase of government-supplied fertilizer and chemicals. Such cooperative society members also imbibe more knowledge from visiting government cooperative officers and extension agents as to the usefulness of fertilizers.

There is little wonder, then, that higher fertilizer usage would be encountered within this group of coop members. What is in fact remarkable—given their greater difficulty in purchasing fertilizer and the higher prices paid—is the fairly high percentage of farmers using fertilizer among the group of non-coop members from the same villages as the coop member group. This means that one of the positive side effects of having a government cooperative society, whose members are introduced to the use
<table>
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<th>(1) Number</th>
<th>(2) %</th>
<th>(3) Mean</th>
<th>(4) Mean</th>
<th>(5) Mean</th>
<th>(6) % as % of</th>
<th>(7) Mean</th>
<th>(8) Mean</th>
<th>(9) Mean Total Cash Income</th>
<th>(10) Mean Off-Farm Income</th>
<th>(11) Mean Farm Income</th>
<th>(12) Mean Number of Acres</th>
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<td>76.8</td>
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<td>50.0</td>
<td>176.0</td>
<td>328.0</td>
<td>15.2</td>
<td>51.8</td>
<td>1290.0</td>
<td>1890.0</td>
<td>600.0</td>
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<td>15.0 (3)</td>
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<td>124.3</td>
<td>171.3</td>
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<tr>
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<td>35.9</td>
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<td>406.1</td>
<td>8.8</td>
<td>71.7</td>
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<td>882.8</td>
<td>216.6</td>
<td>1.8</td>
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<td>18.5</td>
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<td>5.0</td>
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<td>954.0</td>
<td>272.5</td>
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<td>1500 and Above</td>
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<td>99.8</td>
<td>942.5</td>
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<td>75.1</td>
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<td>3376.5</td>
<td>536.7</td>
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<td>62.9</td>
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<td>3123.7</td>
<td>1118.5</td>
<td>2.4</td>
<td>63.7 (10)</td>
</tr>
</tbody>
</table>

* Numbers in parentheses in column (12) refer to the number of respondents for whom this information was available.

N.A. = Not Available

SOURCE: Field surveys.
of modern inputs, may be the demonstration effect on non-coop members in the same village.\(^1\)

The temptation to deduce a causal effect between credit and fertilizer use is further dampened by the fact that those non-coop members who borrowed informally do no better, and in most cases perform worse, than those who took no informal loans, in terms of incidence of fertilizer use and amounts spent (see Table 4-10, rows 4, 5, 9, 10, 14, and 15). It is, therefore, highly likely that in present Nigerian agriculture, there is very little causal effect of credit (subsidized or otherwise) on higher fertilizer usage. In fact, it could be argued that should non-coop members have the same access to subsidized fertilizer, and the same knowledge as coop members, there would be little or no difference in fertilizer usage between the two groups.

Figures in Table 4-10, column 6 show that for coop members and non-coop members alike, expenditure on fertilizer is a fairly low percentage of total farm expenditures. Therefore, the bulk of expenditures must go to labor and other items. It would be expected, then, that were subsidized credit recipients (coop members) to be primarily interested in investing their credit in agricultural production, they would spend significantly more than non-coop members on farm expenditures. This would appear to be the case on an aggregate level from the mean farm expenditure figures of ₦566.5 for coop members and ₦356.2 for non-coop members. These figures, however, merit a more disaggregated look, as was done earlier in Table 4-2.

\(^1\)Observations on fertilizer use in a control group of villages with no cooperative societies would be necessary in order to make definitive statements on a demonstration effect.
When farm expenditure figures are broken down by cash income group and by region, as in columns 5 of Tables 4-10 and 4-11, coop members do not consistently spend more than non-coop members in all the income groupings.¹ This finding is better illustrated in Table 4-12, which shows the F-statistic and significance levels pertaining to a difference of means test between mean farm expenditures of coop members and non-coop members for each income group. The null hypothesis is that there are no statistically significant differences in mean farm expenditures of coop members and non-coop members by income groupings. If the decision rule is to reject the null hypotheses at or below the 5% level of significance, as is conventional, then it is obvious from the figures in Table 4-12 that the null hypotheses cannot be rejected for all except one income group. This exception is for the lowest income group in the northern villages, where the much higher farm expenditures by coop members of this group may be attributable to a desire on their part for greater per capita household food consumption.

This view is supported by the fact that while mean household sizes for coop members and non-coop members in this group are the same, at 12 members per household, there is no (as will soon become clear) statistically significant difference in mean cash farm incomes (marketable surplus) between the two groups; neither is there any real difference in off-farm incomes (Table 4-11, column 10). This must imply that for this small group

¹There is admittedly a trend showing coop members spending more than non-coop members in most of the groups. However, the important point is whether these larger mean expenditures are significant in a statistical sense. This is tested in Table 4-12.
### TABLE 4-12

**MEAN FARM EXPENDITURES OF COOP MEMBERS AND NON-COOP MEMBERS COMPARED BY INCOME GROUP AND REGION**

(Expenditures in ₦)

| Total Cash Income Group | Coop Members | Non-Coop Members | F-statistic | Significance $^1$
|------------------------|--------------|------------------|-------------|----------------
|                        | Entire Sample|                  |             |                |
| 0 - 499                | 118.2        | 92.8             | 1.63        | 0.21          |
| 500 - 1499             | 329.3        | 345.3            | 0.03        | 0.86          |
| 1500 and Above         | 1112.8       | 782.5            | 2.13        | 0.15          |
|                        | **Southern Villages** |              |             |                |
| 0 - 499                | 107.2        | 97.7             | 0.17        | 0.68          |
| 500 - 1499             | 225.4        | 294.8            | 0.98        | 0.33          |
| 1500 and Above         | 641.2        | 328.0            | 0.85        | 0.39          |
|                        | **Northern Villages** |              |             |                |
| 0 - 499                | 173.3        | 75.5             | 9.20        | 0.02          |
| 500 - 1499             | 452.8        | 370.6            | 0.32        | 0.58          |
| 1500 and Above         | 1230.7       | 843.1            | 2.35        | 0.13          |

$^1$For a brief explanation of the significance level, the F-statistic, and the test used in this and similar tables, see Appendix C.

**SOURCE:** Field surveys.
of coop members, unlike their counterparts in the south and in other income groups, who seem more interested in off-farm activities, credit is being spent on farming.

It is a possibility then (although there is no evidence available on this) that food increases resulting from the farm expenditures are not being marketed (as the government would have hoped) but consumed. The difference in farm expenditures observed for this income group, coupled with the high, though non-significant, differences in the highest income group in the north (significance level 0.13) account for the statistically significant differential (at the 3% level) between mean farm expenditures for coop members (₦ 566.5) and non-coop members (₦ 356.2) when both groups are considered at an aggregate level.

A look at mean cash farm incomes (a proxy for marketable surplus) at a disaggregated level reveals patterns similar to those discussed above for expenditures (see Tables 4-10 and 4-11, columns 8, and Table 4-13). Again, given a little flexibility in the decision rule for hypothesis testing discussed above, only one group, the highest income group in the north (where differences in farm expenditures were also high), exhibits statistically significant differences (at the 6% level) in mean cash farm incomes. As before, differences in this group help explain statistically significant differences (at the 2% level) in mean cash farm incomes between coop members (₦ 1320.3) and non-coop members (₦ 858.3) when both groups are considered at an aggregate level.

Finally, if coop members and non-coop members are compared on their ability to generate marketable surplus per Naira of farm expenditure, coop members, on the average, do no better than non-coop members. This is true
TABLE 4-13
MEAN CASH FARM INCOMES OF COOP MEMBERS AND NON-COOP MEMBERS
COMPARED BY INCOME GROUP AND REGION
(Cash Incomes in N)

<table>
<thead>
<tr>
<th>Total Cash Income Group</th>
<th>Coop Members</th>
<th>Non-Coop Members</th>
<th>F-statistic</th>
<th>Significance</th>
</tr>
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<td></td>
</tr>
<tr>
<td><strong>Entire Sample</strong></td>
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<td></td>
</tr>
<tr>
<td>0 - 499</td>
<td>296.9</td>
<td>234.7</td>
<td>2.25</td>
<td>0.14</td>
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<td>787.7</td>
<td>0.19</td>
<td>0.66</td>
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<td>2613.2</td>
<td>1921.1</td>
<td>3.23</td>
<td>0.08</td>
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<td><strong>Southern Villages</strong></td>
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</tr>
<tr>
<td>0 - 499</td>
<td>288.6</td>
<td>218.6</td>
<td>2.53</td>
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<tr>
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<td>338.3</td>
<td>291.2</td>
<td>0.16</td>
<td>0.70</td>
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<td>0.01</td>
<td>0.91</td>
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<td>2839.8</td>
<td>2005.2</td>
<td>3.69</td>
<td>0.06</td>
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</table>

SOURCE: Field surveys.
both on a disaggregate level (Tables 4-10 and 4-11, column 11) and on an aggregate level, where the cash farm income generated by coop members and non-coop members per Naira of expenditure is N 2.3 and N 2.4, respectively. It should be noted that for the disaggregate information presented above on mean farm expenditures and mean cash farm incomes, changing the income groupings changes actual figures in each category, but does not change the major trends and conclusions suggested by the data in the discussion above. (See Appendix B.)

What light does all the information presented in this section throw on the validity of the assumption being examined? So far, it has been argued that the higher expenditures on fertilizer by coop members cannot be wholly or even largely attributed to credit availability as such, because coop members have greater access to, knowledge about, and cheaper prices for fertilizer. Furthermore, even for coop members, the level of expenditure on fertilizer is low when compared with other inputs, such as labor.¹ In terms of farm expenditures and cash farm incomes, the evidence available points to the fact that the higher mean aggregate figures observed for coop members are attributable to one or two income groupings in the north of the country. For the majority of the income groupings, the differences between coop members and non-coop members' mean farm expenditures and cash farm incomes are not statistically significant.

¹More importantly, the level of expenditure on fertilizer is probably very low when compared with the expectations of government officials concerning fertilizer use by coop members.
Given these pieces of suggestive evidence, it is difficult to accept the validity of the assumption that lack of credit is the major factor in low levels of modern input adoption and in the lack of increases in the marketable surplus. Other possible constraints on agricultural production have been mentioned in earlier sections of this chapter and will be discussed in Chapter Five.

Assumption (4)

Such credit as is provided by the formal system must be given at low or concessional rates of interest in order to persuade farmers to borrow, since their demand for credit is highly interest elastic.

It is virtually an article of faith in most developing countries that credit should be given to farmers at low or negative real rates of interest. A number of reputable economists (Gonzalez-Vega, 1976; McKinnon, 1973; Shaw, 1973; Adams, 1978), in sharp contrast, have argued the merits of allowing the forces of supply and demand to play as much of a part as possible in setting the prices (interest rates) for credit (see Chapter Two). These same economists have pointed out the distortions and inefficiencies in allocation that arise from concessional interest rate policies. Some of these economists have argued that the hidden or transaction costs of credit (bribes, transport costs, costs of hours lost at work, etc.) in most developing countries are so high that these costs may ultimately be more important to the small farmer than the nominal interest costs. They have pointed out that in many cases, lenders may impose high transaction costs on small-farmer borrowers in order to discourage these borrowers
from seeking loans. This is because of low profitability margins on small farmer loans which render such loans unattractive. If governments could move away from concessional interest rate policies (while maintaining attractive margins of profitability for lenders), many of the barriers to small-farmer borrowing listed above would be eliminated. Small farmers would have better access to credit, and many of the allocational inefficiencies that arise when small farmers are in effect excluded from getting loans would also be eliminated.

Despite the intellectual force of these arguments, developing country governments have continued to insist on low or concessional interest rate policies that often do poorly with regard to their welfare objectives. This insistence on low interest credit policies is partly a result of the "moneylender mentality" discussed earlier in this chapter. That is, there is a feeling that it is wrong to make money out of the plight of a needy person (as people believe moneylenders do). Part of the insistence could also be attributed to political motives. It is easy to use cheap credit as a way of currying and buying "favor votes" from the poor. Though the majority of these people may never receive the credit, they are left with the feeling of a sympathetic government trying to help poor farmers. Furthermore, low interest credit may benefit the politically powerful, who will be loath to see a revision of such policies (Ladman, 1979).

In Nigeria, the assumed unwillingness of rural farmers to borrow unless interest rates are very low is used as another excuse for concessional interest rate policies, which in actual fact deprive the rural areas, and particularly poorer rural farmers, of one important source of credit, namely, commercial banks (see section below).
It has been shown in the discussion under assumption (2) that for informal loans incurring interest charges, farmers seem willing to pay fairly high charges (up to and above 30% per annum) to obtain a loan. This willingness could be partly explained by the fact that some of the borrowers may need a certain amount of cyclical consumption credit to tide them over until harvest time. They are, therefore, prepared to pay high rates to obtain the necessary survival amounts. For other borrowers who might be interested in off-farm activities, as long as the returns from such activities exceed the rate of interest, they would be willing to borrow at what might be perceived as high rates.

Table 4-14 displays attitudes toward higher interest rates among the study sample. In the villages surveyed, three sets of nominal per annum interest charges prevailed on formal (cooperative) loans: these were 20% in the northern villages of Turawa, Yakasai, and Giwa; 18% in the western village of Araromi; and 12% in the eastern village of Nomeh. Effective interest charges in these villages could be slightly higher if the minimum amount of ₦ 10-12 that must be used to purchase a compulsory number of shares in the society (before obtaining a loan) is taken into account. The table shows that the majority of respondent farmers surveyed would have been willing to pay twice the current amount being charged in order to obtain the loan amounts given out. Non-coop members show an even greater willingness to pay, indicating their greater desire for access to the formal loans from which coop members are benefitting. A minor, though significant, percentage of both coop members and non-coop members would even have been willing to pay up to three times the current charges in order to obtain loans.
TABLE 4-14
ATTITUDES TOWARD HIGHER INTEREST CHARGES

<table>
<thead>
<tr>
<th></th>
<th>Cooperative Society Members</th>
<th></th>
<th>Non-Members of Cooperative Societies</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pay Twice Current Charges (24-40% P.A. Nominal)</td>
<td>Pay Triple Current Charges (36-60% P.A. Nominal)</td>
<td>Pay Twice That Currently Paid by Coop Members In Your Area (24-40% P.A. Nominal)</td>
<td>Pay Triple That Currently Paid by Coop Members In Your Area (36-60% P.A. Nominal)</td>
</tr>
<tr>
<td></td>
<td>Number</td>
<td>%</td>
<td>Number</td>
<td>%</td>
</tr>
<tr>
<td>Unconditionally Willing to Pay</td>
<td>57</td>
<td>68.7</td>
<td>18</td>
<td>21.7</td>
</tr>
<tr>
<td>Not Willing to Pay</td>
<td>24</td>
<td>28.9</td>
<td>51</td>
<td>61.4</td>
</tr>
<tr>
<td>Conditionally Willing to Pay</td>
<td>2¹</td>
<td>2.4</td>
<td>14²</td>
<td>16.9</td>
</tr>
<tr>
<td>TOTAL</td>
<td>83</td>
<td>100.0</td>
<td>83</td>
<td>100.0</td>
</tr>
</tbody>
</table>

¹Conditions stipulated: (a) if marketing produce becomes easier; (b) if there are no other loan sources.

²Conditions stipulated: (a) money must arrive at appropriate time, i.e., during beginning of planting season (4 respondents); (b) willing to pay triple if amount given is substantially higher than current amount (1 respondent); (c) if marketing produce becomes easier and gains can be made (6 respondents); (d) if others in group agree (1 respondent).

³Condition stipulated: if there is no other source (2 respondents).

⁴Conditions stipulated: (a) if money amount large enough (1 respondent); (b) if there are no other sources (3 respondents).

SOURCE: Field surveys.
Some of the conditions stipulated by those conditionally willing to pay are indicative of the organizational and policy problems that beset credit policy and agriculture itself. The failure of credit to arrive at the height of the planting season, when it is most needed for production and consumption, poses an organizational problem that has been repeatedly pointed out by researchers in the Nigerian case, while the inability in the village of Nomeh, for instance, to make gains from locally produced rice due to massive government importation of superior quality rice is a policy problem. This latter point is dealt with in more depth in Appendix A and in Chapter Five.

The figures in Table 4-14 suggest that farmers' demand for credit is relatively interest inelastic. The range of interest rates at which the demand for credit would significantly diminish is fairly high. This finding contradicts policy-makers' common presumption that the demand for credit by farmers is highly interest elastic. Given the figures in Table 4-14, there may be little justification for the very low or negative real rates of interest currently being charged.

When respondents' answers on interest rates are disaggregated by region and nominal interest charged, as in Table 4-15, an interesting fact emerges. Western village respondents are much less willing than their counterparts to pay higher interest charges. This holds for coop members and non-coop members alike, although the latter (as was found for the entire sample in Table 4-14) are much more amenable to higher interest charges. There are certain facts particular to this village that might help explain the difference in attitudes.
### TABLE 4-15

**ATTITUDES TOWARD HIGHER INTEREST RATES BY REGION**

<table>
<thead>
<tr>
<th>Northern Villages (Current Nominal Rate 20% P.A.)</th>
<th>Coop Members</th>
<th>Non-Coop Members</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Twice as Much</td>
<td>Three Times as Much</td>
</tr>
<tr>
<td>Unconditionally Willing to Pay</td>
<td>91.0%</td>
<td>31.1%</td>
</tr>
<tr>
<td>Not Willing</td>
<td>8.9</td>
<td>55.6</td>
</tr>
<tr>
<td>Conditionally Willing</td>
<td>0</td>
<td>13.3</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td></td>
<td>86.7%</td>
<td>36.7%</td>
</tr>
<tr>
<td></td>
<td>13.3</td>
<td>60.0</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>3.0</td>
</tr>
<tr>
<td></td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Western Village (Current Nominal Rate 18% P.A.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unconditionally Willing to Pay</td>
</tr>
<tr>
<td>Not Willing</td>
</tr>
<tr>
<td>Conditionally Willing</td>
</tr>
<tr>
<td>TOTAL</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Eastern Village (Current Nominal Rate 12% P.A.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unconditionally Willing to Pay</td>
</tr>
<tr>
<td>Not Willing</td>
</tr>
<tr>
<td>Conditionally Willing</td>
</tr>
<tr>
<td>TOTAL</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

**SOURCE:** Field surveys.
In the western village of Araromi, the effective interest charges are slightly higher than the nominal charges. Even barring the inclusion of amounts paid for cooperative society shares, etc. in the interest rate calculations, effective interest charges come to 22% per annum, as compared with the 18% nominal rates. This is because the government agency that gives the cooperative the loans in this instance deducts the interest payments before the loan is given out. In this village also (much more than in the others), well-organized informal loan sources exist that provide an attractive alternative to cooperative loans. These are the indigenous non-rotating savings associations. There are many of these associations, and some have saved up several thousand Naira that are available for lending.

Nominal interest charges in the village range from 0 to 60% per annum, with the modal interest charge for the savings associations coming to 18%, and a mean interest charge for the village loans in the survey of 24% per annum. It could be that the greater availability of loan sources willing to lend fairly high amounts (₦ 100 upwards) in this village has given the inhabitants more freedom to worry about rates of interest. And, as depicted in Figure 4-2(a), the effective formal loan rate of 22% per annum (P₂) may very well be close to the equilibrium market rate of interest (P₁) in the village; hence, the greater reluctance to pay interest charges twice or three times the formal rates, which would really be 44% and 66% per annum if the effective interest charge is taken as the base rate.

For the northern villages, probably because of Moslem customary law, there is a greater percentage of loans bearing no interest charges—84%, as compared to 69.6% in the west and 46.6% in the east. The fewer alter-
native sources for borrowing in the informal financial markets of the north may account for the expressed willingness to pay high rates as a means of guaranteeing loan availability. In the eastern village, however, there are many more informal loan sources than in the north, but a greater tendency to charge interest. In this situation, the formal cooperative rate of interest ($P_2$) may be considerably below the village equilibrium rate ($P_1$), as depicted in Figure 4-2(b). This notion is supported by the fact that nominal interest charges in this village range from zero to 124% per annum. The mean rate is 43.3%, and it is far above the 12% nominal rate charged by the cooperative society.
The differing attitudes toward higher interest charges in the three sets of villages has interesting policy implications. It suggests that arbitrary attempts to set interest rates without reference to the prevailing credit environment (e.g., alternative loan sources, charges in the informal credit market, etc.) could result in rates that are too high and thus unattractive to the area borrowers. Or, as is more frequently the case, the result can be rates that are too low. Such low rates create allocational problems. They also render potential borrowers unattractive to non-governmental lenders, such as commercial banks.

Other evidence supportive of the contention that Nigerian farmers worry much less about interest rates than is generally supposed comes from an unpublished 1979 study conducted by Igben, using a sample of farmers in Borno State. In this study, farmers were asked to rank lenders' attributes according to the ones they found important. On a scale of 1 to 6 (with 1 being the most important), the majority of farmers ranked cost of loan as fifth behind attributes such as lender's knowledge of farming, lender's willingness to lend at any time, simplicity of lending process, etc. Miller (1977) reports on a survey conducted among small maize and rice farmers in three divisions in Nigeria. Asked what they would be willing to pay for the loan they had already stated they would request, if additional credit were made available, the farmers provided answers that showed "considerable support for the view that small farmers would be quite willing to pay higher rates than they are commonly charged by government credit agencies."¹ (Agricultural Credit and Finance in Africa, p. 25).

¹This willingness to pay higher rates would very likely be strongly related to the size of loans being offered.
In view of the evidence presented above, it would seem that the assumption that farmers need low nominal or very low to negative real rates of interest in order to persuade them to borrow is invalid. Therefore, current formal interest charges by cooperatives, but especially by commercial banks (who are allowed by government to charge only 4–6% nominal per annum rates on production loans), cannot be justified by quoting the supposed wishes of rural farmers. Such charges must then be reviewed, particularly in light of the distortions being caused in the behavior of formal rural financial institutions. Such distortions will be discussed in the next section.

Assumption (5)

The current distribution mechanisms for credit can, with little or no modification, ensure access to poor farmers.

To anyone familiar with recent investigations into developing country credit programs, the inequities of access to credit might appear to be so universally true as not to warrant further investigation or proof in any developing country. Yet in the Nigerian case, a more in-depth enquiry is called for, because the fundamental causes and extent of inequities are neither obvious to nor fully appreciated by policy-makers. It is true that the policy-makers recognize that rural areas are deficient in financial services, and they have recently legislated the establishment of commercial banks in selected rural areas as a remedy to this situation. This legislation, however, involves a cosmetic rather than a structural change, because it does not deal with the fundamental attitudes and prac-
tices of the banks toward rural borrowers. Neither does it recognize interest rate policy as an important root cause of these attitudes.

In this section, the existence and extent of inequities in access to credit from the formal distribution mechanism will be examined, and the fundamental causes of inequities, wherever they exist, will be discussed. The formal institutions involved in the channeling of credit to agriculture and to rural areas have been described in Chapter Three, as has the extent of the institutions' coverage of the rural areas and the concessional interest rate structure to which they are subject. Since cooperatives and commercial banks are the two sets of institutions supposed to play the largest role in channeling credit directly to rural farmers, they will be examined further to determine what problems exist with regard to access to rural farmers in general, and poorer rural farmers in particular.

Commercial banks in Nigeria have long been noted for their reluctance to serve agriculture and the rural areas. This reluctance has been discussed at length in Chapter Three. It has often been attributed to the domination of the commercial banking system by foreign interests concerned only with financing export-import trade (or manufacturing) undertaken by individuals and firms from their metropolitan countries. (Report on Nigerian Financial System, 1976) While there may be some truth in this assertion, it can only serve as a partial explanation for commercial bank behavior, because, as is clear from Table 4-16, indigenous (wholly Nigerian-owned) banks have often performed no better than expatriate-controlled banks with regard to their meeting up to the Central Bank's minimum lending ratio for the agricultural sector.
### TABLE 4-16

**COMMERCIAL BANK PERFORMANCE COMPARED TO CENTRAL BANK PRESCRIBED RATIOS**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Bank Prescribed Ratio</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PRODUCTION</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Agriculture, Forestry, Fishing</td>
<td>45.0</td>
<td>42.6</td>
<td>45.7</td>
<td>37.4</td>
<td>48.0</td>
</tr>
<tr>
<td>- Manufacturing</td>
<td>30.0</td>
<td>25.7</td>
<td>30.7</td>
<td>17.4</td>
<td>30.0</td>
</tr>
<tr>
<td>- Mining &amp; Quarrying</td>
<td>4.0</td>
<td>3.7</td>
<td>6.8</td>
<td>6.8</td>
<td>2.0</td>
</tr>
<tr>
<td>- Real Estate &amp; Construction</td>
<td>7.0</td>
<td>10.5</td>
<td>10.1</td>
<td>11.0</td>
<td>10.0</td>
</tr>
<tr>
<td>SERVICES</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Public Utilities</td>
<td>11.0</td>
<td>7.6</td>
<td>7.9</td>
<td>7.2</td>
<td>10.0</td>
</tr>
<tr>
<td>- Transportation &amp; Communication</td>
<td>3.0</td>
<td>0.9</td>
<td>1.1</td>
<td>0.6</td>
<td>2.0</td>
</tr>
<tr>
<td>OTHERS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Credit &amp; Financial Institutions</td>
<td>8.0</td>
<td>6.7</td>
<td>6.7</td>
<td>6.6</td>
<td>8.0</td>
</tr>
<tr>
<td>- Governments</td>
<td>12.0</td>
<td>18.1</td>
<td>12.0</td>
<td>28.0</td>
<td>10.0</td>
</tr>
<tr>
<td>- Personal &amp; Prof.</td>
<td>2.0</td>
<td>2.5</td>
<td>2.8</td>
<td>1.8</td>
<td>2.0</td>
</tr>
<tr>
<td>- Miscellaneous</td>
<td>6.0</td>
<td>6.8</td>
<td>4.4</td>
<td>10.8</td>
<td>4.0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Another very plausible explanation, suggested by Fabiyi and Ekong (1979) can be found in the economics of the commercial bank situation with regard to agricultural sector lending. Commercial banks are allowed to charge 4-6% nominal per annum interest on agricultural production loans (the loans of major interest in this study). They are currently required to pay a 5% per annum nominal rate on passbook savings deposits. If the banks concentrated on agricultural production lending, the above rates would leave them, at most, only a 1% margin for covering loan-processing costs and the risks involved with agricultural loans. Is is, therefore, not surprising that banks consistently underperform (more than in other sectors) with regard to meeting the Central Bank prescribed minimum ratio for agricultural lending (Table 4-16).

Neither is it irrational that commerical bank loan volume to agriculture is relatively small (Table 4-17) when compared with economically less important sectors, such as Personal and Professional, which enjoy higher commercial loan interest charges of up to 11% and fewer lending risks. Browbeating and threat of punitive measures by the Central Bank, as well as the oil-generated financial boom in the country in the mid-1970s, have accounted for apparent improvements in commercial bank performance toward agricultural lending. However, that performance, as discussed in Chapter Three, still leaves much to be desired.

Given the government mandate to provide low interest loans to agriculture and the realities of profit and loss mentioned above, commercial banks would theoretically be interested in supplying the smallest volumes of credit to agriculture. If the prescribed interest rate to be charged is represented as \( P_2 \) (see Figure 4-3 below), commercial banks would be
interested in supplying quantity \( q_1 \) of credit instead of quantity \( q_3 \) demanded at the prescribed rate of interest.

As discussed in Chapter Two, in this situation the commercial bank would resort to rationing the loans, looking for less risky borrowers, and giving larger loans with smaller processing-cost-to-loan ratios. Such methods would clearly militate against poorer and smaller borrowers in agriculture.

That the commercial banks in Nigeria practice forms of rationing detrimental to the interests of rural borrowers in general, and poorer rural borrowers in particular, is clear from their scanty geographical presence in the rural areas (see Chapter Three), and from their insistence on unavailable collateral as guarantees for loans. For example, in 1975,
### TABLE 4-17

**ANALYSIS OF COMMERCIAL BANK LOANS AND ADVANCES (N '000s)**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Agriculture, Forestry &amp; Fishing</td>
<td>6,992</td>
<td>9,272</td>
<td>19,246</td>
<td>21,588</td>
<td>27,166</td>
<td>37,370</td>
</tr>
<tr>
<td>2. Mining &amp; Quarrying</td>
<td>6,584</td>
<td>11,624</td>
<td>10,156</td>
<td>6,280</td>
<td>12,165</td>
<td>16,288</td>
</tr>
<tr>
<td>3. Manufacturing</td>
<td>76,388</td>
<td>119,716</td>
<td>143,984</td>
<td>182,173</td>
<td>258,484</td>
<td>410,683</td>
</tr>
<tr>
<td>4. Real Estate &amp; Constr.</td>
<td>25,956</td>
<td>37,396</td>
<td>49,180</td>
<td>76,561</td>
<td>97,790</td>
<td>212,781</td>
</tr>
<tr>
<td>5. Public Utilities</td>
<td>678</td>
<td>3,642</td>
<td>5,162</td>
<td>3,552</td>
<td>7,265</td>
<td>17,114</td>
</tr>
<tr>
<td>6. General Commerce</td>
<td>167,542</td>
<td>221,204</td>
<td>222,188</td>
<td>274,635</td>
<td>284,992</td>
<td></td>
</tr>
<tr>
<td>(a) Exports</td>
<td>(69,544)</td>
<td>(91,652)</td>
<td>(90,342)</td>
<td></td>
<td>(91,705)</td>
<td>(100,593)</td>
</tr>
<tr>
<td>(b) Imports</td>
<td>(59,934)</td>
<td>(63,102)</td>
<td>(50,184)</td>
<td></td>
<td>(81,137)</td>
<td>(230,584)</td>
</tr>
<tr>
<td>(c) Domestic Trade</td>
<td>(32,210)</td>
<td>(56,426)</td>
<td>(73,656)</td>
<td></td>
<td>(98,137)</td>
<td>(144,308)</td>
</tr>
<tr>
<td>(d) Bills Discounted</td>
<td>(5,854)</td>
<td>(10,024)</td>
<td>(8,006)</td>
<td></td>
<td>(14,013)</td>
<td>(28,215)</td>
</tr>
<tr>
<td>7. Transportation &amp; Communication</td>
<td>18,974</td>
<td>31,786</td>
<td>44,378</td>
<td>51,748</td>
<td>65,939</td>
<td>81,950</td>
</tr>
<tr>
<td>8. Credit &amp; Financial Institutions (a)</td>
<td>2,722</td>
<td>5,778</td>
<td>14,236</td>
<td>11,823</td>
<td>21,653</td>
<td>51,552</td>
</tr>
<tr>
<td>9. Governments</td>
<td>1,296</td>
<td>3,592</td>
<td>9,016</td>
<td>17,639</td>
<td>31,693</td>
<td>37,306</td>
</tr>
<tr>
<td>10. Personal &amp; Professional</td>
<td>23,260</td>
<td>33,136</td>
<td>61,928</td>
<td></td>
<td>62,360</td>
<td>84,796</td>
</tr>
<tr>
<td>11. Miscellaneous</td>
<td>20,958</td>
<td>24,876</td>
<td>40,026</td>
<td>107,451</td>
<td>68,560</td>
<td>83,783</td>
</tr>
<tr>
<td>TOTAL</td>
<td>518,892</td>
<td>723,226</td>
<td>841,698</td>
<td>753,450</td>
<td>938,067</td>
<td>1,537,327</td>
</tr>
</tbody>
</table>

1 Detailed information from this source is currently available only until 1975.

nearly 80% of commercial banks' loans and advances outstanding were secured, 28% of the total being secured against real estate. (Report of the Committee on the Nigerian Financial System, 1976, p. 16) This insistence continues even under the Agricultural Credit Guarantee Scheme set up by the government in 1977 to aid agriculture in general, and small farmers in particular, in obtaining loans.

Since Central Bank directives urge the commercial banks to treat all the applications under the Guarantee Scheme "with the same degree of diligence, good faith and competence with which they would normally be expected to treat all applications for loans received in the normal course of their banking business" (Guidelines to the Agricultural Credit Guarantee Scheme, p. 2), the banks have even more of an excuse to continue asking for the popular forms of collateral, such as real estate, life insurance policies, stocks and shares, which effectively exclude rural and poor borrowers.

Table 4-18 is an attempt to examine who gets the loans from commercial banks under the Agricultural Credit Guarantee Scheme (ACGS). The table contains very scanty information, both because of the reluctance of the banks to give out what they consider to be private information and because of poor record keeping at various banks. Seven out of 19 banks were sampled. Only five were able and willing to provide even the limited information in Table 4-18, and, as noted earlier, before the information was released the author had to promise not to mention the actual names of the banks. The three largest commercial banks in Nigeria mentioned in Chapter Three, however, are represented among the five in Table 4-18. Loans to three categories of borrowers, individuals, limited liability firms, and cooperative societies are depicted in the table.
<table>
<thead>
<tr>
<th>Category of Borrowers</th>
<th>Bank A (as of April 27, 1979)</th>
<th>Bank B (May 1978 to May 1979)</th>
<th>Bank C (Amounts Recommended for Approval Sept. 1978 to June 1979 by Recommending Officer)</th>
<th>Bank D (as of April 1979)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of Loans</td>
<td>Total Amount Granted</td>
<td>Total Amount Requested by Grantees</td>
<td>Amounts Recommended for Approval</td>
</tr>
<tr>
<td>Individuals</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limited Liability</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Firms</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cooperative Societies</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(continued on following page)
TABLE 4-18
(continued)

<table>
<thead>
<tr>
<th>Category of Borrowers</th>
<th>Number of Loans</th>
<th>Total Amount Granted</th>
<th>Total Amount Requested by Grantees¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individuals</td>
<td>40</td>
<td>474,731</td>
<td></td>
</tr>
<tr>
<td>Firms</td>
<td>5</td>
<td>196,878</td>
<td></td>
</tr>
<tr>
<td>Cooperative Societies</td>
<td>8</td>
<td>700,000</td>
<td></td>
</tr>
</tbody>
</table>

¹Information on total amount requested by everyone (grantees and others) applying for funds was either not available or was not released to the researcher during field surveys.

²The total amount granted in this case was more than the amount requested, probably because the Bank considered that one or two of the cooperative societies required more money than requested in order to successfully carry out the proposed projects.

³Only information on the two loans granted was provided by this bank.

SOURCE: Field surveys.
The category 'individuals' represents individual direct borrowers from the bank headquarters and their branches. Since the majority of the country's farmers are to be found in the rural areas, a preponderance of rural-based borrowers would have been expected, especially under a scheme developed to assist small farmers. This was not, however, the case from the information revealed to the author through the names, titles, and positions of these borrowers. This information (which, because of bank rules, could not even be extracted in writing from their records) showed the predominance of urban-based 'farmers' (university lecturers and their wives, army officers and their wives, school teachers, top ranking civil servants, businessmen, and private sector managers), who would have the type of collateral demanded by the banks. A few rural-based farmers were included, but they were mostly the rural elite, such as village heads and district clerks. One bank did give upwards of ten loans to small non-elite rural farmers, but these were farmers involved in a World Bank scheme, and their loans had been granted with special recommendations from the scheme.

Limited liability firms are registered firms claiming to be involved in agricultural activities. Cooperative societies, as seen in previous sections, represent groups of rural farmers. The figures in the table show the loans that were actually granted by the banks to each of these groups. Except in the case of Bank A, where the author was told that no cooperative societies had applied, and Bank C, where figures on number of loans recommended for approval and number actually approved were given, there is no indication of how many applications were turned down. The figures show that individuals and firms received the bulk of the total
number of loans granted by the banks as of the dates reported in the table. Cooperative societies received less. These societies may not apply for loans, as in the case of Bank A, because they may get enough from government sources. However, the societies are also reluctant to try commercial banks, because they often face the same barriers as individual rural borrowers. They may not have the types of collateral or security attractive to the commercial banks, and could be turned down for loans unless they can obtain a government agency or ministry guarantee to back up their requests. And commercial banks are not, of course, interested in wooing cooperative societies.

In cases where cooperative societies do apply, their treatment is uncertain. They may receive favorable treatment, as in Banks B and E, or their requests could be completely denied, as was the case with amounts actually approved in Bank C. Although cooperative society membership sizes were not available to the author in this case, it is clear (if the range of sizes of 45 to 140 members found during the survey is taken as an indication) that each cooperative society member may receive no more than a few hundred, or at most a thousand, Naira by the time their loan is shared out among all members. This is in contrast to the urban-based individual borrowers whose per capita loan shares run, on the average, into several thousand Naira.

The differential in loan shares could be partly explained by the fact that the agricultural expenditures outlined by the urban-based borrowers run several times higher than those of their rural counterparts. However, the high economic and social positions of the urban-based borrowers and their ownership of attractive collateral probably enables them
to command loan amounts sometimes in excess of actual needs. Even among these individual urban-based borrowers, the distribution of loans could be heavily skewed in favor of a few persons.

For example, in a branch of one of the banks in Table 4-18, one businessman, within a short period of time, applied for and received three separate loans, ostensibly for different cash crops, for an amount totalling ₦ 460,000. In another branch of the same bank, another businessman was granted separate loans totalling ₦ 200,000. Anecdotal information from the agricultural loan managers or officers of the commercial banks reveals that they have encountered several instances where these individual loans were definitely not invested in agricultural activities, since site inspections of the agricultural facilities of these borrowers showed little or no activity.

Other circumstantial evidence that points to the preponderance of urban-based, well-off borrowers among the participants in the Agricultural Credit Guarantee Scheme is contained in the type of agricultural activities for which the loans under the scheme are being made. It is open and verifiable knowledge in Nigeria that very few if any rural farmers are involved in running modern poultry facilities. The farmers do keep some chickens, along with other livestock, such as goats, cows and sheep. Yet, as is visible in Table 4-19, 32% of the total number of loans under the ACGS (representing one-half of the total loaned sum) were made for setting up modern poultry facilities, probably proposed by the more sophisticated urban borrowers. Though the borrowers may locate some of these poultries in their home villages, a good number also use the back gardens of their urban homes or pieces of land acquired on the outskirts of the metropoli-
<table>
<thead>
<tr>
<th>Purpose</th>
<th>Number of Loans</th>
<th>Percent of Total Number of Loans</th>
<th>Amount of Loan (N '000s)</th>
<th>Percent of Total Amount of Loans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poultry</td>
<td>109</td>
<td>32.0</td>
<td>5,680.0</td>
<td>50.3</td>
</tr>
<tr>
<td>Cattle</td>
<td>22</td>
<td>6.5</td>
<td>347.0</td>
<td>3.1</td>
</tr>
<tr>
<td>Other Livestock</td>
<td>6</td>
<td>1.8</td>
<td>13.0</td>
<td>0.1</td>
</tr>
<tr>
<td>Mixed Farming</td>
<td>35</td>
<td>10.3</td>
<td>1,555.5</td>
<td>13.8</td>
</tr>
<tr>
<td>Grains</td>
<td>79</td>
<td>23.2</td>
<td>2,277.7</td>
<td>20.2</td>
</tr>
<tr>
<td>Tuber and Root Crops</td>
<td>37</td>
<td>10.9</td>
<td>590.5</td>
<td>5.2</td>
</tr>
<tr>
<td>Other Crops</td>
<td>53</td>
<td>15.5</td>
<td>820.7</td>
<td>7.3</td>
</tr>
<tr>
<td>TOTAL</td>
<td>341</td>
<td>100.2</td>
<td>11,284.4</td>
<td>100.0</td>
</tr>
</tbody>
</table>

NOTE: Percentage totals may not add up to 100.0 due to rounding.

tan area. This means that the demonstration effect on rural farmers of having modern facilities that could introduce them to modern practices is also lost. The output of poultry farms is purchased only sporadically by the urban poor. The main consumers are the middle- and upper-income classes for whom these products are affordable on a regular basis.

Although the evidence presented here on commercial banks' lending activities is scanty and far from conclusive, it is suggestive of the fact that commercial banks in Nigeria behave so as to ration rural, especially poor rural, farmers out of the market for agricultural loans.

Cooperative societies are another set of institutions involved in channeling loans to farmers. These societies are geared specifically toward on-lending activities for rural, particularly poor rural, farmers. With regard to these village-level societies, the questions are: To what extent are those who belong to the societies (coop members), and thus have access to formal loans, more well off than those who do not (non-coop members)? What is the structure of control of these societies? How well are the poorer farmers (defined as those whose total cash incomes were ₦0 - 499 in the study year) who gain access to the societies treated relative to other members with regard to loan shares? To answer these questions, several measures of wealth were developed for purposes of comparison between coop members and non-coop members. Data deficiencies have been discussed in Chapter One. Because of these deficiencies, the measures developed are far short of perfect. However, they do provide some indication of differences between the groups of interest.
The measures used are Mean Total Cash Income. This is cash income from farm and non-farm sources per respondent. It does not include cash income from other members of the respondent's household; and, as noted in Chapter One, this may be a significant deficiency in the case of households where female-generated incomes are important. Mean Per Capita Cash Income is the respondent's cash income divided among members of the respondent's household or dependents. The Mean Asset amount is again per respondent. Assets include livestock—goats, cows, chickens, sheep, donkeys and other animals—as well as valuable property, such as bicycles, motorcycles, and other motor vehicles. Land is not included because in the majority of these communities it is not ordinarily saleable by those who farm it. Instead, the Mean Number of Acres Farmed in the study is measured separately for those respondents for whom the figures were available. The other measures used are the number of respondents giving loans to other villagers in each subgroup, and the mean amount loaned out per respondent in each subgroup. This use of lending activity as a measure is done on the assumption that lending is some function of income, though it is, of course, a function of other variables such as reciprocity.

Using these measures, the figures in Tables 4-20 and 4-21 indicate the differences between coop members and non-coop members. In addition, a test for statistical significance in the differences (at the 5% level) is made for some of the measures in Table 4-20. The figures in the tables show that coop members tend, on average, to have higher cash incomes and greater assets than non-coop members. Coop members are also apparently more willing and able to lend than non-coop members. However, except for the differences in lending performance, none of the other measured differ-
### TABLE 4-20

INDICATORS OF WEALTH: COOP MEMBERS AND NON-COOP MEMBERS COMPARED
(All Money Values in N)

<table>
<thead>
<tr>
<th></th>
<th>Coop Members</th>
<th>Non-Coop Members</th>
<th>F-Statistic</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean Total Cash Income</td>
<td>1599.0</td>
<td>1226.9</td>
<td>2.04</td>
<td>0.16</td>
</tr>
<tr>
<td>(per respondent)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean Per Capita Cash Income</td>
<td>139.8</td>
<td>128.9</td>
<td>0.24</td>
<td>0.63</td>
</tr>
<tr>
<td>(per respondent's dependents)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean Asset Amount</td>
<td>966.9</td>
<td>748.8</td>
<td>0.57</td>
<td>0.45</td>
</tr>
<tr>
<td>(per respondent)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean Amount Loaned Out</td>
<td>85.1</td>
<td>32.8</td>
<td>5.99</td>
<td>0.02</td>
</tr>
<tr>
<td>to Other Villagers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(per respondent)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean Number of Acres Farmed</td>
<td>24.6\textsuperscript{1}</td>
<td>21.0\textsuperscript{2}</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>in Study Year</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\textsuperscript{1} Mean for 72 out of 83 respondents.

\textsuperscript{2} Mean for 41 out of a total of 57 respondents.

SOURCE: Field surveys.

### TABLE 4-21

LENDING BY INDIVIDUALS: COOP MEMBERS AND NON-COOP MEMBERS COMPARED

<table>
<thead>
<tr>
<th></th>
<th>Number Lending</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>Coop Members</td>
<td>40 out of 83</td>
</tr>
<tr>
<td>Sample</td>
<td>Non-Coop Members</td>
<td>18 out of 57</td>
</tr>
<tr>
<td>Southern Villages</td>
<td>Coop Members</td>
<td>9 out of 40</td>
</tr>
<tr>
<td></td>
<td>Non-Coop Members</td>
<td>4 out of 27</td>
</tr>
<tr>
<td>Northern Villages</td>
<td>Coop Members</td>
<td>31 out of 43</td>
</tr>
<tr>
<td></td>
<td>Non-Coop Members</td>
<td>14 out of 30</td>
</tr>
</tbody>
</table>

SOURCE: Field surveys.
ences are statistically significant. This would seem to imply that it would be dangerous to conclude that coop members are significantly better off than non-coop members.¹

When these measures are examined on a regional basis, however (Tables 4-22 and 4-23), a difference emerges between the north and south. Whereas coop members are definitely better off than non-coop members in the south (the measured differences are statistically significant in three cases), this is not the case in the north where, again, only differences in amounts loaned per respondent show statistical significance. The lumping together of these north/south figures thus accounts for the inconclusiveness of the figures in Table 4-20.

The fact that better-off people in the south may indeed tend to have greater access to cooperative society membership is supported by the reasons given by non-coop members for not joining the cooperative societies (Table 4-24). Among the most frequently mentioned reasons are the barriers caused by the monetary requirement for joining, such as the amount needed for buying a minimum number of shares, and the tips that may be demanded by a coop member asked for introductions to the society by a non-coop member (row 1), as well as the feeling that the societies are for elites only (row 3). These reasons were either not mentioned in the north or were less frequently mentioned.

The evidence on lack of difference in assets and income between coop members and non-coop members in the north is surprising and demands explana-

¹Note, however, that coop members perform consistently better than non-coop members on all five measures of wealth. The interesting question is the overall probability that this should be so.
### Table 4-22

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coop Members</th>
<th>Non-Coop Members</th>
<th>F-Statistic</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean Total Cash Income (per respondent)</td>
<td>912.2</td>
<td>495.3</td>
<td>7.69</td>
<td>0.01</td>
</tr>
<tr>
<td>Mean Per Capita Cash Income (per respondent's dependents)</td>
<td>123.6</td>
<td>80.3</td>
<td>3.87</td>
<td>0.05</td>
</tr>
<tr>
<td>Mean Asset Amount (per respondent)</td>
<td>429.6</td>
<td>191.7</td>
<td>5.36</td>
<td>0.02</td>
</tr>
<tr>
<td>Mean Amount Loaned Out to Other Villagers (per respondent)</td>
<td>29.7</td>
<td>8.0</td>
<td>0.94</td>
<td>0.34</td>
</tr>
<tr>
<td>Mean Number of Acres Farmed in Study Year</td>
<td>8.9(^1)</td>
<td>6.7(^2)</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

\(^1\) Mean for 30 out of total of 40 respondents. Information not available for the remainder.

\(^2\) Mean for 17 out of total of 27 respondents.

**Source:** Field surveys.
<table>
<thead>
<tr>
<th></th>
<th>Coop Members</th>
<th>Non-Coop Members</th>
<th>F-Statistic</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean Total Cash Income (per respondent)</td>
<td>2237.8</td>
<td>1885.3</td>
<td>0.68</td>
<td>0.41</td>
</tr>
<tr>
<td>Mean Per Capita Cash Income (per respondent's dependents)</td>
<td>154.8</td>
<td>172.7</td>
<td>0.23</td>
<td>0.63</td>
</tr>
<tr>
<td>Mean Asset Amount (per respondent)</td>
<td>1491.1</td>
<td>1250.2</td>
<td>0.21</td>
<td>0.65</td>
</tr>
<tr>
<td>Mean Amount Loaned Out to Other Villagers (per respondent)</td>
<td>135.4</td>
<td>55.1</td>
<td>6.08</td>
<td>0.02</td>
</tr>
<tr>
<td>Mean Number of Acres Farmed in Study Year</td>
<td>35.7&lt;sup&gt;1&lt;/sup&gt;</td>
<td>31.4&lt;sup&gt;2&lt;/sup&gt;</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

<sup>1</sup>Mean for 42 out of 43 respondents.

<sup>2</sup>Mean for 24 out of 30 respondents.

SOURCE: Field surveys.
### TABLE 4-24

**REASONS GIVEN BY NON-COOP MEMBERS FOR NOT JOINING COOPERATIVE SOCIETY, BY REGION**

<table>
<thead>
<tr>
<th>Reason</th>
<th>Number of Times Mentioned</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Monetary constraints: No money to buy shares or give tips to people for introduction to the society, or for any required contribution</td>
<td>South: 5 North: 3</td>
</tr>
<tr>
<td>2. Was not allowed to join; told membership filled up</td>
<td>South: 3 North: 1</td>
</tr>
<tr>
<td>3. Did not try because of feeling it is for elites only</td>
<td>South: 5 North: -</td>
</tr>
<tr>
<td>4. Was sick at the time</td>
<td>South: 5 North: -</td>
</tr>
<tr>
<td>5. Did not know when people were joining, or was not around at the time</td>
<td>South: 2 North: 9</td>
</tr>
<tr>
<td>6. Did not want to be indebted, or was not interested in joining because of availability of other loan sources</td>
<td>South: 3 North: 4</td>
</tr>
<tr>
<td>7. Did not know the benefits of joining</td>
<td>South: 2 North: 2</td>
</tr>
<tr>
<td>8. Did not know procedures for joining</td>
<td>South: 4 North: 2</td>
</tr>
<tr>
<td>9. Did not know a person could belong to both the cooperative and other informal savings and loan organizations at the same time</td>
<td>South: 2 North: -</td>
</tr>
<tr>
<td>10. The loans do not arrive at the time needed</td>
<td>South: - North: 3</td>
</tr>
<tr>
<td>11. Loan amounts are too small</td>
<td>South: 1 North: 8</td>
</tr>
</tbody>
</table>

**SOURCE:** Field surveys.
tion, because it differs from what has been found in earlier research carried out in the north and in other parts of Nigeria (e.g., see King, 1976). Part of the explanation seems to lie in one of the answers given by non-coop members in the north for not joining the cooperative society (Table 4-24, column 11). The small size of the loan amounts given by the cooperative societies in the north is the second-most frequently mentioned reason for not joining the societies. That is, some potential borrowers feel that loan amounts are so small when compared with their expenditures, that it is not worthwhile to go through the procedures for joining the cooperative society.

Figures for total expenditures, i.e., farm, consumption, and non-farm expenditures, are not available for the sample. However, when mean loan amounts are compared with mean farm expenditures for coop members in the north and south, the notion of small loan-to-expenditure ratios espoused by the non-coop members in the north is borne out. The figures in Table 4-25 show that, on the average, coop members in the north receive much less in loans than their southern counterparts (₦ 133 as compared with ₦ 262). Within the income groupings, southern coop members receive loan amounts that more than compensate for their farm expenditures. This is not the case in the north, where, particularly for the highest income group, the loan-to-expenditure ratio of 0.1 is a very small number. Unlike their southern counterparts, the more well-off farmers in the north, on the average, appropriate less, on a per capita basis, of the total loan amounts.¹ This is probably due to the smaller total loan

¹Note, however, that as a group they still command the largest share of the total amount of loans.
<table>
<thead>
<tr>
<th></th>
<th>S O U T H</th>
<th></th>
<th>N O R T H</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Number</td>
<td>Mean</td>
<td>Number</td>
</tr>
<tr>
<td></td>
<td>Amount</td>
<td>Borrowing</td>
<td>Farm</td>
<td>Amount</td>
</tr>
<tr>
<td></td>
<td>Borrowed</td>
<td></td>
<td>Exp.</td>
<td>Borrowed</td>
</tr>
<tr>
<td>Entire</td>
<td>261.5</td>
<td>40 out of 40</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Sample of</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coop Members</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Groups</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-499</td>
<td>134.0</td>
<td>15</td>
<td>107.2</td>
<td>1.3</td>
</tr>
<tr>
<td>500-1499</td>
<td>303.7</td>
<td>19</td>
<td>225.4</td>
<td>1.4</td>
</tr>
<tr>
<td>1500 and</td>
<td>813.3</td>
<td>6</td>
<td>641.2</td>
<td>1.3</td>
</tr>
<tr>
<td>Above</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>133.0</td>
<td>43 out of 43</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>106.7</td>
<td>3</td>
<td>173.3</td>
<td>0.6</td>
</tr>
<tr>
<td></td>
<td>113.0</td>
<td>16</td>
<td>406.1</td>
<td>0.3</td>
</tr>
<tr>
<td></td>
<td>146.6</td>
<td>24</td>
<td>1255.7</td>
<td>0.1</td>
</tr>
</tbody>
</table>

**SOURCE:** Field surveys.
amounts available for sharing in the north, coupled with the greater sense of responsibility of richer farmers toward poorer ones (according to Moslem tradition) in the north than in the south. These factors thus serve to make cooperative society membership currently least attractive for the extremely well-off farmers in the north. The recent rapid growth in farm expenditures (see Chapter One) caused by the price rises in the largest input (labor) and the much slower growth in loan amounts has rendered cooperative society membership much less attractive to richer farmers in today's northern villages than in the past. This has the interesting implication that one way of keeping richer farmers out of cooperative societies is to keep total loan amounts small enough so that any per capita shares they may receive will prove insignificant when compared with their overall expenditures.

Within the cooperative societies themselves, when the structure of control is examined (compare Tables 4-26 and 4-27), a pattern emerges which is similar to that discussed above in the comparison between coop members and non-coop members. In the south, the committee members who control the societies are much wealthier than the rest of the members. This is not the case in the north. The findings in the north are again contrary to expectations. It would be expected that even if there is no differentiation on the average between coop members and non-coop members in terms of wealth, within the societies themselves, where richer and poorer farmers exist, the richer farmers would be in control of the societies because of their greater prestige.

In the northern villages, the committee members, on the average, are not better off than other coop members. If anything, they are less well-
TABLE 4-26

INDICATORS OF WEALTH: COMMITTEE MEMBERS OF COOPERATIVE SOCIETIES
(All Money Values in ₦)

<table>
<thead>
<tr>
<th></th>
<th>All Committee Members (Sample = 18)</th>
<th>Members in Northern Villages (Sample = 9)</th>
<th>Members in Southern Villages (Sample = 9)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean Total Cash Income</td>
<td>1689.2</td>
<td>1903.6</td>
<td>1474.9</td>
</tr>
<tr>
<td>Mean Per Capita Cash Income</td>
<td>152.2</td>
<td>140.0</td>
<td>171.5</td>
</tr>
<tr>
<td>Mean Asset Amount</td>
<td>875.8</td>
<td>1034.1</td>
<td>735.0</td>
</tr>
<tr>
<td>Mean Number Acres Farmed</td>
<td>29.6</td>
<td>37.1</td>
<td>20.0</td>
</tr>
<tr>
<td>Mean Number of Years Western-Type Education</td>
<td>3.2</td>
<td>2.3</td>
<td>4.1</td>
</tr>
<tr>
<td>Mean Amount Borrowed from Coop</td>
<td>466.4</td>
<td>227.2</td>
<td>705.6</td>
</tr>
</tbody>
</table>

NOTE: The difference in mean per capita cash income between committee members in the north and south is accounted for by the much larger mean household sizes of northern committee members (12.5 persons on average per household in the north compared with 7.5 in the south). Furthermore, it may be that committee members in the north need to borrow less for "farming" because larger household sizes indicate larger labor supplies for household farms. This latter point is, however, debatable, since northern committee members also have on average much larger farms than those in the south.

SOURCE: Field surveys.
TABLE 4-27
INDICATORS OF WEALTH: COOP MEMBERS (EXCLUDING COMMITTEE MEMBERS)
(All Money Values in $)

<table>
<thead>
<tr>
<th></th>
<th>Total Coop Members (Sample=65)</th>
<th>Northern Villages Coop Members (Sample=34)</th>
<th>Southern Villages Coop Members (Sample=31)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean Total Cash Income (per respondent)</td>
<td>1572.4</td>
<td>2326.3</td>
<td>748.8</td>
</tr>
<tr>
<td>Mean Per Capita Cash Income (per respondent's dependents)</td>
<td>144.3</td>
<td>158.1</td>
<td>111.1</td>
</tr>
<tr>
<td>Mean Asset Amount (per respondent)</td>
<td>1005.6</td>
<td>1642.4</td>
<td>341.0</td>
</tr>
<tr>
<td>Mean Number Acres Farmed</td>
<td>19.9</td>
<td>34.3</td>
<td>4.1</td>
</tr>
<tr>
<td>Mean Number Years Western-Type Education</td>
<td>0.4</td>
<td>0.2</td>
<td>0.4</td>
</tr>
<tr>
<td>Mean Amount Borrowed from Formal System</td>
<td>145.6</td>
<td>106.0</td>
<td>132.6</td>
</tr>
</tbody>
</table>

SOURCE: Field surveys.
off, as can be seen by comparing Tables 4-26 and 4-27. This difference in control is explicable by the fact that in the south, there is a strong correlation between being wealthy and having some degree of Western-type education. In the north, where community leaders and richer villagers traditionally spearheaded the attacks on non-Islamic education, this is not the case. Hence, with the need for Western-educated people to run the societies so as to maintain record keeping procedures compatible with those in the government cooperative offices, the better-off cooperative society members in the northern villages (with their low or zero education levels) were less able to gain control of the societies than their better-educated southern counterparts. In both northern and southern villages, however, committee members used their positions to acquire much larger mean per capita loan shares than the rest of the coop members. The differential in the south between committee members and other coop members is particularly noticeable.

One important point in favor of the cooperative societies is the treatment of lower-income farmers with regard to mean per capita loan shares and farm expenditures (see Table 4-25). Even though upper-income farmers do command larger per capita and larger absolute loan shares than farmers in the lowest income group, these latter farmers fare reasonably well when the mean per capita shares they receive is compared to mean farm expenditures. In the south, these farmers are, on average, more than compensated for their farm expenditures, just as is the case for the upper-income farmers. In the north, as noted previously, the lower-income farmers enjoy a larger loan-to-farm expenditure ratio than the upper-income farmers. This means that if poorer farmers are afforded access to coop-
erative society loans, they stand a good chance of favorable treatment relative to farming costs in the society loan sharing process.

There are usually problems of cause and effect relationships during a socio-economic research exercise, such as in this study, and another logical interpretation of the figures presented above is at least possible. This alternative interpretation would suggest that the coop members in the south were not, on the average, necessarily wealthier than non-coop members at the time of joining the cooperative society, but rather they became better off after joining because they could use relatively low-interest cooperative society loans to enrich themselves. While this could conceivably be the case, anecdotal information from non-coop members as to the long-term status of most coop members in their village makes it doubtful that these people were not also better off to begin with. Furthermore, the testimony of these non-coop members as to the peopling of the society with elites (Table 4-24) suggests that the coop members in the south were indeed on the average the better-off people in their villages even before joining the cooperative societies. In one village, for instance, the long-standing ruling family had four members in their village cooperative society, and these members were, in effect, the society's controlling officers. In any case, even if the above alternative interpretation of the figures is accepted, it does not detract from one of the main points in this author's argument which concerns the present-day underlying inequities in the credit distribution mechanism in both the north and the south.

Cooperative society members are the only ones who, by virtue of their membership, are assured access to formal loans in each year that
loans are made available. Non-members cannot obtain cooperative loans. Membership expansion may be restricted in any year by members (see Table 4-24), and by the government cooperative offices (when the loans available to these offices for disbursement are very small), so that only a sprinkling of additional farmers can join. In this situation, the welfare gap between those who can obtain low-interest formal loans and those who cannot will continue to widen.

It is obvious from the discussion above that just as with the production objectives of credit policy in Nigeria, problems exist with the welfare objectives. Commercial bank agricultural loans tend to be concentrated on rich, upper- and middle-class, urban-based borrowers. At the village level, in at least one part of the country, wealthy rural farmers may be the ones who are largely enjoying the benefits of cooperative society loans. And if this is the case—as the data for the southern villages suggests, then the situation is further compounded by the fact that these same privileged coop members appear to have greater access to interest-free (i.e., free of monetary interest) loan sources in the informal loan market. Thus, in both Tables 4-28 and 4-29, a greater percentage of coop members' loans are obtained from relatives and friends, compared with loans for non-coop members. A relatively large percentage of non-coop members' loans are borrowed from the interest-charging savings organizations. This difference is even more marked in the south (Table 4-29), where the inequities in the distribution system appear to be more prominent.

What is certainly suggested by the data presented in this section (if welfare objectives are to be achieved) is the necessity for a rethinking of interest rate policy, along with structural reforms in the organiza-
TABLE 4-28

INDEBTEDNESS TO THE INFORMAL SECTOR BY SOURCE:
COOP MEMBERS AND NON-COOP MEMBERS COMPARED,
NORTHERN AND SOUTHERN VILLAGES COMBINED

<table>
<thead>
<tr>
<th>Source</th>
<th>% of Coop Members' Loans Borrowed from Source</th>
<th>% of Non-Coop Members' Loans Borrowed from Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Savings</td>
<td>5.4</td>
<td>36.1</td>
</tr>
<tr>
<td>Organization</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moneylender</td>
<td>2.7</td>
<td>0</td>
</tr>
<tr>
<td>Patron</td>
<td>5.4</td>
<td>0</td>
</tr>
<tr>
<td>Relatives</td>
<td>54.1</td>
<td>33.3</td>
</tr>
<tr>
<td>Friends</td>
<td>32.4</td>
<td>30.6</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

1Total number of loans borrowed by coop members = 37.

2Total number of loans borrowed by non-coop members = 36.

SOURCE: Field surveys.

TABLE 4-29

INDEBTEDNESS TO THE INFORMAL SECTOR BY SOURCE:
COOP MEMBERS AND NON-COOP MEMBERS COMPARED,
SOUTHERN VILLAGES

<table>
<thead>
<tr>
<th>Source</th>
<th>% of Coop Members' Loans Borrowed from Source</th>
<th>% of Non-Coop Members' Loans Borrowed from Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Savings</td>
<td>8.3</td>
<td>56.5</td>
</tr>
<tr>
<td>Organization</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moneylender</td>
<td>4.2</td>
<td>0</td>
</tr>
<tr>
<td>Relatives</td>
<td>45.8</td>
<td>8.7</td>
</tr>
<tr>
<td>Friends</td>
<td>41.7</td>
<td>34.8</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

SOURCE: Field surveys.
tion of the credit distribution mechanism. In the next section, other factors that highlight the need for interest rate reform will be discussed.

Assumption (6)

Lack of credit is the most important financial service problem in the rural areas. Savings mobilization is relatively unimportant since savings capacities are quite low. Given this, there is little need to revise the interest rate structure in favor of savings.

In Chapters Two and Three of this study, the fundamental reasoning accounting for assumption (6) was discussed. King (1976) aptly summarizes the essential points that lie behind this emphasis on credit, as opposed to savings, in Nigeria and other developing countries. Agricultural (land and labor) productivity is customarily low. The rate of accumulation by farmers of capital goods that could increase this productivity is also very low. Policy-makers reason that this low capital accumulation is due to the fact that farmers' production is barely sufficient for their consumption needs, implying that there is little or nothing left over for the savings necessary for the acquisition of capital goods. The logical remedy to the situation, therefore, is the infusion of credit—particularly low-interest credit—into the farmer's production cycle. King notes that "this reasoning is particularly attractive because it suggests that a little lubricant in the form of credit supplied by the government will automatically set in motion the machinery of agricultural development in rural areas." ("Capital, Credit and Savings . . .", p. 17)
Arguments and data presented in previous sections of this chapter suggest that such low-interest credit policies not only face difficulties in achieving these agricultural development objectives, but also actually tend to prove detrimental to the interests of poorer farmers.

If it could be proved that savings capacities are not insignificant in rural areas, that farmers are interested in savings mobilization efforts, and that poorer farmers may stand to benefit more from an emphasis on savings mobilization than they currently do by the stress on disbursement of government credit, then a further argument could be made for a re-examination of current credit policies which, in addition to their other disadvantages, serve to discourage savings by under-rewarding savers.

The evidence on savings capacities and availability in Nigeria's rural areas is very limited, and has been compiled mainly through the scattered case studies of researchers in different rural areas of the country. Matlon (1978) remarks on the contradictory nature of this evidence with some studies indicating the existence of significant savings capacities and savings availability in the rural areas, while others point to radically different conclusions.

Matlon cites two studies--that of Zuckerman carried out in 1970-71 and one by Simmons (1976)--that seem to support the popular notion of zero savings capacities in Nigeria's rural areas. In his study of three western villages, Zuckerman found that annual expenditures exceeded income by between 10 and 30%. He concluded that while dissaving of this magnitude was unlikely, savings close to zero were probable for the average small farmer (Matlon, p. 5). Simmons conducted a study in three villages in the Zaria area of northern Nigeria and found shortfalls of incomes below
expenditures roughly similar to the ones found by Zuckerman (Matlon, p. 5).

Different conclusions than the ones suggested above have been arrived at by several other researchers in studies carried out in varying time periods. Galletti and Baldwin (1956) and Vigo (1965), in their respective studies in western and northern Nigeria, found evidence of extensive cash-lending activities by higher-income farmers, indicating high savings capacities by these farmers (Matlon, p. 6). Upton, in a 1967 study of six villages in southwest Nigeria, found average savings propensities of between 16.7 and 37.1% for the sample of farm families there, while marginal savings propensities ranged from 0.2 to 0.8 (cited in Ojo, 1976, p. 75; Matlon, 1978, p. 5).

Matlon himself, in a 1978 study in northern Nigeria, noted that positive or negative savings rates could be found for farm households in different income groups, depending on the treatment given female-generated incomes. In his study, when male and female (but predominantly male) harvesting incomes were considered, four out of his seven income groupings emerged with positive savings ratios. Extremely high rates of dissaving (-94.9% and -53.3%) were found for the poorest two income classes. When female off-farm incomes (not necessarily full employment) were considered, however, as being made available to the males on a loan basis for agricultural investment purposes, positive savings ratios were calculated for all but the poorest two income groups. The average household savings for the entire sample amounted to ₦ 68 (or 16%) of net household income. Dissaving for the two lowest income groups in this instance fell to -23.5% and -14.6%, respectively. Under a full-employment assumption for women in the lowest two income groups, dissaving for these groups fell further to -7.1%
and -3.7% (pp. 23-25). Such evidence leads to the conclusion that for all but the very lowest income groups, the capacity for savings does exist, and even when predominantly male incomes are considered, middle-to-higher income groups are still able to save.

Other support for the existence of positive savings capacities in the rural areas comes from a study of rotating credit and savings associations (esusus) undertaken by Miller and Okorie (1976) in eastern Nigeria. They found that the 25 clubs studied succeeded in accumulating in 1974, in Miller's words, "an impressive total of N 17,925 or N 13.63 per member." (Miller, 1977, p. 103)

A 1977 study of five non-rotating savings organizations, undertaken by the author in Ogwashi-Uku (a rural area of Bendel State), showed similar per member savings of N 17 for the calendar year. King (1976) notes that the existence of various savings-credit arrangements and institutions in northern Nigeria signifies a capacity for savings, even though these savings may be made largely for ceremonial purposes. Thus, "Biki," a system of mutual obligation between partners of the same sex in which gifts are exchanged to help each other fulfill ceremonial obligations, is one such arrangement. The rotating credit associations, "adashi" (esusus in the south), that in the north are patronized mainly by women, is another. In addition to these ceremony-related savings, King also reports the depositing by poorer farmers with rich traders of harvest-time savings to be withdrawn and utilized at the beginning of the next cultivating season. He notes that most farmers may save in the form of commodities or livestock.
Information gathered in this study, while far from conclusive, tends to support this notion that a good number of farm households in the rural areas do save, and the savings are made not just for ceremonial purposes. Like the earlier Galletti and Baldwin (1956) and Vigo (1958) studies, extensive lending activities were found in the villages studied. Farmers obtained loans from other farmers (relatives, friends, and patrons) in amounts ranging from N 10 to N 1000 (see Table 4-6). And most of these loans were made in the difficult April-to-July period of the planting season, when the lenders themselves must have needed cash for production and consumption purposes. It must mean then that there were farm households with available surplus cash in these villages.

More direct evidence on savings availability was obtained by asking respondent-farmers if they had any savings in cash in the study year. The author made an attempt to distinguish savings from cash held for cyclical consumption purposes. Although the distinction may have been difficult for respondents, they seemed to understand what was meant. Table 4-30 shows that 41% of the sample admitted to having cash savings. This is encouraging, given the tendency for a downward bias in the figures because of farmers' natural reluctance to admit having savings. The percentage of savers was slightly higher in the north than in the south, where, as is evident from previous tables (see for instance Table 4-22 and 4-23), cash farm incomes are higher.

The relationship between savings and income is confirmed in Table 4-31, which shows savings availability by income group. The figures indicate that the highest income group also contains the largest number of savers. The surprising factor, however, is the small but significant
TABLE 4-30

AVAILABILITY OF CASH SAVINGS

<table>
<thead>
<tr>
<th>Region</th>
<th>Number of Respondents Having Cash Savings</th>
<th>% Having Cash Savings Within Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Sample</td>
<td>58 out of 140</td>
<td>41.4</td>
</tr>
<tr>
<td>Northern Villages</td>
<td>32 out of 73</td>
<td>43.8</td>
</tr>
<tr>
<td>Southern Villages</td>
<td>26 out of 67</td>
<td>38.8</td>
</tr>
</tbody>
</table>

SOURCE: Field surveys.

TABLE 4-31

SAVINGS AVAILABILITY BY INCOME GROUP

<table>
<thead>
<tr>
<th>Total Cash Income Group (N)</th>
<th>Number of Persons Within Income Group Having Cash Savings</th>
<th>Percent of Total Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 499</td>
<td>13</td>
<td>22.4</td>
</tr>
<tr>
<td>500 - 1499</td>
<td>14</td>
<td>24.1</td>
</tr>
<tr>
<td>1500 and Above</td>
<td>31</td>
<td>53.5</td>
</tr>
<tr>
<td>TOTAL</td>
<td>58</td>
<td>100.0</td>
</tr>
</tbody>
</table>

SOURCE: Field surveys.

percentage of savers in the lowest income group. So, while most farm-households in the low strata of rural income may not be able to save (on a net basis), there are a significant number in this group who are able to put some cash aside, at least at some point during the year.
Obtaining information on where people had their cash savings was a much more sensitive issue, and only a few farmers volunteered such information when asked. Savings were kept with a variety of sources, almost none of which paid any interest. In fact, in a few instances, respondents paid a small commission to have their savings held for them. Two respondents noted that they gave their savings to their patrons (other wealthy farmer-traders) to hold for them and gave the patron or his children small gifts for this favor. One person saved with an "indigenous banker."

Indigenous bankers are a new and fast spreading breed of people in the informal financial markets who, for a fee, provide banking-type facilities for those interested in saving.¹

¹Indigenous bankers could be urban- or rural-based men or women. They go around collecting savings deposits from interested people. Although only one person in the sample admitted to saving with such a banker, others in the sample and in the villages described the way these people function. In two of the cases described, one in the village of Giwa in the north, the other in Araromi in the south, the indigenous bankers were young men who rode in on motorcycles every village market day (every three or four days, as the case may be) from the neighboring cities of Zaria and Ibadan. The 'banker' from Zaria was a junior worker employed in some capacity at Ahmadu Bello University. The occupation of the one from Ibadan was not clear. These young men collected deposits from several participating villagers (men only in Giwa, men and women in Araromi). The deposits ranged from 20 kobo to N 2, depending on the income or desires of each depositor. The amounts were kept constant to make record keeping easier and also to enable the depositor to keep track of his savings. The bankers recorded each deposit in a big notebook against the saver's name. At the end of each month, a depositor could either collect his savings minus the amount of first deposit (which went to the banker as a fee) or continue making deposits. Some people said that these bankers kept the savings collected in a bank account in the city. Others were not sure what was done with the savings. No one reported loss or embezzlement as yet.

Such a system of banking requires enormous trust on the part of the depositors--trust which is possible if the bankers belong originally to the village communities from which they collect deposits. This was the case in Araromi. In Giwa, it was not so clear if the banker was a member of the village or if his family still resided there. But from what the author was told, he clearly had strong connections in the vil-
Several respondents mentioned keeping deposits with "safe" societies. These societies are a non-rotating variant of the much described "esusus" (adashi) or rotating credit associations. Here, savers deposit a certain and constant amount every week or every fortnight for a year or more. Records are kept by an elected secretary, and sometimes, as was the case in the rural area of Ogwashi-Uku, the deposits are literally kept in a wooden box known as a safe—hence the name of these societies. In the case of the "Alajeshekun" Society in Araromi, the money was kept at the Cooperative Bank in Ibadan. Savers receive interest on their deposits only to the extent that borrowers from the society pay interest (which is shared among members according to the size of their contributions), or to the extent that the commercial bank pays interest on the deposits, as with the Alajeshekun Society in Araromi.

Other deposit arrangements or institutions utilized by respondents included keeping savings in their own homes or participating in rotating credit associations (Roscas). However, because of the attempt by the author to avoid including cash destined for cyclical consumption expenditure. Unfortunately, due to time constraints, interviews could not be obtained from these bankers to inquire whether their visits included other villages as well. In addition to the visiting young banker in Araromi, a resident woman banker was also mentioned. These banking activities must provide substantial benefits to the bankers, not only in the form of fees received, but also in the form of interest-free loans (which is, in effect, what these deposits are) that they can invest in short-term activities of their own interest. The use of these bankers by some rural savers indicates the great need by the savers for a banking institution or arrangement that would provide depositor or cash-management services.
tures as savings, some of the respondents participating in Roscas\(^1\) did not count their deposits as savings.

Except for the amounts contributed to Roscas or "safes" (information which respondents were not loath to part with), it was difficult to obtain figures for actual amounts saved for respondents in the sample who claimed they had cash savings. Only eight out of the 58 savers in the sample revealed the amount they had saved in the study year, and only five of these gave information as to the period of time over which savings were made. These five belonged to a "safe" society. This information is contained in Table 4-32, which also shows the total cash incomes of the respondents in the study year. The information on the first respondent in the table (Respondent A), showing fairly high savings in previous years compared with cash income in the study year, appears unusual. This is because the study year was an abnormal one for the respondent. His cassava farm, from which most of his cash income would have been obtained,

\(^1\)A notable point about Roscas and safes is the strong participation of women. In the south, they may have their own associations (Okonjo, 1976) or become members of a joint female-male association. In the north, Roscas are associated with women, although they are beginning to become popular among men. The women use their lump sum takeouts to start a trade (north and south) or to buy household goods for their daughters' weddings (north). Some women who owned farms in the south even invested their take-out in the farms. The lump sums in the north came to ₦ 40 every fortnight for two Roscas investigated in Giwa. These sums are fairly small because of the smaller size of the membership in the north (10-30 women) and the smaller contributions (due to women's limited economic activities), averaging about 10 kobo per day. In Araromi in the south, contributions for two 80- and 83-member female Roscas investigated averaged 15 kobo per woman per day, and resulted in takeouts of approximately ₦ 80 and ₦ 83 per receiving member per week. Such activity by women indicates the importance of securing their participation in potential savings drives.
TABLE 4-32

INDICATION OF SAVINGS AMOUNTS AMONG STUDY SAMPLE
(All Money Values in W)

<table>
<thead>
<tr>
<th>Respondent</th>
<th>Cash Amount Saved</th>
<th>Number of Years over Which Amount Saved</th>
<th>Mean Cash Savings Per Annum</th>
<th>Total Cash Income of Respondent in Study Year (1978/79)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>100</td>
<td>3</td>
<td>33.3</td>
<td>70</td>
</tr>
<tr>
<td>B</td>
<td>100</td>
<td>4</td>
<td>25.0</td>
<td>228</td>
</tr>
<tr>
<td>C</td>
<td>72</td>
<td>3</td>
<td>24.0</td>
<td>150</td>
</tr>
<tr>
<td>D</td>
<td>800</td>
<td>6</td>
<td>133.3</td>
<td>1510</td>
</tr>
<tr>
<td>E</td>
<td>40</td>
<td>N.A.</td>
<td>N.A.</td>
<td>409</td>
</tr>
<tr>
<td>F</td>
<td>72</td>
<td>3</td>
<td>24.0</td>
<td>272</td>
</tr>
<tr>
<td>G</td>
<td>40</td>
<td>N.A.</td>
<td>N.A.</td>
<td>95</td>
</tr>
<tr>
<td>H</td>
<td>80</td>
<td>N.A.</td>
<td>N.A.</td>
<td>810</td>
</tr>
</tbody>
</table>

N.A. = Not Available

SOURCE: Field surveys.

was, according to him, the object of an antelope attack, which left him with lower than normal cash income in that year. Although average savings ratios (in the accepted sense of the term) cannot be calculated for the other respondents because of difficulties in the measurement of total cash incomes (see Chapter One), if the total cash incomes of these respondents in the study year is taken as a proxy for other years, it can be said that respondents saved a low, but significant, percentage of their cash earnings, given the savings-to-cash-income ratios of 9-16%.

Other data on amounts saved comes from the author's study (1977-1978) of safes cited earlier. The information collected then (along with
additional information on two other safes obtained during this study) is presented in Table 4-33. The per member annual amount saved ranges from ₦ 10 to ₦ 40 (actually on a 10-month basis). Except for the ₦ 40 figure, these amounts may not appear so large on a per capita basis. However, the amounts are significant when considered in terms of the zero savings capacities attributed to farm households. Furthermore, as argued in the earlier study, when these savings are looked at in terms of the millions of potential savers in Nigeria's rural areas, the absolute savings amount that could be mobilized looms large indeed. The necessity for mobilization efforts is made even more significant by the fact that some of these savings could be idle for months and even years during the duration of an association's savings period (usually one calendar year or more). For example, as of September 1979, when the data for the Otu-Uka association were collected, of the ₦ 6787 saved, ₦ 3342 was out on loan, while ₦ 3445 was lying idle in the association's safe. The occurrence of such an event in a rural area where people are looking for loans underscores the communications and fragmentation problems that plague the informal rural financial markets.

In addition to the cash savings described, respondents also saved 'in-kind.' This became apparent when some farmers who said they had no cash savings added, "but we have other types of savings." Savings in livestock was the most frequently mentioned 'in-kind' savings (five respondents), though foodstocks was also mentioned (two respondents). The citing of these in-kind savings was done by farmers in the northern villages and prompted the addition to the questionnaire of questions about livestock ownership in the study year—on the assumption that even respondents who
Table 4-33

SAVINGS IN NON-ROTATING SAVINGS ASSOCIATIONS ("SAFES")
(All Money Values in N)

<table>
<thead>
<tr>
<th>Association Name</th>
<th>Location</th>
<th>Period of Savings</th>
<th>Total Amount Saved</th>
<th>Number of Savers</th>
<th>Mean Per Member Savings for Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Onyeliyachei</td>
<td>Ogwashi-Uku</td>
<td>1975</td>
<td>823</td>
<td>44</td>
<td>19</td>
</tr>
<tr>
<td>Onyeliyachei</td>
<td>Ogwashi-Uku</td>
<td>1977</td>
<td>654</td>
<td>36</td>
<td>18</td>
</tr>
<tr>
<td>Aniuba</td>
<td>Ogwashi-Uku</td>
<td>1977</td>
<td>452</td>
<td>29</td>
<td>16</td>
</tr>
<tr>
<td>Ogbe-Ofu</td>
<td>Ogwashi-Uku</td>
<td>1977</td>
<td>3944</td>
<td>178</td>
<td>22</td>
</tr>
<tr>
<td>Ogbe-Ubu</td>
<td>Ogwashi-Uku</td>
<td>1977</td>
<td>1000</td>
<td>100</td>
<td>10</td>
</tr>
<tr>
<td>Otu-Uka (a branch)</td>
<td>Ogwashi-Uku</td>
<td>Dec. 1978 to Sept. 1979</td>
<td>6787</td>
<td>168</td>
<td>40</td>
</tr>
<tr>
<td>Alajeshekun</td>
<td>Araromi</td>
<td>1978</td>
<td>900</td>
<td>75</td>
<td>12</td>
</tr>
</tbody>
</table>


May not have said so could also have purchased livestock as a form of savings. The livestock figures given were then translated (after several assumptions as to size and average worth—see Chapter One) by the author into monetary figures.

These figures are presented by region and income group in Table 4-34. The type of animals that were considered for conversion into cash figures were those on which the farmer was not directly dependent for food or income earning purposes. Thus, cows (which are generally given to Fulani herders for care and safekeeping), goats (whose milk is not popularly consumed), sheep, chickens, ducks, and turkeys were considered for conversion, while donkeys (used as pack animals) were excluded.
The figures in Table 4-34 show fairly high levels of cash accumulated in the form of livestock over a number of years. In some cases, the figures surpass the mean total cash income for the group in the study year. Unfortunately, the number of livestock purchased during the study year itself was not separated out. It is, therefore, impossible to make comparisons between amounts invested in livestock and cash incomes for that year. As would be expected, the mean amount accumulated in livestock in the north is higher than in the south. This is because of the greater emphasis on livestock in the north and the more nearly disease-free environment for animals, as well as the lack of informal savings organizations, such as "safes," where cash could be deposited.

The mean amount accumulated by the lowest income group in the north is considerably lower than for the same group in the south, despite simi-
lar mean total cash income figures (see Table 4-11). This could be due to higher mean household sizes for this group in the north than in the south, and also due to the fact that some of the lower income group farmers in the north invested in donkeys, which they used to earn extra income (carrying manure to other farms and carrying farm produce back).

The very high levels of livestock investment observed for the highest income group in the north represents higher levels of cattle ownership. King (1976) has noted that ownership of cattle constituted a long-term investment and a sign of wealth conferring great prestige on the owner (p. 92). High levels of cattle ownership, and indeed of other livestock, was also an astute way of beating inflation and making quick gains, because the animals could be fattened and sold off several months later. Foodstocks of millet, maize, guinea-corn, and rice were also kept and sold off for similar reasons. However, investing or saving in foodstocks was a much riskier business because of storage problems resulting in spoilage. In one of the villages visited, a farmer (who claimed he invested over ₦2000 of his own and a friend's savings in grains to be sold off later for gains) was almost in tears when he showed the author the damage being done by insects to the grain in his mud storage house.

Attempts to invest or save in livestock and foodgrains for the purpose of making gains later indicate that if similar monetary rewards could be offered by a savings institution to the farmers, they might be induced to reduce the extent of their investment in tangible assets and make deposits in cash instead.

The evidence presented in this section on savings availability and savings capacities in rural areas, while not conclusive, is substantial
enough to cast doubts on the assumption about lack of cash savings among farm-households in the rural areas. The question is, if some farm-households do experience cash surpluses in certain years or at certain periods, why are these surpluses not further invested in agricultural production? Moreover, why is it that while some farm-households have surpluses, others (even within the same geographical area) experience difficulties in obtaining credit at certain periods? The answers to these questions seem to lie in structural problems\(^1\) with agriculture and with the communications and fragmentation problems that beset the rural informal financial markets.

In any case, what is apparent from the available data is that a savings mobilization effort in the rural areas would be a worthwhile project. Part of this effort would involve setting up various types of savings institutions—not just commercial banks—that could join with already existing informal mechanisms in a savings mobilization effort. The offering of attractive savings incentives in the form of higher interest payments could be another part of the mobilization effort.\(^2\) This stress on the role of financial intermediation in the savings effort is important because as U Tun Wai (1972) noted, savings is a function not just of income, but also of the degree and extent of financial intermediation. Thus, par-

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\(^1\)Part of the answer, of course, can be attributed to the personal preferences of households, as well as differences between households.

\(^2\)It should be noted, as discussed in Chapter Two, that setting up appropriate and attractive institutional savings forms might initially be more important than interest rate incentives. However, efforts to maintain positive interest payments on savings may ultimately be important if savers are to be effectively persuaded to switch away from savings in real assets to savings in financial assets.
particularly in the rural areas of developing countries, increased financial intermediation could increase the savings rate through the widening of savings opportunities, and the offering to the saver of a more preferred package of yield, risk, and liquidity (p. 31).

Benefits of savings mobilization in the rural areas include the extra income that would accrue to farm-households from the interest payments. This is especially relevant to poorer farmers, some of whom (as has been pointed out) do save, because such interest payments could prove to be a significant addition to their cash incomes. Furthermore, poorer farmers would also benefit from a larger pool of cash available for lending, because if the pooling of more resources is coupled with the charging of realistic interest rates on loans, their chances of being elbowed out of the loan process would diminish, while the amounts they would receive could increase.

In addition, if savings mobilized within a given community are also loaned out within the same community, the risk of default would decrease as social pressure by the community would encourage potential defaulters to pay back the borrowed funds. Financial intermediaries themselves would benefit from the type of mobilization effort being mentioned, because it could lead to greater financial liquidity and higher earnings on their part.

In Chapter Five, the specific details about the various intermediaries and intermedation packages that could be offered in the rural areas will be dealt with in greater depth.
Summary and Revision of Assumptions

The focus in this chapter has been on the presentation of evidence that would help examine the validity of various assumptions underlying present credit policy in Nigeria. The necessity for examining these common assumptions arises out of their distorting influence on the direction and scope of credit policy. Most of the evidence presented has not been of a conclusive nature, but it has been significant enough to cast serious doubts on the validity of virtually all the assumptions examined. Given this fact, it would seem that, based on the findings in this chapter, a rethinking and reformulation of the assumptions is in order as a guide to alternative credit policies to be discussed in Chapter Five.

Reformulated Assumptions

Assumption (1)

Some rural farmers—particularly the poorer ones—do face credit shortages, but it is doubtful whether this shortage is primarily for agricultural credit.

Assumption (2)

Significant amounts of credit are readily available at reasonable costs from a variety of informal sources. However, the length of time for which informal sector loans are available is fraught with uncertainty and can be extremely short. Therefore, within certain villages, and at certain peak credit demand periods such as early in the planting season, additional outside credit (particularly of a longer-term nature) may be necessary.
Assumption (3)

It is doubtful whether credit availability has had much of an impact on input adoption or output expansion under Nigerian conditions—particularly on the expansion of the marketable surplus. It is more probable that at present the mere availability of appropriate inputs and the instruction of rural farmers on input use will have a more widespread effect on input adoption than the provision of credit.

Assumption (4)

Rural farmers' demand for credit appears to be relatively interest inelastic. The range of interest rates at which demand will sharply fall off due to high prices is quite high. It would seem that present credit institutions could charge nominal per annum rates as high as 40% before demand really begins to fall off. Nevertheless, a study of different rural credit environments is necessary, and flexibility is the key in formulating interest rate policies.

Assumption (5)

Given the current interest rate structure and institutional practices, the present credit distribution mechanism is biased against rural, particularly poorer rural, farmers. The tendency toward bias may be less strong in those parts of the country where the obligations of richer toward poorer farmers is well established and where the amounts at stake for sharing are smaller.
Assumption (6)

Some cash savings are available in the rural areas, and savings capacities are positive, particularly among wealthier farmers. Farm-households exhibit interest in institutions that can perform savings and cash management functions. Given this, there is a need to devise appropriate intermediary institutions and intermediation packages that would also link up with existing informal savings mechanisms.
CHAPTER FIVE
A NEW APPROACH TO CREDIT POLICY

Introduction

The concern in previous chapters of this study has been with pointing out the difficulties inherent in the Nigerian government's "blanket type" credit approach to the rural-agricultural sector's problems. In Chapter Four, in particular, six basic assumptions underlying credit policy were examined. These assumptions were found to be of questionable validity and in need of reframing to fit the realities of credit and savings needs and use in rural-agricultural areas. The reformulation of the basic assumptions in the last chapter bring to light new directions in which Nigerian credit policy ought to be moving.

The main task of this chapter is to outline and discuss the possible new focus for Nigerian credit policy, including problems that might be inherent in any new approach. The concern in this chapter will not be so much with the specifics or exact details of a new credit policy (since this requires a broader base of information than is available in this study), but rather with a more generalized discussion of the directions toward which policy ought to be oriented. It will be useful to begin the discussion by reviewing briefly the major findings in Chapter Four.

From the discussion in Chapter Four, suggesting fairly substantial borrowing activities in the rural areas, it would seem that many rural farm-households do indeed require credit for their activities. However,
this credit need may not be solely, or even primarily, for purposes of agricultural production, since other types of activities may be more profitable or beneficial in a welfare sense.

Many rural farm-households requiring credit seem able to fulfill a substantial part of their needs from rural sources. This is supported by indications (contrary to government's and conventional economists' beliefs; see Chapters Two and Three) that some surplus cash does exist in the rural areas. However, there are problems with the uncertain and short-term structure of loans from the informal rural financial markets. Furthermore, fragmentation in these informal markets means that surplus cash may be available in one part of a village while credit needs go unfulfilled in another part of the same village. In addition to the above, there are certain credit needs, perhaps even for longer-term credit, that the informal rural financial markets (RFMs) at present seem incapable of fulfilling. The formal financial institutions designated to serve the rural population--cooperative societies, and particularly commercial banks--have been unable to fill the service gap left by the informal RFMs. This has been due in large part to low interest rate credit policies, which have made the rural areas unprofitable for commercial operations.

The Chapter Four discussion has also brought out that, contrary to the government's view of a high interest elasticity of demand for credit on the part of the rural-agricultural population, rural farm-households appear willing to pay fairly high rates of interest on loans. Since the loans do not appear to be directed solely (or in some cases, mainly) at increased agricultural investment, it must be that there exist other economic and non-economic, off-farm activities (e.g., trading) with high
enough pay-off rates to enable the payment of high rates of interest on
loans.

The above summary of the study findings suggests two major areas of
focus for a new credit policy. The first area is that of the need for
better financial intermediation services in the rural areas. Such ser-
vices must be more rural area-specific. That is, they must take into
account the financial services that already exist in the rural areas, the
needs and desires of rural farm-households for financial services, and
the constraints in providing these services from the lender side. A new
focus on intermediation should involve equal emphasis on both savings and
credit, including the implications of such an emphasis for a low interest
rate policy. Furthermore, if one of the objectives of credit policy is
to help improve rural incomes through increased financial services, then
there should be a realization that better financial intermediation ser-
vices need not necessarily be synonymous with better agricultural credit
services. This is because rural farm-households can use the intermedia-
tion services to foster investment in income-increasing, non-farm activi-
ties. Therefore, there should be the freedom within a new intermediary
network for a household requiring non-farm-related investment loans to
be able to obtain such loans.

The second major area of focus for a new credit policy involves the
improvement of agricultural production and the marketable surplus. Given
that (among those who receive credit) credit is not currently very effec-
tive in fostering increased agricultural input use or increase in the
marketable surplus, the relevant questions here should be: What are the
real constraints on agricultural production, and what are the implications
of these constraints for rural incomes? Can credit be meaningfully used to ease the constraints, or are other government policies more appropriate? If credit appears useful, how can this credit be made most effectively available to the agricultural sector?

The remainder of this chapter will consist of an elaboration of the implications of the above two major focuses of a new credit policy.

**Better Financial Intermediation Services**

Credit policy must focus on the need for better financial intermediation services in the rural areas, not just for purposes of agricultural investment but for all types of credit needs and for savings.

The need for better financial intermediaries in rural areas is currently being expressed by policy-makers in Nigeria. However, such expressions fall far short of the approach that will be suggested in this chapter, for they involve the proliferation in their current form of formal intermediaries such as commercial banks. These intermediaries, as has been discussed in Chapters Three and Four, have serious difficulties in effectively serving the rural-agricultural population. It would seem that a useful approach to formulating guidelines for better intermediation services in the rural areas should involve asking the questions: What type of financial intermediation services are needed, and what characteristics of intermediaries seem most or least useful to rural farm-households?
Useful Intermediary Services and Characteristics

From discussions in previous chapters, and as noted in the introductory summary in this chapter, it appears that rural farm-households need some additional credit (in some cases, of a longer-term nature) from outside the rural areas. This credit could be for farm or off-farm investment, and maybe even for short-term consumption—the assumption here being that all such needs are legitimate from the viewpoint of personal and national welfare. It should be stressed, however, bearing in mind the fungibility issue, that most of the credit requests reported by households in the study sample were for investment rather than consumption activities. (See Chapter Four.) Rural farm-households also need more effective savings facilities and better intermediation services among individual households. This intermediation should enable them to tap all the available financial resources within the rural area itself.

Data from the study survey provide some information on the issue of useful/desirable characteristics of financial intermediaries. The data concern the opinions of farm-household heads surveyed about current (formal and informal) RFMs with which they have either had dealings or about which they have some knowledge. The questions asked to elicit opinions on RFMs were open-ended, allowing the 145 respondents to list as many opinions as they wanted, and nothing if they had no opinions on the issue.  

1It was noted in Chapter One that 145 respondents were interviewed, of which five were dropped from the sample because of inconsistent answers, leaving a sample of 140. For purposes of questions on RFMs, the five respondents originally dropped were added back because their answers on this particular section of the questionnaire (unlike answers on other sections) seemed reliable.
Table 5-1 presents information (on a regional and overall sample basis) on what the respondents regarded as the positive attributes of formal RFMs (e.g., cooperative societies, banks, etc.) as far as savings and credit activities were concerned. The regional information provides a means of comparing the importance of different attributes in the south and north. Significant regional differences could mean different approaches in designing appropriate intermediary services in the two broad geographical areas.

Table 5-1 (column 3) shows that leniency in dealing with defaults and with slow repayment of loans is extremely important to rural households. This may be a reflection of the uncertain returns from the economic activities, i.e., agriculture, in which they are principally engaged. The security of savings—and surprisingly, interest payment on savings within formal institutions—appear important to those respondents surveyed. The positive opinions on interest payments is surprising given the fact that policy-makers believe small savers, such as rural households, do not care about interest payment on savings. The fact that putting savings into institutions can prevent the money from being squandered also appears important. Low interest charges on loans appear fifth on the list of positive attributes, supporting the notion mentioned in Chapter Four that low interest charges on loans may not be as important to the rural-agricultural population as policy-makers imagine.

The order of priorities on positive attributes for the total sample holds more or less true on a regional basis, but there are a few differences between the north and south. For example, interest payments on savings and larger loan amounts from formal than from the informal system...
<table>
<thead>
<tr>
<th>Attribute</th>
<th>Number of Times Mentioned (1)</th>
<th>(2)</th>
<th>Total Sample (in Descending Order of Importance)</th>
</tr>
</thead>
<tbody>
<tr>
<td>With regard to credit:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patience of formal institutions (e.g., cooperative societies) in waiting for loan repayment and dealing with default</td>
<td>47</td>
<td>50</td>
<td>97</td>
</tr>
<tr>
<td>With regard to savings: Security of savings within the banking system (safeguarded from thieves, fire, and termites)</td>
<td>39</td>
<td>35</td>
<td>74</td>
</tr>
<tr>
<td>Interest payment by formal institutions on savings</td>
<td>38</td>
<td>6</td>
<td>44</td>
</tr>
<tr>
<td>Money management function of savings institutions which prevents savings from being squandered</td>
<td>16</td>
<td>22</td>
<td>38</td>
</tr>
<tr>
<td>Low interest charges on loans from formal institutions</td>
<td>9</td>
<td>15</td>
<td>24</td>
</tr>
<tr>
<td>Larger loan amounts from formal than from informal system</td>
<td>10</td>
<td>3</td>
<td>13</td>
</tr>
<tr>
<td>No personal conflicts in dealing with formal system</td>
<td>2</td>
<td>11</td>
<td>13</td>
</tr>
<tr>
<td>Privacy in transactions with formal system</td>
<td>4</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>Trustworthiness of formal institutions</td>
<td>4</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Formal system available to everyone</td>
<td>1</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

1Total number of respondents to questions on RFMs = 145; number of respondents in the north = 76; number of respondents in the south = 69.

SOURCE: Field surveys.
are more important in the north than in the south, while low interest charges on loans from formal institutions and lack of personal conflicts in dealings with the formal system are more important in the south than in the north.

Table 5-2 shows the negative attributes of formal RFMs mentioned by respondents (see column 3 in particular). Heading the list of negative attributes in Table 5-2 is the fact that long delays are encountered in getting money out of deposit accounts with formal institutions. The issues of disciplinary actions by formal institutions in case of loan defaults and lack of timeliness in arrival of loans also appear important, although they are far less so than the issue of delays in withdrawing money from deposit accounts. (Compare the number of times (24) mentioned for the latter with 6 and 5 for the former.) The order of priorities of negative attributes for the overall sample again holds on a regional basis, except that in the south timely arrival of loans is not mentioned at all. This may be because in the south people have many more alternative sources of informal loans, such as rotating and non-rotating credit and savings associations from, from which they can borrow if formal loans do not arrive on time, or at all. This latter alternative is less available in the north, as evidence in Chapter Four shows.

Among the formal RFMs, commercial banks were singled out for greater analytical attention because the government is currently pushing commercial branch banking in the rural areas as a means of improving intermediary services in villages. Table 5-3 establishes the level of knowledge of respondents about the more general activities of commercial banks. Table 5-4 looks specifically at reasons for not requesting commercial
TABLE 5-2

PERCEIVED NEGATIVE ATTRIBUTES OF FORMAL SYSTEM

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Number of Times Mentioned</th>
<th>(3) Total Sample (in Descending Order of Importance)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1) Northern Villages</td>
<td>(2) Southern Villages</td>
</tr>
<tr>
<td>Delays in getting money out of savings accounts</td>
<td>10</td>
<td>14</td>
</tr>
<tr>
<td>Formal institutions can take court or disciplinary action in case of default on loan</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Formal institutions do not give loan on time for needs</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Illiteracy is a handicap in dealing with formal institutions</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Location of banks too far</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Impersonal attitudes of bank clerks</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Formal loans are too small</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Formal institutions only help important people</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Savings can be made void in case of war\footnote{1}</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

\footnote{1}{This reason was mentioned in Nomeh village in Anambra State where, during the Nigeria-Biafra war of 1967-1970, some villagers lost the money they had in banks and post office savings accounts, since the Biafran currency was declared abolished by the winning Nigerian side.}

SOURCE: Field surveys.
TABLE 5-3
KNOWLEDGE OF COMMERCIAL BANKING

<table>
<thead>
<tr>
<th>Responses</th>
<th>Do you know you can borrow from a bank?</th>
<th>Do you know you can save in a bank?</th>
<th>Do you know interest is paid on savings in banks?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of Responses</td>
<td>Number of Responses</td>
<td>Number of Responses</td>
</tr>
<tr>
<td><strong>Southern Villages</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>51</td>
<td>63</td>
<td>48</td>
</tr>
<tr>
<td>No</td>
<td>7</td>
<td>0</td>
<td>15</td>
</tr>
<tr>
<td>TOTAL</td>
<td>58</td>
<td>63</td>
<td>63</td>
</tr>
<tr>
<td><strong>Northern Villages</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>51</td>
<td>76</td>
<td>69</td>
</tr>
<tr>
<td>No</td>
<td>15</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>TOTAL</td>
<td>66</td>
<td>76</td>
<td>76</td>
</tr>
</tbody>
</table>

1 The discrepancy between the number of people answering questions on borrowing versus saving arises from the fact that the author was originally interested only in the savings aspect and added the question on borrowing a little later in the survey, thereby missing some respondents. Also, not all respondents who were asked these particular questions answered them because it was toward the end of the questionnaire and they were tired. A total of 139 people out of 145 surveyed on opinions about RFMs answered the questions on savings in the table. A slightly lower number (124) responded to the questions on borrowing.

SOURCE: Field surveys.
TABLE 5-4
REASONS FOR NOT BORROWING FROM COMMERCIAL BANKS

<table>
<thead>
<tr>
<th>Reason</th>
<th>Northern Villages</th>
<th>Southern Villages</th>
<th>Total Sample (in Descending Order of Importance)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have no savings in banks, so cannot borrow</td>
<td>28</td>
<td>11</td>
<td>39</td>
</tr>
<tr>
<td>Bank is only for important people/Nobody knows me</td>
<td>4</td>
<td>16</td>
<td>20</td>
</tr>
<tr>
<td>Do not know procedures for borrowing</td>
<td>8</td>
<td>8</td>
<td>16</td>
</tr>
<tr>
<td>Have no need to borrow from bank given current available sources</td>
<td>2</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>Have no guarantor</td>
<td>3</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>Bank is too far</td>
<td>3</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>I am illiterate</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
</tbody>
</table>

SOURCE: Field surveys.

From Table 5-3, it appears that the level of knowledge about general (if not specific) commercial bank activities is high among respondents. However, a significant minority of respondents in the south did not know that interest is paid on savings deposits. This may account, in the south, for the lower priority given interest payments.

Respondents were also asked why they had no savings accounts with commercial banks. The answer was almost uniformly that they did not have savings, or the savings they had were not enough to warrant the bother with commercial banks. This latter answer matches the negative attitudes toward delays in withdrawing savings from formal institutions.
among positive attributes of formal RFMs (see Table 5-1). In the north also, a significant minority of respondents did not know credit could be obtained from commercial banks. Table 5-4 (see column (3) in particular) shows that rural people feel there are a lot of barriers to their use of commercial banks for credit activities. At the top of the list of reasons for not borrowing from commercial banks is the fact that people feel they must already have savings accounts in a bank before they can approach that bank for credit.¹

Respondents also feel the banking system is not for ordinary farmers like themselves, while the fact that they are not familiar with banking procedures ranks high. On a regional basis, the degree of alienation from the commercial banking system is much higher in the south than in the north, while in the former region also, people feel they have less need, given home resources, to resort to commercial banks for loans. This suggests that either the need for outside sources of credit may be more important in the north than in the south, or that there is greater need to mobilize local financial resources and make these available to rural households in the north. The information presented in Table 5-4 suggests that the recent spread of commercial bank branches in rural areas may not result in increased use of intermediary services by rural people unless the barriers they feel separate them from the banking system are broken down through information and publicity campaigns and through some changes in banking practices. How realistic it is to expect accomplish-

¹This is, in fact, sometimes true in practice. Some banks insist that potential borrowers establish themselves first as bank customers by opening deposit accounts.
ment of the latter will be a subject for discussion later in the chapter.

With regard to informal RFMs, respondents also displayed positive and negative feelings. Table 5-5 shows that on both an aggregate and a regional basis, the greatest strengths of the informal institutions were seen to be their accessibility, particularly in times of emergency need, and their flexibility with regard to loan use, size, and repayment terms. At the same time, this flexibility of the informal RFMs and the very personal nature of dealings spurred negative feelings, especially with regard to non-relatives (Table 5-6). Quarrels, the threat of court action, and the constant worry about being asked to repay before a loan is due rank high on the list of negative attributes. Also important, on both an aggregate and a regional basis, are the uncertainty about getting loans when these loans are requested, the lack of respect for the privacy of a borrower's financial affairs, high interest charges by non-relatives, and forced seizure or sale of property to repay loans. It therefore appears that while rural farm-households would like some freedom in making financial arrangements suited to their needs, they would also appreciate some degree of formality, certainty, and standardization in their financial transactions.

The sentiments expressed above about formal and informal RFMs are not peculiar to Nigeria's rural-agricultural population. In a Latin American survey conducted by Nisbet in the 1960s (quoted in Donald, 1976, p. 84), farmers' comments about formal and informal RFMs were similar to some of the comments found in Tables 5-1 through 5-6.

Given the opinions expressed in the various tables above, and other information about informal RFMs presented in Chapter Four, guidelines can
<table>
<thead>
<tr>
<th>Attribute</th>
<th>Number of Times Mentioned (3)</th>
<th>(1) Northern Villages</th>
<th>(2) Southern Villages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accessibility of informal lender sources</td>
<td>36</td>
<td>14</td>
<td>22</td>
</tr>
<tr>
<td>Flexibility of informal sources with regard to loan use, loan size, and loan repayment</td>
<td>29</td>
<td>15</td>
<td>14</td>
</tr>
<tr>
<td>Promptness of informal system in giving loans</td>
<td>4</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>No interest charges from relatives</td>
<td>3</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Relatives maintain privacy of dealings</td>
<td>3</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>

SOURCE: Field surveys.
<table>
<thead>
<tr>
<th>Attribute</th>
<th>(1) Northern Villages</th>
<th>(2) Southern Villages</th>
<th>Total Sample (in Descending Order of Importance)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occurrence of personal conflicts (e.g., quarrels over loan)</td>
<td>25</td>
<td>25</td>
<td>50</td>
</tr>
<tr>
<td>Threat of court action by lenders who are non-relatives</td>
<td>30</td>
<td>4</td>
<td>34</td>
</tr>
<tr>
<td>Impatience with regard to loan repayment (i.e., asking for repayment before agreed-upon loan term is up)</td>
<td>20</td>
<td>8</td>
<td>28</td>
</tr>
<tr>
<td>Uncertainty about obtaining loan/loan scarcity</td>
<td>11</td>
<td>8</td>
<td>19</td>
</tr>
<tr>
<td>Lack of privacy in dealings</td>
<td>9</td>
<td>6</td>
<td>15</td>
</tr>
<tr>
<td>High interest charges by non-relatives</td>
<td>8</td>
<td>7</td>
<td>15</td>
</tr>
<tr>
<td>Forced seizure or sale of property to repay loan</td>
<td>7</td>
<td>5</td>
<td>12</td>
</tr>
<tr>
<td>Untrustworthiness of informal dealers in transactions</td>
<td>0</td>
<td>11</td>
<td>11</td>
</tr>
</tbody>
</table>

SOURCE: Field surveys.
be constructed for the operations of the 'ideal' or 'desired' rural financial intermediary institution. These guidelines (or characteristics) are compiled in Table 5–7 for both the credit and savings sides of such an intermediary's financial operations. As the title of Table 5–7 suggests, the successful implementation of the guidelines, if indeed this were possible, would result in a perfect or near-perfect rural financial institution (i.e., bearing in mind what rural farm-households want). Such an institution would not only grant agricultural production loans to farm-households, but would also allow them the freedom to receive other types of loans. At the same time, it would help farm-households manage their finances better by instituting convenient and lucrative savings schemes.

The willingness and ability of any financial institution to implement the guidelines set out in Table 5–7 would depend to a large extent on the sort of financial incentives that were available to the institutions. These financial incentives would hinge largely on the rates of interest payable on savings and chargeable on loans. Under current government interest rate policies, it would be impossible for even the best-intentioned rural financial institution to implement most of the guidelines set out above. As such, it is important to discuss necessary reforms in interest rate policies before considering possible institutional forms that might incorporate the characteristics mentioned in Table 5–7 above.
TABLE 5-7
GUIDELINES FOR (OR CHARACTERISTICS OF) AN IDEAL RURAL FINANCIAL INTERMEDIARY INSTITUTION

A. General Characteristics

1) Intermediary must perform joint savings and credit functions.
2) It must be within easy reach of the community or set of communities it serves.
3) It should cultivate a community image, be able to integrate well into the community, and maintain as much openness and publicity as possible about its affairs.
4) It should avoid dealing with community elites only and strive for the image of availability to all community members.

B. Characteristics/Policies Important for Savings

1) Intermediary should allow accounts to be opened with very small initial amounts (e.g., from N 0.2 to N 0.5).
2) It should consider having a clerk or clerks who can go around the community on a regular basis (once a week, or once a fortnight) to collect agreed-upon, specified amounts of savings from savers. This will help in cash management.
3) The intermediary should have strict and visible security measures against theft, fire, etc. Savings could also be protected through a Federal government savings insurance scheme.
4) There should be attractive remuneration, in the form of interest payments, for savings.
5) Intermediary should institute additional incentives to attract savings deposits. Such incentives could be occasional lotteries for savers, with prizes such as educational scholarships, small household durable goods (radios, clocks, etc.), cash, etc. (These incentives have been used successfully in Taiwan and Korea.)
6) Intermediary should institute savings schemes for specific purposes in which rural community savers might be interested (e.g., cultivation of new stands of tree crops, educational funds for children, house building, trading funds, marriage funds, etc.).
7) Intermediary should have very simple and fast deposit and withdrawal procedures requiring little or no reading and writing ability.
8) There should be as few restrictions on withdrawals as possible.
9) The intermediary should have some clerks familiar with the language and customs of the area, who can explain financial transactions to rural savers, and answer their questions.

(continued)
TABLE 5-7  
(continued)

B. Characteristics/Policies Important for Savings  
(continued)

10) The intermediary should show a willingness to reinvest savings within its host community. This would keep rural funds within rural communities, reinforce feelings of a community stake in the intermediary institution, and put pressure on borrowers not to default.

C. Characteristics/Policies Important for Credit

1) Intermediary institution should have no pre-set requirement for potential borrowers to open or maintain savings accounts in the institution before being eligible for loans, although inducements may be given to borrowers to open new accounts.

2) The granting of a fairly wide range of loan amounts should be possible in order to cater to both large and small loan requests.

3) Intermediary should be open to financing any type of genuine loan request, be it for agriculture, trading, education, consumption, purchase of consumer durables, etc. The latter two might be handled through group loan schemes.

4) There should be the ability on the part of the intermediary to finance both short-term (one year or less) and, at least, medium-term (2 to 5 year) projects.

5) There should be flexibility as to type of loan repayment arrangement, either installment repayment or repayment in bulk.

6) Intermediary should be willing and able to renegotiate loan due dates in the face of genuine, extraneous circumstances for the rural borrower, e.g., natural (agricultural) disasters, ill health, business problems, etc.

7) Collateral requirements should be commensurate with realities of rural life. Items such as crops in field, livestock, could be used as security instead of real estate, life insurance, etc. If possible, collateral requirements should be dropped altogether in favor of such mechanisms as group guarantee schemes.

8) Intermediary should have simple and fast loan application procedures requiring little or no reading and writing aptitude on applicant's part. Granting of loan should be prompt.

9) Polite and pleasant clerks able to speak the language of the area to interpret loan terms and answer questions should be employed.

10) Applicant's financial position and transactions should be held confidential.  
(continued)
C. Characteristics/Policies Important for Credit

11) Rates of interest on loans should be considered reasonable from both borrower and lender viewpoints. That is, rates high enough to cover lender costs with some margin for profit and low enough to make borrowing attractive and possible for the majority of rural households.

12) Intermediary should have the ability to call on outside financial sources where necessary, to augment rural community's loanable funds.
Reform of Interest Rate Policies for Better Financial Intermediation

It has been a consistent theme throughout this study that current government interest rate policies bear great responsibility for the inadequate financial services available to the rural-agricultural population. It is clear that if better financial intermediation (particularly of the type outlined in Table 5-7) is to be achieved in the rural areas, rates of interest on loans and on savings will have to be revised upwards to make the rewards on rural financing at least as attractive, if not more so, than those on urban-based financing.

While the exact rate of interest that should be charged on loans cannot be specified in this study, upper bounds on rates that would be willingly borne by borrowers can be suggested from the findings in Chapter Four.

A look at Table 4-14 in Chapter Four, which shows respondents' attitudes toward higher interest charges, suggests that a nominal interest charge of 40% or slightly more per annum might be acceptable to most rural farm-households. Using a 24% per annum inflation rate, the 40% nominal rate would imply an approximate real rate of 16% or more.

Whether such loan rates would be acceptable from the lender's viewpoint would depend on its costs for rural lending. Cost estimates for rural lending were not made by the author for the Nigerian financial

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1Such a rate may not be appropriate for most or all rural areas in the country. The case for variable inflation premiums based on different communities' inflation rates will be made a little later in the discussion.
intermediaries described in Chapter Three of this study. However, if the estimates made for small farmer lending in other studies are used (e.g., see Donald, 1976, p. 116\(^1\)), and if the inflation rate of 24\% per annum is

\(^1\)Donald compiled figures from various country studies to arrive at the estimates below:

<table>
<thead>
<tr>
<th>Costs</th>
<th>Estimates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative</td>
<td>10 (median)</td>
</tr>
<tr>
<td>Cost of Capital</td>
<td>(3^a - 10^b)</td>
</tr>
<tr>
<td>Allowance for Defaults</td>
<td>5 (10 maximum)</td>
</tr>
<tr>
<td>Allowance for Funds Not on Loan</td>
<td>0 - 6</td>
</tr>
<tr>
<td>Inflation Rate</td>
<td>(4^a) (median) 22 - 35</td>
</tr>
</tbody>
</table>

\(^a\)Concessional rate on public capital.

\(^b\)Cost of a savings program.

These estimates can be adjusted slightly for the Nigerian case, as below:

<table>
<thead>
<tr>
<th>Costs(^a)</th>
<th>Estimates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative</td>
<td>10</td>
</tr>
<tr>
<td>Cost of Capital</td>
<td>10(^b)</td>
</tr>
<tr>
<td>Allowance for Defaults</td>
<td>5 (10 maximum)</td>
</tr>
<tr>
<td>Allowance for Funds Not on Loan</td>
<td>0 - 6</td>
</tr>
<tr>
<td>Inflation Rate</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>49 - 60</td>
</tr>
</tbody>
</table>

\(^a\)Note that these costs could also be handled by allowing variable premiums to be charged for each loan, depending on the cost situation for each loan or the range of costs in the community in which a bank is located. This is discussed at greater length in the next few pages.

\(^b\)This cost of capital is used assuming that the institution would be wholly dependent on private funds. If public funds were to be used, then the cost of capital could decrease to the 3\% figure quoted by Donald.
taken into account, then it seems that a 49% nominal rate per annum would be the lowest acceptable rate for rural lending in Nigeria. (Note that if the Federal Office of Statistics 16.6% rate of inflation figure is used, the lowest acceptable per annum nominal rate would be 41.6%.) This lower rate would cover all costs of lending (e.g., administrative, default allowance, cost of capital, etc.). A 49% nominal rate of interest might just be acceptable to rural borrowers if they could get the size of loan desired, receive the loan on time, and not be tied down to using the loan for a pre-specified purpose. Lenders could adjust the nominal rate downwards in areas (such as Araromi village in this study) where the cost of capital appears comparatively lower. Lenders could make some economic profit if default rates were to be minimized (for example, as a result of community pressure on borrowers to repay loans) and if lender-loan transactions costs were to decline because of the use of group loan schemes.

For the ideal financial intermediary outlined in Table 5-7 above, default rates and lower loan transactions costs (if group lending were used) would allow the intermediary to cover the additional administrative costs that could result from the greater flexibility built into its operations. Even in this case, such an intermediary could just break even in its operations, implying a need for some kind of public intervention to give it added incentive to operate.

If it were possible to charge the interest rates discussed above on loans, then financial institutions would be able to pay up to a 10% real rate (34% or 26.6% nominal rate, depending on which inflation figures are used) of interest on rural savings deposits. Whether these rates would be attractive enough to substantially increase savings is perhaps
debatable. The controversy over the relationship between the level of savings and the real interest rate still rages, but as mentioned in Chapter Two, evidence from Taiwan and Korea show that higher real rates of interest have resulted in higher savings levels in these countries. Moreover, since a good number of rural respondents interviewed for the present study expressed positive opinions on interest payments on savings (see Table 5-1), it would seem that higher interest rates than the currently prevailing ones would make these rural farmers even more willing to save. Higher rates would perhaps induce a greater than expected level of savings. At the very least, positive real rates of interest on savings (in the face of high inflation) could persuade farmers to hold some of their savings in financial forms, such as savings accounts, instead of in real forms, such as foodstocks and livestock. This in itself would increase the level of savings in rural financial institutions and, provided these savings were kept within the rural communities, as suggested in Table 5-7, they would augment the volume of loanable resources in the rural areas.

It may be that the level of interest rates on savings and credit suggested above would be politically unpalatable to the government because the rates are seemingly high. In this case, a more flexible approach to interest rates on credit and savings could be taken. With regard to credit, for instance, the government could allow commercial banks flexibility in setting interest charges to cover all lending costs—administrative costs, default costs, the opportunity cost of capital, etc. In places where these costs were low, interest charges on loans would be low, and vice versa for places or circumstances entailing high
lending costs. Alternatively, the government could announce some basic minimum interest rate (to cover administrative and capital costs, perhaps), and then allow banks some flexibility in deciding on various additional premiums to cover inflation and default costs, etc. The premiums could vary from community to community (or group to group), depending on the extent of these costs in each individual circumstance. For example, in a community with very low default rates and a low inflation rate compared to the national average, the premiums charged would be very low. The overall average nominal rate of interest on loans in that community would, therefore, be moderate. In a community with high default rates and a high inflation rate, the reverse would be the case. Similarly, the nominal interest payment on savings deposits could vary depending on the local rate of inflation and the opportunity costs of capital in the area (in the event that this latter was not fixed by the government at a nationwide rate).

It should be noted that with regard to loans, commercial banks might be more interested in being permitted flexibility to vary premiums over time than over space. That is, commercial banks may be more concerned with keeping up and ahead of monthly or yearly cost variations than with cost variations from community to community or group to group. In this case, the government could allow banks the flexibility they need to vary different premiums according to cost fluctuations over time, while maintaining differences in the premiums charged different communities (or groups, or individuals) within a narrowly specified margin. The government could, in fact, decide not to permit spatial variations in the different types of premiums charged by banks (except maybe for the risk premium which could differ considerably from community to community), and allow variations in
premiums only over time. This latter strategy would minimize the chance of horizontal inequities arising with regard to premiums paid commercial banks by different communities or groups of people.

Some policy-makers may be uncomfortable with the idea of allowing commercial banks some flexibility in deciding on interest charges. For one, some commercial banks may abuse this privilege by charging unfairly high rates on loans. Secondly, bank behavior and performance would be difficult to monitor in the face of such flexibility. The strategy of allowing commercial banks some flexibility in setting interest rates would, however, solve the problem (for government) of having to announce high (and perhaps politically embarrassing) nominal interest rates, particularly on rural loans. Besides, even if some commercial banks were tempted to charge unjustifiably high (given the costs in a community, or costs at varying time periods) premiums on loans, they would be constrained to some extent by the demand situation in the market. Evidence on farmers' willingness to pay varying interest charges on loans (see Chapter Four) shows that most farmers do have a clear upper limit of interest charges, above which they would be unwilling to take out loans.

Interest rates (under a flexible or fixed system of setting interest charges) could be made high by high rates of inflation throughout the country. In this case, the government might wish to reduce the rate of inflation first, before announcing charges or reforms in interest rate policy. Attempts to reduce the rate of inflation or to overhaul the system for setting interest rates could be regarded as longer-run objectives of interest rate policy.
In the short-run, the government could, at the very least, still revise interest rates upwards by some margin. An effective margin should be high enough to ensure that rural (predominantly agricultural) loans would be slightly more attractive than other types of loans. This would help counter the bias of formal RFMs against rural, particularly poorer rural, borrowers. The government could also eliminate or modify the current multiple-rate structure which gives direct farmer-borrowers an advantage over farmers borrowing from, or through, cooperative societies. The existing horizontal inequities in the interest rate structure would thus be eliminated.

Whatever the interest rates that are finally instituted on rural savings and credit, it is clear that unless these rates are more advantageous to rural lenders and savers, better financial intermediation will not be possible in the rural areas. Formal RFMs will continue to discriminate against poor rural borrowers, and rural savings mobilized by RFMs will continue to migrate out of rural areas—an undesirable state of affairs for those of the rural-agricultural population seeking loanable funds.

Possible Institutional Forms for an "Ideal" Rural Financial Intermediary Institution

Having outlined earlier the desirable characteristics for a rural financial intermediary and, as discussed above, the type of interest rate policies that would be conducive to better financial intermediation in the rural areas, a question that comes to mind is: Can any existing RFMs be suitably adapted to incorporate the characteristics set out in Table 5-7?
The formal RFMs that currently deal directly with rural savings and credit activities are commercial banks, cooperative societies, and the Federal Savings Bank. The commercial banks already possess, in their functions and operations, some of the characteristics mentioned in Table 5-7. There are, however, other important characteristics (e.g., flexibility in repayment terms, simple loan procedures, suitable collateral requirements, etc.) which they lack. Given attractive financial incentives, commercial banks might be willing to adapt their operations to the desires of the rural-agricultural population. However, it is doubtful whether, in reality, they could adapt enough to meet all the requirements set out for such an institution. This is because commercial banks have an entrenched bureaucratic system which has been operating in a particular way for decades. Such systems usually prove very difficult to change substantially. Thus, while commercial banks, if given incentives, might approach the requirements for the ideal RFM, they could not (operating alone) represent that "ideal" institution.

The cooperative movement would seem promising as a foundation institution on which to build the desired RFM. However, cooperative societies currently lack many of the required characteristics and functions of such an institution and, consequently, it would take almost complete reorganization of the societies to incorporate the guidelines outlined in Table 5-7. This would be almost tantamount to setting up a new institution, but with the probable disadvantage of some (perhaps involuntary) resistance from an entrenched cooperative division in the government's Ministries of Agriculture. The same remarks would apply with regard to the Federal Savings Bank.
On the informal side, the only institution that meets many of the requirements for an ideal RFM is the non-rotating savings and credit association ('safe'). This institution (more common in the south of the country) is easily accessible to rural people, and performs savings, credit and money management functions. (See Chapter Four.) However, many of the 'safes' pay no interest on savings, and their cash holdings are susceptible to attack by thieves or fire. As such, these non-rotating savings and credit associations would also need considerable reorganization to formalize procedures, provide security, etc., before they could prove entirely satisfactory by themselves as the 'ideal' RFM. In the process of such extensive reorganization, many of the characteristics that endear the institutions to the rural-agricultural population would be lost.

Barring the complete reorganization of existing institutions discussed above, another alternative for satisfying the desires of the rural-agricultural population for a suitable type of financial institution would be to create an entirely new institution, perhaps under the auspices of

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1 The non-rotating savings and credit associations, known locally in some areas as 'safe' associations, have been picked out as meeting more of the requirements over their rotating counterparts because these latter, as their name implies, do not actually keep collected funds (except in rare cases). Instead, they rotate the funds from member to member at each meeting. As such, their operations do not give much outside room for non-members to borrow, and they are much less like banking-type transactions than those of non-rotating savings and credit associations whose funds stay collected in a place over an agreed-upon period.

2 The 'safe' is, of course, a cooperative organization, but it differs from the government cooperative societies in that it is completely organized and managed by its rural members without government input—monetary or otherwise. It reaches many more rural people. The mobilization of savings is taken very seriously in 'safes' (in fact, it is their primary function). This contrasts with the lax attitude taken toward savings mobilization in government cooperative societies.
the Nigerian Agricultural and Cooperative Bank (NACB). This new institution would start its operations with a new image and a clean slate, and it would probably be more successful in endearing itself to its service-population than a reorganized older institution such as the cooperative societies. Setting up a new institution is, however, always very expensive in terms of human, financial, and other resources; and if there are other promising ways of achieving the same or approximate results at lower cost, then these may be worth trying.

One tentative suggestion might be to modify and then to forge links between a formal and informal RFM, so that jointly they would combine the characteristics desired by the rural-agricultural population. For example, such links could be developed between the non-rotating credit and savings associations ('safes') and commercial banks. Commercial banks perform savings and credit functions, savings held in the banks are fairly secure and receive interest payments, and banks have recourse to outside sources of credit to augment loanable rural resources. 'Safes' are very accessible to members of the rural community. They have a community image, simple and fast procedures for savings and loan transactions, in-depth knowledge of the membership, and membership pressure not to default on loans. Very few personal conflicts arise in dealings with these associations, as also is the case with commercial banks.

Given this joint list of favorable characteristics, commercial banks and 'safes' need only make a few modifications to their operations to closely approximate the 'ideal' RFM. The commercial banks would have to make more branches accessible in the rural areas, although they need not try to reach every village or hamlet since 'safes' could do this. Com-
mercial banks would also have to make loan repayment arrangements more flexible, and they would need to hire some local clerks to deal with the 'safe' officers or with other individuals. The number of local clerks hired need not be so many, however, because a good number of customers would carry out their transactions through the 'safes.' The 'safes' themselves would have responsibility for the periodic door-to-door collection of savings that bank clerks would have had to do. As for the operations of 'safes,' these would have to be modified to allow the deposit of a designated proportion of collected savings with the commercial banks. Members of 'safes' would receive interest payments for these savings and the savings would be secure. An individual 'safe' association would also have the advantage of obtaining larger loan amounts (whenever needed) for members from commercial bank funds. These borrowed funds could be shared out among members according to the previously established loan sharing formula of the 'safe.' 'Safe' association members could also jointly guarantee repayment of the loans.

To attract the 'safes' and establish the needed links between them and commercial banks, both an extensive publicity campaign and higher interest rates on savings would be needed. High rates on savings would imply higher rates of interest on loans which, as discussed previously, individual rural community members appear willing to pay. There would have to be some margin of difference between rates charged on loans and those paid on deposits in order to give the commercial banks incentive to operate. Or, government could offer commercial banks some type of economic reward for each given number of 'safe' accounts successfully opened and retained. Commercial banks themselves would probably have
some flexibility in lowering and increasing loan and savings rates in order to make these activities more attractive to 'safes.' In addition to interest rate incentives, other incentives such as lotteries, with attractive prizes for members of 'safes,' could also be used, while the banks might offer officers of these 'safes' special assistance in setting up their records and doing their accounts. If the commercial banks cannot, because of higher costs, offer technical assistance to officers of the 'safes,' then a government agency could take charge of providing this type of assistance.

A knowledgeable observer might note that many 'safe' associations— including those located close to commercial banks—do not currently make use of these banks' facilities. The question would be, why should this change under the proposed system? From the author's investigations in the field, three reasons might be hypothesized for the current relative lack of association between 'safes' and commercial banks, even when they have operated in close proximity.¹ These reasons are: the 'safe' association membership feels itself "closed-off" from commercial banks because they think the banks are for elites or elite organizations only. The economic rewards of dealing with commercial banks have not been high enough to warrant the difficulties, delays and paperwork experienced with the banks. The liquidity requirements of 'safe' association members may be so great that they would think it unwise to deposit their savings

¹In the rural town of Ogwashi-Uku, for example, and in Araromi village (surveyed during this study), one or two 'safes' had deposits in nearby commercial banks. However, most others did not use the commercial banking system despite reasonable proximity, especially in the case of Ogwashi-Uku.
in a bank where the savings might not be easily accessible when needed. If these are indeed taken as the reasons for the reluctance of 'safes' to deal with banks, then under the new relationship being proposed between the two sets of institutions, the perceived difficulties could be taken care of, and commercial banks would have an economic incentive to make 'safes' feel wanted. The 'safes' would, themselves, have economic and other incentives to associate with commercial banks, and they would have flexibility to deposit only that amount of their savings that they felt to be compatible with their liquidity requirements. In fact, they could be encouraged to apply to the banks for additional liquidity in case of need.

Dealing with 'safes' would not preclude banks from dealing with individual rural community members (although banks might encourage individuals to work through these groups). Individuals could open up accounts or request loans. In the latter case, they could apply to a given 'safe' to act as a guarantor for their loan, thereby making it unnecessary for the banks to request other types of security on the loan.

'Safes' are currently common only in the south of Nigeria. After trial-associations with commercial banks, their development could be actively encouraged in the north.\(^1\) Close relationships between 'safes' and a formal institution would make these informal societies more acceptable in the north, where the major complaint against them is that the

\(^1\)Alternative or supplementary arrangements (in the case that 'safes' do not gain popularity here) are discussed later in this section.
person keeping the funds collected might embezzle or abscond with these funds. In the north, unlike the south, 'safe' associations could initially be encouraged to deposit all collected funds with the commercial banks until such time as members develop trust in a given individual who could then retain some of the funds for emergency loans.

Should the 'safe'-commercial bank relationship prove successful and spread, it would provide one example in Nigeria of an integrated rural financial institution with fairly strong links between a formal and an informal organization. This type of integrated financial institution could even become the predominant organization with which government would deal whenever it required a medium for rural reforms.

The formal use of both rotating and non-rotating credit associations has been previously discussed elsewhere in the literature (e.g., see Donald, 1976, and the AID Spring Review Volume on Informal Credit). Many of the views on their use have usually been pessimistic, because these associations have been considered primarily from the viewpoint of agricultural credit. It has been said, for example, that as a medium for agricultural credit disbursement, rotating and non-rotating savings and credit associations would be unsuitable because they would not be able to provide technical assistance to accompany the agricultural credit.

In the type of association envisaged here between 'safes' and commercial banks, the main concern of the 'safes' would not be with agricultural credit alone, but with other types of financial activities. The 'safes' would be free to disburse loans received from commercial banks for all types of activities desired by members. This freedom is desirable because, as has been argued previously, it would be misleading
to focus solely on agricultural credit when the need for other types of credit is pressing and even predominant. If a specific need arises to disburse agricultural credit from outside (e.g., government) sources, the 'safes' could still be used in conjunction with technical assistance from a government agency. This would be far better than the current cooperative movement, where farmers receive little or no technical assistance with credit and only a few farmers are reached.

Some other writers on the use of rotating and non-rotating savings and credit associations advocate direct intervention by government in the operations of these associations to formalize them and make them more useful as rural financial intermediaries (e.g., see Ijere, 1979). In the viewpoint of such writers, the rotating and non-rotating savings and credit associations would be required to register with government, send officers for training, and submit to government legislation and control of their activities. Such massive intervention by government would probably have adverse instead of beneficial effects. There would be extra paperwork for officers (whose current remuneration is very small), members would be suspicious of government registration requirements, and membership might fall off, not increase. Excess formality would probably destroy rather than reinforce the essence of these organizations.

In contrast to the forced formalization recommended by these writers, the type of relationship between commercial banks and 'safes' recommended in this study would rely on persuasion and economic incentives, and not on coercion, to obtain improvements and integration in rural financial markets. The voluntary route would probably take longer to achieve and would require more sustained public effort. However, if
the commercial bank-'safe' relationship took off the ground, there would be far longer lasting effects on rural financial market operations than if coercive tactics had been used.

It has been noted above that the type of 'safe'-commercial bank relationship envisaged would hopefully involve very little direct government or formal intervention in the activities of the 'safes.' There might be circumstances, however, requiring direct contact between government agencies and 'safes.' This could occur, for instance, if, as mentioned earlier, government agencies decided to use 'safes' as a conduit for credit to farmers. Such contact between government agencies and 'safe' associations could set up stresses damaging to the character of 'safe' organizations, particularly if the agencies insisted on imposing their rules and regulations on the 'safes.'

To minimize the occurrence of such disruptions, government agencies would have to follow closely the rules already established between 'safes' and commercial banks. The agencies would have to limit paperwork arising from the loan process. They would have to ascertain that the credit being channeled to 'safe' association members for agriculture was really desired by them for that activity. The agencies would have to allow the 'safes' flexibility (within certain mutually agreed-upon limits) to decide on suitable (for 'safe' members) loan sharing and loan repayment formulae. This flexibility would permit the 'safes' to maintain some consistency in their dealings with formal organizations. It would also serve to encourage the 'safes' to maintain their ties with both the commercial banks and the government agencies.
It is important to mention at this point that, with regard to the credit aspect, the type of relationship proposed in this chapter between non-rotating savings and credit associations and commercial banks has been successfully tried, in slightly different forms, in credit programs in some developing countries. For example, the Prídeco/Fedecredito Program in El Salvador, involving a government development agency and a credit union, gives loans to solidarity groups of five to eight people who are proprietors of micro businesses. The members of these solidarity groups collectively guarantee loans for one another, and also are collectively responsible for paying back the individual loans of each business owner. The program provided loans averaging US $80 - US $200 (approximately N$ 48 - N$ 119, at 1980 rates of exchange) to 2735 businesses in 18 months. Default rates were very low (about 2%), while administrative costs averaged US $30 for the first loan and US $10 for the second and subsequent loans.

The Working Women's Forum (an organization of low-income women) in Madras, India, has used a group mechanism (5–50 members) similar to the one in El Salvador to obtain loans from banks for group members' economic activities. In this case, group leaders have stood as personal guarantors for loans to the entire group. The group leaders have also been responsible for collecting payments daily and depositing these in the lending bank. Individual loans, in this case, have been very small, 

\[^{1}\text{For a more detailed description of these and similar programs, see the series of 1980 reports on Assisting the Smallest Scale Economic Activities of the Urban Poor, published by Accion International/Aitec in Cambridge, MA.}\]
averaging about US $2 - US $36 (N 1.2 - N 21.4), while default rates and administrative costs have been even lower than in the program in El Salvador.

The programs described briefly above differ from the non-rotating savings and credit association-commercial bank relationship proposed in this chapter in that they involve urban rather than rural groups. They may involve government rather than private lending institutions, and further, the emphasis may lie more on credit than on savings. However, the principles underlying the loan process are similar to those proposed for non-rotating savings and credit associations interested in obtaining loans from commercial banks. As in the programs above, groups of low-income people in the 'safes' can collectively guarantee, obtain, and repay loans from commercial banks at what would probably be lower administrative, default, and other costs for these banks. In the case of 'safes' in Nigeria, members can also collectively deposit and earn interest on savings in commercial banks. The fact that relationships between informal groups and formal institutions have worked successfully (albeit in a different setting) in other developing countries provides some encouragement for a trial of the non-rotating savings and credit association-commercial bank relationship being proposed for Nigeria's rural areas.

So far, the author has advocated the encouragement of a new type of rural financial intermediary involving an association between 'safes' and commercial banks, because this intermediary would seem to approximate the 'ideal' financial institution desired by the rural-agricultural population. The stress on establishing a 'safe'-commercial bank relationship in the rural areas is not, however, meant to imply that existing formal
rural financial institutions, such as the Nigerian Agricultural Bank (NACB), the cooperative societies, or the Federal Savings Bank, should be closed up or neglected. Indeed, this latter action would be most difficult to achieve, given the considerable amount of public effort and funds that have been invested in these institutions over a period of time. Moreover, entrenched bureaucratic and political interests would work to keep the existing institutions functioning.

It would seem that even if a 'safe'-commercial bank relationship were encouraged in the rural areas, current rural financial institutions could still play a role (even if only in the short run) in providing financial intermediation services to the rural population. For example, the NACB could still continue its function as a conduit for government funds intended for rural areas, except that it would have an additional grassroots organization--the 'safe'--through which it could channel these funds.

With regard to cooperative societies, they would duplicate to a large extent the functions of the 'safes,' so that the encouragement of one type of institution might serve to discourage the development of the other. This need not be the case in every instance, however, because circumstances could arise requiring the coexistence of both types of intermediaries. For instance, it has been mentioned earlier that, in some rural areas, it could take the 'safe'-commercial bank relationship considerable time to develop. During this development process, the cooperative societies (if they exist in those areas) could continue in their role as village-level financial intermediary institutions for farmers.
It could also be the case that the 'safe'-commercial bank relationship fails to develop successfully in some rural areas. Should this happen, the cooperative societies (perhaps modified to stress savings mobilization) could at least provide a limited set of financial services for the rural households in those areas.

Finally, some rural households may want to see both 'safe'-commercial bank associations and cooperative societies develop in their villages. In this circumstance, both types of financial intermediaries could coexist and compete, until such time as one of them becomes more widely accepted than the other. This process of competition could also be allowed between the 'safe'-commercial bank associations and the Federal Savings Bank. No matter which institution survived in the competition, the important point would be that rural households would have access to a financial institution which they considered suitable.

The 'safe'-commercial bank relationship has been suggested in this chapter as one means of approximating the desired characteristics of an 'ideal' rural financial institution. Other ideas involving associations between formal and informal RFMs or the modification of a formal or an informal RFM could doubtless be worked out to approach this ideal. This is, in fact, one of the areas in which, as will be pointed out in Chapter Six, further research on RFMs in Nigeria could be fruitfully carried out.

In this section of the chapter it has been suggested that rural credit policy should change its focus from sole concern with agricultural credit, and concentrate instead on instituting better financial intermediation services for savings and for all types of credit in the rural areas. The type of intermediation services that might be instituted,
the incentives to encourage such services, and the institutional form that a specific intermediary offering these services might take have been discussed.

An important point underlying the discussion has been that concern with improving rural incomes should involve not only agricultural credit, but other types of credit as well as savings activities. This viewpoint, however, might seem to leave credit policy with the still important task of improving agricultural production, because better financial intermediation services in rural areas and a more integrated rural financial market may not necessarily suffice to improve agricultural production. It is important, therefore, to consider separately whether and how credit policy might help solve the problem of improving production in the agricultural sector.

**Improving Agricultural Production**

Credit policy should eschew a 'blanket-approach' to increasing credit in the agricultural sector and focus on finding the real constraints to agricultural production as a means of improving performance in that sector.

It was mentioned earlier in this chapter that among those who received credit, credit does not appear to have been very effective in improving agricultural input use or increasing the marketable surplus. Furthermore, agricultural credit has, in some cases, been diverted to other uses, suggesting that currently lack of credit may not be the
important constraint on agricultural production for many rural farm-households. The implication of the above statements is that a 'blind' approach to credit policy, emphasizing increases in the amount of agricultural credit without carefully studying whether and how that credit might be most useful, may well be ineffective in improving agricultural production. A more sensible approach to credit policy would be one that asked the question: Putting aside the issue of credit for adopting agricultural inputs, what might be the important constraints on agricultural production, and how can credit be useful (if at all) in easing these constraints?

Answering this question in any detail would require an in-depth study of the various facets of agricultural production in Nigeria, with a view to discovering which of them posed the real problems for production in the agricultural sector. Such a study is outside the scope of this thesis, and would be best carried out by the government or other designated bodies. What can and will be done within this study is to formulate some plausible hypotheses concerning possible constraints on agricultural production, and then to briefly explore if and how credit might be useful in easing these constraints. The hypotheses would be based on the perceptions of other authors (discussed in Chapter One) about the agricultural sector's problems, and on the author's own field experiences among farmers in 1977 and 1979.
Hypotheses on Constraints in the Agricultural Sector

Five sets of hypotheses concerning marketing, technological, personnel, risk, and labor problems seem suggested from the discussion in Chapter One and elsewhere in the study as explanations for the agricultural sector's problems. Of these five, the hypothesis on labor constraint seems, from the author's own investigations, to have greatest explanatory potential. Its implications will, therefore, be discussed in somewhat more detail than the implications of other hypotheses. The five hypotheses are set out below.

Hypothesis A

Difficulties with marketing, especially poor farm-to-market roads, and inadequate storage facilities are responsible for the shortfalls in agricultural production—particularly the marketable surplus.

The concern with marketing problems by government officials and academics has been mentioned in Chapter One. Though it is difficult to measure the exact extent of this problem, the generally visible poor state of many rural roads in Nigeria provides some support for this hypothesis. In fact, two of the villages visited during the survey for this study (Nomeh and Turawa) had difficulties with marketing products because of poor farm-to-market roads. This occasionally had an adverse effect on farm prices and further created pressure for storage facilities.

There is a difficulty, however, with attributing too much explanatory power to the marketing problem. The reason is that many villages have always had poor farm-to-market roads. The situation was even worse in the 1940s and 1950s. Yet, agriculture experienced boom periods during
these years. It seems, therefore, that while inadequate marketing facili-
ties may carry some blame for the agricultural sector's performance, the
lack of these facilities cannot constitute the major explanation for the
sector's performance. Other explanations must be sought.

The above line of reasoning does not preclude, however, asking the
question: If marketing problems of the sort outlined above indeed pose
difficulties, how can agricultural credit to farm-households help? The
answer is that credit to farm-households can help very little. For
example, in the area of road building, a public or community effort,
rather than individual farmer effort, is clearly needed. If the govern-
ment cannot undertake required road building projects itself, then it
would have to consider giving aid to communities in terms of money and
some equipment so they can carry out the projects themselves. Many rural
Nigerian villages have been known to use community effort to carry out
such projects successfully.

Individual farmer credit might, of course, be useful in building
storage facilities. However, in some rural areas, villagers have suc-
cessfully built storage barns from materials available to them. What
is needed, perhaps more than credit, is the introduction and adaptation
to local conditions of these methods in areas where such knowledge is
lacking. Modification of storage facilities, e.g., cementing the floor
and inside walls of storage areas, may also have to be introduced as a
means of guarding against insects and rodents. Such modifications need
not be very expensive. However, to the extent that they require consid-
erable investment by farm-households, then it may be legitimate to con-
sider the granting of credit to such farm-households.
Hypothesis B

Lack of trained personnel in the fields of agricultural and irrigation engineering, farm and extension management, etc. constitutes a constraint on the expansion of agricultural output.

There appears to be some truth to the statement that adequately trained personnel for agricultural development in Nigeria are lacking. The poor ratio of extension agents to farmers, mentioned in Chapter One, is a case in point. However, in the case of this hypothesis (as in that of Hypothesis A), it is difficult to ascertain the extent to which the lack of trained personnel is contributory to the agricultural sector's current problems.

What can be said is, if lack of trained personnel is the problem in agricultural production, then credit to individual farmers is not a solution. What will be needed are fast and innovative approaches by government for the training of these personnel. This could include the drafting (in the case of extension agents) of trainees who are already farmers, instead of concentration on young, urban-oriented, upwardly-mobile school leavers, as is currently the practice.

Hypothesis C

Lack of technological inputs and the inappropriateness of these inputs bear responsibility for the poor growth of agricultural output, including the marketable surplus in rural areas.

It is true that many Nigerian rural areas lack modern technological inputs (e.g., fertilizer), and this could account for the slow growth of agricultural output. However, it was mentioned in Chapter Four that some
farmers have access to fertilizer which they use in very little quantities, even when the fertilizer is heavily subsidized, as is the case with cooperative society members. This implies, then, that for these farmers, the lack of inputs may not be as important a constraint on output expansion as the inappropriateness of the inputs.

It could be that the lack of enthusiasm over a modern input is due to the fact that this input has not demonstrated considerable superiority over traditional methods. The lag in the development of appropriate fertilizer and seed technology for root crops—the most common crops in Nigeria—is well known. Lack of superiority, therefore, could be due to inappropriateness of the input for local crops and conditions, or to improper application of the input. If this is the case, then credit to farmers to adopt the given input is again of little or no use because the problems with inputs need to be dealt with at a more aggregate level. What could be more useful is research into inputs suitable for local crops and conditions and instruction of farmers in the proper use of these inputs. If, after these measures are undertaken, the use of appropriate inputs should also require expensive complementary factors, such as irrigation channels, then some individual farmer credit may again be in order. The priority, however, would lie with developing the appropriate inputs, and then disseminating them widely, along with proper instructions as to their use.

Hypothesis D

The desire to minimize the risks inherent in agricultural production could prove to be an important deterrent to the expansion of agricultural output and the marketable surplus.
Farmers in Nigeria, as elsewhere, are subject to various natural risks—vagaries of weather, disease, and pest attacks—in their agricultural production activities. In the absence of programs to ensure against this type of risk, farmers could be hesitant to plough back savings into expansion of farmed acreage for fear of losing these savings (in case of any of the eventualities listed above) and endangering the household's livelihood. This type of behavior could then slow the expansion of agricultural output and the marketed surplus. It is likely that the type of risk avoidance behavior described above is of some importance in Nigeria and may be contributory to the agricultural sector's problems. However, the extent of its importance is difficult to determine.

Individual household credit could be of some help in easing constraints on agricultural production arising from the type of risk described because farmers could use the credit (rather than their savings) to undertake potentially production-increasing expansion of farmed acreage. The granting of such credit would only be risk-reducing, however, to the extent that repayment requirements were flexible and entailed at least some forgiveness or reduction of debt in the case of any of the natural eventualities mentioned above. In any event, crop insurance programs or direct payments to affected farm-households (after the occurrence of any natural disaster) might be more effective and efficient than allocations of credit in dealing with this type of constraint on agricultural production.

Farmers could also exhibit risk-averse behavior if asked to adopt innovative agricultural inputs or practices. Such behavior could delay the use of modern inputs which might ensure the fast expansion of output. It is unlikely that this type of risk-averseness is as yet an important
problem in current Nigerian agriculture. This is because there is still very little known about appropriate, truly innovative farming approaches and packages in the country. If and when such approaches and packages become available to farmers, some credit may be needed to enable poorer farmers to undertake the risk inherent in these new approaches. However, it may be that, given attractive prices for farmers' output, credit could prove unnecessary as an inducement (even for poorer farmers) to adopt new agricultural packages and approaches.

Hypothesis E

Labor scarcity in the rural areas, resulting in high and fast rising prices for agricultural labor (the major input), renders agriculture unattractive, even in the face of rising prices for agricultural products. This leaves investment in agriculture with low profits, thereby reducing incentives to increase production and the marketable surplus.

The issue of labor scarcity and prices in agricultural product and input markets has been explored in Appendix A. The institution of universal primary education (diverting some potential agricultural labor to school), increasing rural-urban migration and rising agricultural wages seem to provide some support for the belief in labor scarcity in rural areas. Rising wages (consequent to this scarcity), which appear to be keeping pace with rising agricultural product prices (see Appendix A), provides some support for the idea of reduced incentives for agricultural investment. In turn, the likelihood of reduced incentives for agricultural investment may be borne out by the failure of farmers who received credit in the study sample to invest significantly more in agriculture.
than other farmers with the same income and farm-acre characteristics who did not receive credit.

The hypothesis of reduced agricultural investment incentives due to high labor prices would seem to have more powerful explanatory power than other suggested hypotheses, because, as remarked above, many of the problems implied in the other hypotheses have always existed—even in boom periods for agriculture. This has not been the case with year-round agricultural labor scarcity. In fact, this latter is a recent phenomenon that only came to public attention with the drafting of the Third National Development Plan in 1975.

Labor scarcity may hit agricultural production hardest in terms of the clearing of new land. Most farmers in Nigeria increase the amount of output produced, not by farming a given piece of land more intensively, but by clearing and farming additional land. This is probably where labor is most needed.

If the idea of labor scarcity is accepted, the question becomes: How can this problem be solved, and, again, how can agricultural credit help in its solution?

In order to find solutions to the labor scarcity problem, the issue of the cause of the labor scarcity itself has to be addressed. It has been mentioned above that the declaration by the government of the availability of universal primary education in 1975 is partly responsible for the diversion of some actual and potential agricultural workers to the school room. The other cause of labor scarcity is primarily the migra-
tion of rural youth to urban areas\textsuperscript{1} because of the greater economic and social attraction provided by these urban areas. This trend toward migration has undoubtedly been exacerbated by the oil boom of the 1970s and the consequent concentration of oil-generated revenues in investment in urban areas\textsuperscript{2} (e.g., see Okonjo, 1976).

Given the above, there are several possible methods of dealing with the issue of labor scarcity, high labor prices, and the shortfalls in marketable agricultural surplus. Some of these methods may be regarded as short-run strategies, while others would be longer run. Some would indicate the need for agricultural credit, while others would not.

One method that immediately comes to mind as a solution to the agricultural labor problem is the subsidization of farmers by government to enable them to hire more labor. This could be done either by direct grants or through a credit program. In fact, the current government efforts at directing low-interest agricultural credit to farmers could and has been interpreted earlier in the study as a means of helping farmers purchase inputs such as labor\textsuperscript{3} and fertilizer. This strategy has not worked, even

\begin{itemize}
\itemUrban population grew at an average annual rate of 4.7% from 1960-1970, and 4.9% from 1970-1980. The overall rate of population growth was 2.5% during the same period. (World Bank, \textit{World Development Report}, 1980)
\itemAlthough social and historical circumstances differ, there is a suggestion that oil-generated booms in the urban areas of other oil-exporting countries (e.g., Venezuela, Qatar) have served, or are serving, to draw people to the urban areas at a much faster rate than would normally have been expected, thereby exacerbating the labor-supply constraint in rural areas.
\itemIt is not made explicit that farmers should use the loans to purchase labor input.
\end{itemize}
when farmers have received loans equal to as much as 61-100% of their average farm expenditures (see Table 4-8, Chapter Four). This is because the strategy of giving loans or grants to farmers for labor will not in itself increase the supply of labor in a given area. Although the farmers' effective demand for labor may be increased, if people have migrated out of the area or removed themselves from the labor force, increased farmer demand for labor would probably not bring these people back into the agricultural labor force. This may be because of social and economic costs of moving for those contemplating reverse migration, or because of other problems associated with moving. Instead, the increased effective demand for labor would largely serve to drive the price of existing laborers higher. Direct subsidization of farm labor payments may not be an effective solution, therefore, to the labor problem.

The government could decide to subsidize laborers directly to migrate back to rural areas and swell the agricultural labor force. It could institute incentive schemes (payments to returnees, moving costs, etc.) to attract people. In this case, credit to farmers would be unnecessary. Available resources would instead be used to finance the incentive scheme. Although this solution to the labor supply problem is possible in theory, in practice it would prove very difficult to administer and may not even work if prospective returnees feel themselves stigmatized as failures for not having "made it" in urban areas.

Another short-run strategy that the government could pursue would be to allow agricultural product prices to rise much more sharply than they are doing now, by disallowing or scaling down considerably the importation of staple or substitute food items such as wheat and rice. This
strategy would sharply increase farmer earnings if demand for the necessary food products does not fall off greatly. Agricultural wages would, of course, rise in response, but perhaps not immediately. The rise might serve to attract laborers back to the rural areas, or it might at least decrease the rate of outmigration. This would, in turn, dampen wage increases, allowing farmers more profit and therefore greater incentives to invest in agriculture.

Again, this strategy is attractive, but is likely to be unpalatable to government because of the political implications of extremely high food prices. Moreover, it could be argued once more that labor response in terms of reverse migration would be uncertain.

It must be stressed here, however, that government should realize that massive imports of rice and wheat probably worsen the incentive structure in the agricultural sector, worsen rural-urban income differentials, and contribute to a dampening of agricultural production. A case in point is the village of Nomeh in Anambra State (surveyed during this study), where farmers were unable to sell their local rice crop because of the presence of government-imported, superior-quality rice. This caused these farmers to delay repayments on their loans from the Anambra State Agricultural Finance Agency. If the government, therefore, wants some improvement in agricultural sector production, it may find it necessary to trade off some of its political popularity in urban areas for some greater rise in agricultural product prices and greater income increase in rural areas. This could be done by scaling down imports and allowing local farmers a chance to sell their products at more favorable prices. In the longer run, production would increase in response to these prices,
and prices might even hopefully start to decrease.

As a longer-run strategy to decrease the labor migration rate, and perhaps even induce reverse migration, government could reorient its aggregate economic and social investment decisions to allow the rural areas to catch up with urban areas. This would involve investing larger amounts in the near future in rural infrastructure, health, education, and rural (not necessarily agricultural) jobs, etc. Such a strategy should certainly be favored. It would make the rural areas much more attractive to live in than currently, improve the farmers' standard of living, and be beneficial to the agricultural sector—not only in terms of retaining or attracting agricultural labor, but in other more general ways. Such a longer-run strategy would be favorable to the economy because it would help overall to alleviate the problem of a land-surplus agricultural sector existing side-by-side with a labor-surplus industrial or modernized sector.

All the strategies discussed above have thus far focused on inducing labor back or keeping labor in the agricultural sector as a means of reducing agricultural wages and enabling farmers to increase production and the marketable surplus. A question could be asked, however, as to how the increased labor supply strategies would affect overall incomes for farmers and laborers in the agricultural sector, particularly in the long run. For it seems that while farmers and agricultural laborers could increase production and make some gains in the short run, in the longer run larger labor supplies in the agricultural sector might ultimately mean decreased per capita incomes in agriculture. This could come about because of the sharing of gains by a larger number of people. Such a situation could
exacerbate already existing income distribution problems between agriculture and other sectors.

To avoid the above problem, an alternative strategy could be envisaged. This strategy would increase agricultural production and the marketable surplus in the short and long run without requiring large increases in labor supply. This would mean that increased agricultural earnings (assuming prices were not too dampened) would be shared by a smaller number of people, implying higher and sustained agricultural income increases.

The strategy would, of necessity, involve some mechanization. Since labor is most important in clearing additional land and preparing it for planting, tractors could instead be introduced for clearing this land and for other required tasks. The wider introduction of tractor and other mechanized services would probably be more welcome in the north of the country where, during the study survey, many farmers expressed explicit desires for such services. Tractor services would also be more easily used in the north because of the larger average acreages farmed and owned per household.

In the south, the introduction of mechanized services would meet with more difficulties because of greater fragmentation of land and other land tenure problems. To avoid this, mechanized services need only be used for opening up unused contiguous parcels of land designated by individual interested communities. Each community could then share out the opened and prepared land to individual farmers interested in increasing their farmed acreage. These farmers would subsequently be responsible for paying for the mechanized services.
The introduction of some degree of mechanized farming is not a policy to be taken lightly, for it could have far-reaching economic and social consequences. For example, if the land tenure system permitted, it could lead to the increased acquisition and concentration of land in fewer hands, as wealthier farmers sought to parcel larger pieces of land together to make such farming easier. This would mean the increasing concentration of income in those same few hands and the possible development of a landless class of laborers as people became dispossessed. In short, greater social and economic inequities could be created and maintained in the agricultural sector under such a system. Since the absence of a landless class of laborers is one of Nigeria's favorable social characteristics, the government would have to develop policies to avoid or restrict such unpleasant outcomes as a dispossessed class of laborers, were it to decide to go the mechanization route.

Introducing some degree of mechanized farming in a country like Nigeria, where overall unemployment is generally acknowledged to be high, would at first seem to represent a contradiction in terms. However, as has been mentioned above, this unemployment is currently concentrated in the urban rather than rural areas. And it is doubtful, as discussed, whether the urban unemployed could be persuaded to return to the rural areas to farm, though they might return to other rural jobs. A policy of introducing mechanization in agriculture would, therefore, probably not entail depriving these people of jobs, since they would not have wanted the jobs in the first place.

Other policies, such as those helping to create agriculture-related, economically-attractive, small-scale industrial jobs in the rural areas,
could help solve the unemployment problem at the same time as they helped make the rural areas more attractive to live in.

Should a strategy requiring some mechanization of farming be pursued, then some credit to individual farm-households would probably be needed to pay for tractor hire or other such services. Such credit could be given in the form of withheld payments for tractor clearing. That is, the government or other body would clear the land with its set of tractors, and farmers would then pay for the services after harvest on an individual-billing basis. Or the government could provide credit to farmers (who needed it) to hire these services.

It is also possible that individual farmers or groups of farmers may want to purchase tractors or other types of mechanized tools for their own use and for rental to other farmers. Should this be the case, then credit might be needed by these farmers to enable them to purchase the necessary machines. Credit might also be needed for working capital, should these farmers find that they have to hire out machine services to other farmers on a delayed payment basis.  

1 The idea of individual farmers in Nigeria's rural areas wanting to purchase tractors may not be as far-fetched as many Nigerians would believe. During the survey process in the north, the author encountered one farmer who expressed interest in purchasing some kind of medium grade tractor for his own use and for rental to other farmers.

2 Various commercial operators may also want to purchase tractors for rental to farmers. These operators may need government credit. However, it is likely that they would be able to obtain credit from commercial banks.
The introduction of mechanization could generate a need for agricultural credit far beyond that which is currently being provided. It is questionable whether the government would be able to provide all the funds needed. It might have to rely on RFMs, such as the commercial banks and non-rotating savings and credit associations, to mobilize funds in and out of rural areas and to channel these funds into agricultural investment. To achieve this, the government could, of course, continue to rely on its current paraphernalia of bank and other legislation. However, as has been suggested in the earlier section on interest rate policy in this chapter, the government would probably achieve greater results if it allowed the banks greater economic incentives (in the form of realistic interest rates) for operating in the rural areas. The banks might then work through their counterpart rural institutions, the non-rotating savings and credit associations ('safes') to reach the farmers with credit. With adequate incentives in the agricultural sector through the lifting of the labor constraint (as a result of mechanization) and through some increase in product prices, farmers would be more interested in investing this credit in agriculture rather than in other enterprises. If government or any of its institutions such as the NACB desired, they could also use 'safes' to channel credit to needy farmers.

The granting to farmers of credit for agricultural services at higher or more realistic rates of interest would mean the exclusion from these agricultural services of some very poor farmers who would be unable to pay the rates charged despite higher economic returns to agriculture. Such farmers might be helped through other 'direct-aid' schemes, although it must be said realistically that singling out these farmers and administer-
ing the aid to them solely would be most difficult to carry out in practice.

The hypotheses, solutions, and uses of credit that have been suggested in this section of the chapter have been put forward bearing in mind the market character of Nigeria's economy. More radical, and perhaps ultimately more equitable, solutions to the agricultural sector's problems could have been proposed. However, in the current political environment of the country, such solutions would more likely be rejected out of hand as unrealistic. As such, a more moderate, and perhaps more incrementalist, approach to solutions has been suggested here. Even at that, policy-makers would still consider some of the suggestions—such as those favoring higher interest rates—exceedingly difficult to carry out, despite the fact that they would ultimately prove highly beneficial to the rural-agricultural population by encouraging the growth of needed financial services.

Summary

The effort in this chapter has been to summarize the major findings of the study, and to suggest new directions for credit policy based on these findings. Most of the suggestions put forward for a new credit policy de-emphasize agricultural credit until a determination has been made as to the proper need for, and use of, that credit.

There are two major suggestions. The first is that credit policy should focus more carefully on the provision of suitable financial intermediation services in the rural areas, since a real gap exists in this area. Such services would be based on the needs and desires of the rural-agricultural population, as well as on the operational constraints of intermediary institutions. Providing suitable financial intermediation
services would also involve taking the issue of financial market inte-
gration seriously by promoting appropriate interest rate policies and by
fostering direct interaction between popular informal RFMs such as non-
rotating savings and credit associations, and formal ones such as commer-
cial banks. The promotion of better financial intermediation services
for the rural-agricultural population would have at its heart the improve-
ment of economic conditions for farm-households through all available means
including non-agricultural ones.

The second suggestion for a new credit policy involves a more careful
study of agricultural sector problems by policy-makers in order to deter-
mine how best to improve agricultural production with or without the use
of agricultural credit. In this respect, several hypotheses on marketing,
personnel, technology, risk, and labor, as constraints on agricultural
production, have been suggested and examined—with the labor constraint
problem being stressed as perhaps offering the most powerful explanation
for current agricultural sector problems. The usefulness of credit—in
the event of each hypothesis holding true—has been explored, and it has
been argued that agricultural credit may be unnecessary in most cases.
Credit may be useful, however, as a complementary input in some cases,
and particularly in the event that the government decides to encourage
mechanization as a solution to the labor constraint problem. In this
case, individual farmer credit for tractor hire services or tractor pur-
chase could be provided at 'realistic' rates of interest.

The government would probably find, in examining the hypotheses put
forward, that each problem area is contributory to the agricultural sec-
tor's difficulties to a different degree, and some problem areas might
have to be tackled simultaneously if the agricultural sector's difficulties are to be overcome. The government would then have to proceed with immediate solutions for the more urgent problems, while leaving others for longer-run consideration and treatment.

In the next and final chapter, the study findings and recommendations are summarized in a more operational manner, while suggestions are made for further research.
CHAPTER SIX
SUMMARY OF MAJOR FINDINGS AND CONCLUSIONS

In recent years, agricultural credit has emerged as one of the leading policy tools for dealing with agricultural production and with income-raising problems in the rural areas of most Third World countries. This emergence has been due partly to the ease with which credit policy and the accompanying low interest rate legislation can be enacted. The stress on increasing allocations of agricultural credit for the rural areas of the Third World has been predicated on the belief by policy-makers in certain rarely investigated assumptions concerning the need for and uses of agricultural credit and the related behavior of rural farm-households.

This study has been concerned with examining, for the Nigerian case, the extent to which these assumptions can provide a basis for a national credit policy aimed at increasing the amounts of agricultural credit. Of particular interest in the study has been the effectiveness of low interest rate policies for encouraging agricultural credit use by rural farmers.

Six major assumptions concerning rural credit and savings behavior were examined in the study, with a view to showing that a credit policy based on these assumptions is misguided and inadequate as a means of solving the income-increasing and agricultural production problems of Nigeria's rural sector. These assumptions are:
(1) Rural farm-households in Nigeria face credit shortages, particularly for agricultural credit.

(2) Such credit as is needed is not readily available in the rural areas, or is available at prohibitive costs from usurious money-lenders.

(3) The existence of credit shortages prevents the adoption by farm-households of modern technological inputs which could ensure increases in output.

(4) Such credit as is provided by the formal system must be given at low or concessional rates of interest in order to persuade farmers to borrow, since their demand for credit is highly interest elastic.

(5) The current distribution mechanisms for credit can with little or no modification be effective in reaching poorer farmers.

(6) Lack of credit is the most important problem related to financial services in the rural areas. Savings mobilization, in particular, is relatively unimportant since savings capacities are quite low. Given this, there is little need to revise the interest rate structure in favor of savings.

On close examination (with the aid of data gathered during a sample survey), many of the assumptions were found to be of questionable validity and in need of reformulation in order to provide better guidelines for the institution of a more realistic and effective credit policy. The major study findings can best be seen through a reformulation of the assumptions.

(1) Some rural farmers--particularly the poorer ones--do face credit shortages, but it is doubtful whether this shortage is primarily for agricultural credit.

(2) Significant amounts of credit are readily available at reasonable cost from a variety of informal sources. However, the length of time for which informal sector loans are available is fraught with uncertainty and can be extremely short. Therefore, within certain villages and at certain peak credit demand periods, such as early in the planting season, additional outside credit (particularly of a longer-term nature) may be necessary.
(3) It is doubtful whether credit availability has had much of an impact on input adoption or output expansion under Nigerian conditions—particularly on the expansion of the marketable surplus. It is more probable that the mere availability of appropriate inputs and the instruction of rural farmers on input use will have a more widespread effect on input adoption than the provision of credit.

(4) The demand for credit by rural farmers is relatively interest inelastic. The range of interest rates at which demand will sharply fall off due to high prices appears to be quite high. It would seem that credit institutions could charge nominal per annum rates as high as 40% or more before demand really begins to decrease. Nevertheless, a study of different rural credit environments is necessary, and flexibility is the key in formulating interest rate policies.

(5) Given the current interest rate structure and institutional practices, the present credit distribution mechanism is biased against rural, particularly poor rural, farmers. The tendency toward bias may be less strong in those parts of the country where the obligations of richer toward poorer farmers is well established and where the amounts at stake for sharing are smaller.

(6) Some cash savings are available in the rural areas, and savings capacities are positive, particularly among wealthier farmers. Farm-households exhibit interest in institutions that can perform savings and cash management functions. Given this, there is a need to devise appropriate intermediary institutions that would link up with existing informal savings mechanisms.

Based on these study findings, recommendations were made for changes in the focus of credit policy—away from the current concern for increasing agricultural credit allocation to the rural sector, and toward more informed approaches involving (i) changes in interest rate policy, (ii) emphasis on savings mobilization and the allocation of other types of credit besides agricultural, and (iii) emphasis on exploring and dealing with the real constraints on agricultural production. Specifically, two major recommendations were made in the study, along with suggestions as to how these recommendations might be implemented. The first recommendation called for:
(A) Credit policy to focus on better financial intermediation in the rural areas. Intermediation services should be concerned with savings and other types of credit besides agricultural, as these would help farm-households pursue various non-agricultural, as well as agricultural, income-increasing activities.

To help implement the above recommendation, it was suggested that:

(i) Rural financial institutions (RFMs) should perform both credit and savings functions.

(ii) Interest rates on savings and credit should be revised upwards to make it more attractive for rural savers to save and lenders to extend credit. Specifically, interest charges on credit should cover administrative costs, with various flexible premiums (depending on geographical location and characteristics of borrowers) to cover default costs, the opportunity cost of capital, and the inflation rate. Interest payments on savings should also have some inflation premium built in so as to make saving in financial assets at least as attractive as saving in real assets.

(iii) Links between commercial banks in rural areas and local non-rotating savings and credit associations ('safes') should be actively fostered through interest rate and other incentives, because these two institutions working together can provide the characteristics of RFMs (accessibility, flexibility in dealings, promptness of service, security of savings, privacy of financial affairs, etc.) which rural savers and borrowers want.

(iv) Additional and innovative economic incentives should, if possible, be offered by RFMs to rural borrowers and savers, and by government to RFMs so as to make rural financial activities as or more attractive than urban. In the case of borrowing, this will help prevent capital flight out of rural and into urban areas. Examples of innovative economic incentives could be the holding by RFMs of lotteries with prizes for rural savers and borrowers (this has been successfully tried in Taiwan and Korea), and the institution of some kind of payment by government to commercial banks for each non-rotating savings and credit association account successfully opened and maintained.

Given that there appears to be as yet little impact of credit on input adoption and on the expansion of the marketable surplus, the second major recommendation for changes in credit policy called for:
(B) Credit policy to focus first on searching out the real constraints to agricultural production, and then second on outlining how credit could be used (if at all) in easing these constraints.

To implement the above recommendation, it was suggested that hypotheses involving marketing, appropriate technological inputs, personnel, risk, and labor scarcity problems be carefully explored as constraints on agricultural production and on the expansion of the marketable surplus. Tentative ideas on these hypotheses and the usefulness of credit were further put forward as follows:

(i) Marketing problems, involving poor farm-to-market roads and inadequate storage facilities, might constitute a problem for agricultural production and for the expansion of the marketable surplus. But marketing problems of the type mentioned are unlikely to be the current major constraint on agricultural production since these problems have always existed, even in boom agricultural periods. Even if marketing difficulties constitute a problem, individual farm-household credit can be of little help in building farm-to-market roads. These have to be dealt with at an aggregate government or community level. Farm-household credit might be of use in building storage facilities, though here again credit may really be unnecessary if the storage facilities are kept simple enough.

(ii) Lack of technological inputs may be a problem for agricultural product expansion, but from discussions in this study this may not be as serious a constraint on agricultural production and expansion of the marketable surplus as are inappropriate technological inputs. These latter are technological inputs which show no significant improvements over traditional farming methods and which, therefore, prove unattractive to farmers. Should lack of appropriate inputs turn out to be the, or one of the, major constraints on agricultural production, individual farm-household credit can again be of no help in easing this constraint to the extent, for example, that increased research efforts are required to identify and develop appropriate inputs.

(iii) The shortage of trained personnel in various areas of agricultural specialization may indeed be a problem for the agricultural sector, but the importance of this shortage for current agriculture is difficult to ascertain.
In any event, individual farm-household credit would not be of much help, as in the above cases, in easing this constraint. Instead, innovative and fast training efforts are what would be needed to solve the personnel problem.

(iv) Risk avoidance behavior could constitute a major constraint on the expansion of agricultural output and the marketable surplus in Nigeria if farmers (out of fear of endangering the household's livelihood) were hesitant to plough back savings into expansion of farmed acreage, because this acreage could be subject to the vagaries of weather, disease, and pest attacks. Risk avoidance behavior could also be judged a problem if farmers were faced with innovative agricultural inputs or practices which they were hesitant to adopt.

The first type of risk avoidance behavior is probably of some importance in Nigeria's traditional agriculture, although how much of a constraint it is, is again difficult to ascertain. Individual farm-household credit could probably be of some help in easing this type of constraint, provided such credit was tied to flexible requirements entailing forgiveness or some reduction of debt in case of the occurrence of the vagaries of production mentioned above. However, this type of constraint might be better dealt with, not by allocations of credit to individual farm-households, but by direct payments to affected farmers after the event, or by some type of crop insurance program.

The second type of risk avoidance behavior is unlikely as yet to be an important constraint on Nigerian agriculture, since too little is yet known about appropriate, truly innovative farming approaches and packages. If and when such packages and approaches become available to farmers, some credit may be necessary to enable poor farmers to bear the risk inherent in these new approaches. However, this need for credit would have to be carefully documented, because it is possible that given attractive prices for farm output, some farmers would be willing to risk their savings to adopt the new packages and approaches.

(v) Labor scarcity, resulting in high prices for labor, few economic gains for farmers, and therefore little incentive to expand production and the marketable surplus, may, and does indeed appear to, be (from field investigations) the most likely explanation for current problems in the agricultural sector.

If labor scarcity problems are taken to be the major constraint, then individual farm-household credit would be most useful and applicable in the event that the government decided to promote a mechanization strategy for solving the labor problem. Such credit would enable needy farm-households to purchase tractors or tractor hire services in order to expand farmed acreage.
Further Possible Problems with Agricultural Production

Other possible problems with agricultural production (not dealt with specifically or in detail in the study) which may warrant the allocation of some farm-household credit concern the special case of tree crop production and the issue of changes in taste for food products.

It has been observed in the case of tree crops such as cocoa that production declines as trees reach old age. In this instance, credit to farm-households to undertake new plantings would be useful, because of the long gestation period of these crops and because of the risks inherent in such long-term investments.

With regard to the issue of changes in tastes away from traditional food crops, it may be that this bears some responsibility for the low expansion of agricultural food crop production in the rural areas. Such an assertion, however, would have to be carefully explored, since current high and rising prices of traditional food crops (see Appendix A) such as yams do not generally seem to bear out the argument of a change in tastes (and therefore a drop in demand).\(^1\)

Should it, however, be the case that tastes are indeed changing from traditional to other food crops such as rice and wheat, then the government

\(^1\)It is generally accepted in the economic literature that as incomes rise, people consume less of low-income-elastic food items (perhaps such as some root crops in Nigeria) and more of high-income-elastic food items, e.g., eggs, meat, sugar, and in the Nigerian case probably rice. It may be that this phenomenon is occurring among the upper, middle, and lower-middle income classes in the urban areas, causing some fall in demand for traditional food crops. In this case, then, the demand generated by the increasing population of low-income rural migrants more than compensates for this fall, thereby continuing the upward pressures on prices of traditional food crops.
might want to consider a policy of assisting farmers who wish to switch away from production of traditional food crops to production (in many areas) of new and unfamiliar food crops such as rice and wheat. This might require the allocation of credit, on flexible repayment terms, to individual farm-households to persuade them to undertake the risks involved in producing entirely new types of crops.

In the few instances in which agricultural credit to rural farm-households would actually be beneficial to agricultural product expansion, it has been recommended in the study that such credit be allocated through a new mechanism connecting non-rotating credit associations with commercial banks in the rural areas. The credit would, through this mechanism, have the chance of reaching many more needy rural farmers.

Suggestions for Further Research

The findings and recommendations in this study point to the need for further research into problems of credit use in agriculture. The study itself can best be regarded as a pilot study because of its base on a relatively small sample survey of farmers. In order to better inform Nigerian credit policy, there is a need to conduct a more tightly structured survey of farmers involving many more geographical areas. Such a survey would provide a broader base of support for the study findings on credit and its use in agriculture, as well as the findings on the desires of rural farm-households for better financial intermediation services.

It is specifically recommended that in a broader research effort particular attention should be paid to various issues on which current
information is either scanty, lacking, or contradictory. These issues are:

(a) local practices, attitudes, and views regarding interest rates;

(b) savings capacities in rural areas;

(c) lenders' (particularly commercial banks') costs for various types of agricultural loans;

(d) alternative, practical forms of collaboration between formal and informal rural financial markets;

(e) possible constraints on agricultural sector performance, and the role of credit in easing these constraints;

(f) in particular, the problem of labor scarcity and the possible use of mechanized services to ease this scarcity; and

(g) possible changes in food tastes due to rising incomes in the country, and the consequent implications for agricultural food production and for credit need and use.

The problem of credit policy and of rural financial markets is multifaceted, and thus requires information on the demand for financial services and the supply of these services. The research undertaken in the present study has yielded preliminary information on both the demand and supply sides of the financial service problem. The various pieces of research outlined above should provide more in-depth information which will enable greater specificity in policy recommendations. Given such specificity, greater care can be taken in the reorientation of credit policy along more rational and effective lines than is currently the case.
APPENDIX A

PRODUCT AND INPUT PRICES IN THE AGRICULTURAL SECTOR

The movements of prices in both the product and the input markets of the agricultural sector can greatly affect farmers' incentives to produce and market given quantities of output. Very often, prices in one market may be given prominence by policy-makers without an adequate linkup to prices in the other market. In Nigeria, for instance, greater prominence is being given to the inflationary pressures caused by rising food prices in 1980, without commensurate attention to wages in the agricultural labor market. The discussion in this appendix attempts to examine prices in both markets in order to shed some light on what may be happening to economic incentives and hence production in the agricultural sector. Unfortunately, consistent series of prices are not available for the type of analysis required. The information that is presented in this appendix is, therefore, based on various pieces of statistical data put together from different sources. There may be some question as to the reliability of the data, but hopefully they give some general idea of the trend in prices in agricultural product and input markets.

Table A-1 (see also Figure A-1) shows the consumer price index for Nigeria as found in the International Monetary Fund (IMF), International Financial Statistics, 1978. The table also shows food and export price indices for various years, constructed by the author respectively from FAO, Nigerian Marketing Board, and Nigerian Central Bank data. The food and export price indices were set up using Laspeyre's method given by the formula:
TABLE A-1

THE CONSUMER PRICE INDEX AND PRICE INDICES
FOR MAJOR FOOD AND EXPORT CROPS
(1975 = 100)

<table>
<thead>
<tr>
<th>Year</th>
<th>Consumer Price Index</th>
<th>Annual Growth Rate %</th>
<th>Food Price Index</th>
<th>Annual Growth Rate %</th>
<th>Export Price Index</th>
<th>Annual Growth Rate %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1961-65</td>
<td>40.1</td>
<td></td>
<td>23.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1965</td>
<td>44.0</td>
<td>+9.7</td>
<td>29.0</td>
<td>+26.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1966</td>
<td>42.3</td>
<td>-3.9</td>
<td>28.0</td>
<td>-3.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1967</td>
<td>42.1</td>
<td>-0.5</td>
<td>23.0</td>
<td>-17.9</td>
<td>30.0</td>
<td></td>
</tr>
<tr>
<td>1968</td>
<td>46.4</td>
<td>+10.2</td>
<td>26.0</td>
<td>+13.0</td>
<td>37.0</td>
<td>+23.3</td>
</tr>
<tr>
<td>1969</td>
<td>52.8</td>
<td>+13.8</td>
<td>36.0</td>
<td>+38.5</td>
<td>40.0</td>
<td>+8.1</td>
</tr>
<tr>
<td>1970</td>
<td>61.3</td>
<td>+16.1</td>
<td>55.0</td>
<td>+52.8</td>
<td>41.0</td>
<td>+2.5</td>
</tr>
<tr>
<td>1971</td>
<td>62.9</td>
<td>+2.6</td>
<td>58.0</td>
<td>+5.5</td>
<td>--</td>
<td>+7.3</td>
</tr>
<tr>
<td>1972</td>
<td>66.5</td>
<td>+5.7</td>
<td>58.0</td>
<td>0</td>
<td>47.0</td>
<td>+7.3</td>
</tr>
<tr>
<td>1973</td>
<td>74.8</td>
<td>+12.5</td>
<td>70.0</td>
<td>+20.7</td>
<td>70.0</td>
<td>+48.9</td>
</tr>
<tr>
<td>1974</td>
<td>100.0</td>
<td>+33.7</td>
<td>100.0</td>
<td>+42.9</td>
<td>100.0</td>
<td>+42.9</td>
</tr>
<tr>
<td>1975</td>
<td>122.0</td>
<td>+22.0</td>
<td>101.0</td>
<td>+1.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1976</td>
<td>148.2</td>
<td>+21.5</td>
<td>134.0</td>
<td>+32.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1977</td>
<td>184.3</td>
<td>+24.4</td>
<td>135.0</td>
<td>+0.8</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 The food crops included in this index are rice paddy, maize, millet, sorghum, cassava and yams. The food prices were unpublished FAO estimates from an FAO, "Computer printout S07026-C."

2 Export crops included are benniseed, cocoa, seed cotton, groundnut, and palm kernel. The prices were obtained from Central Bank, Annual Report 1971, 1976, 1977, and Marketing Board figures.
FIGURE A-1

THE CPI, FOOD INDEX AND EXPORT CROP INDEX COMPARED

1Export crops refer to Marketing Board purchases and not total production, although the two may virtually be synonymous in some cases.

NOTE: Food prices available until 1975 only.
The growth rates in Table A-1 suggest that over the period 1965-1975, food prices rose faster than prices in the consumer price index (CPI). Food prices grew at an average annual rate of 17.8%, as compared to a 10% rate for the CPI over the same period. If the abnormal war and after-war years of 1967 to 1970 are excluded, the picture remains the same for growth rates from 1971 to 1975. The table does not provide evidence for food prices after 1975. Unofficial Nigerian Federal Office of Statistics data shown in Table A-2 suggest that food prices were still rising faster than prices in the consumer price index. Note, however, that the food basket represented by the Nigerian CPI differs greatly from that used by the author in constructing the food index in Table A-1. A look at the implicit price deflator and annual growth rates for total Gross Domestic Product (GDP) and the private consumption component in Table A-3 confirms the trend of faster rising agricultural prices on average for the period 1960-1977 considered in the table. Note, however, that if the period of the 1960s is examined separately, the picture does not hold.

Export prices (see Table A-1), like food prices, appear to have risen faster on an average annual basis than prices in the CPI. The prices of key export products grew at an average annual rate of 17.5% from 1968 to 1978. During the same period, prices given by the CPI grew at an average annual rate of 16.2%. Again, excluding the war years of 1968-1970, export crop prices still grew at slightly higher rates than the CPI. (Compare 17.9%
### TABLE A-2

**UNOFFICIAL FEDERAL OFFICE OF STATISTICS**  
**CONSUMER PRICE INDEX WITH FOOD COMPONENT**  
(1975 = 100)

<table>
<thead>
<tr>
<th>Year</th>
<th>Consumer Price Index</th>
<th>Annual Growth Rate %</th>
<th>Food Component of CPI</th>
<th>Annual Growth Rate %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1976</td>
<td>123.9</td>
<td>23.9</td>
<td>122.0</td>
<td>22.0</td>
</tr>
<tr>
<td>1977</td>
<td>143.0</td>
<td>15.4</td>
<td>146.0</td>
<td>19.7</td>
</tr>
<tr>
<td>1978</td>
<td>166.7</td>
<td>16.6</td>
<td>171.9</td>
<td>17.7</td>
</tr>
</tbody>
</table>

**SOURCE:** Federal Office of Statistics, Lagos.
**TABLE A-3**

**IMPLICIT PRICE DEF LATOR AND GROWTH RATES**
**FOR AGRICULTURAL AND TOTAL GDP**
**(1974 = 100)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Agriculture</th>
<th>Growth Rates</th>
<th>Total GDP</th>
<th>Growth Rates</th>
<th>Private Consumption Only</th>
<th>Growth Rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960</td>
<td>42.0</td>
<td></td>
<td>36.0</td>
<td></td>
<td>38.0</td>
<td></td>
</tr>
<tr>
<td>1965</td>
<td>46.0</td>
<td>+9.5</td>
<td>40.0</td>
<td>+11.1</td>
<td>46.0</td>
<td>+21.1</td>
</tr>
<tr>
<td>1966</td>
<td>55.0</td>
<td>+9.0</td>
<td>45.0</td>
<td>+12.5</td>
<td>52.0</td>
<td>+13.0</td>
</tr>
<tr>
<td>1967</td>
<td>53.0</td>
<td>-3.8</td>
<td>43.0</td>
<td>-4.4</td>
<td>52.0</td>
<td>0</td>
</tr>
<tr>
<td>1968</td>
<td>50.0</td>
<td>-5.7</td>
<td>42.0</td>
<td>-2.3</td>
<td>49.0</td>
<td>-5.8</td>
</tr>
<tr>
<td>1969</td>
<td>53.0</td>
<td>+5.7</td>
<td>44.0</td>
<td>+4.8</td>
<td>55.0</td>
<td>+12.2</td>
</tr>
<tr>
<td>1970</td>
<td>68.0</td>
<td>+28.3</td>
<td>51.0</td>
<td>+15.9</td>
<td>65.0</td>
<td>+18.2</td>
</tr>
<tr>
<td>1971</td>
<td>76.01</td>
<td>+11.8</td>
<td>58.0</td>
<td>+13.7</td>
<td>76.0</td>
<td>+16.9</td>
</tr>
<tr>
<td>1972</td>
<td>83.0</td>
<td>+9.2</td>
<td>60.0</td>
<td>+3.4</td>
<td>82.0</td>
<td>+7.9</td>
</tr>
<tr>
<td>1973</td>
<td>85.0</td>
<td>+2.4</td>
<td>67.0</td>
<td>+11.7</td>
<td>80.0</td>
<td>-2.4</td>
</tr>
<tr>
<td>1974</td>
<td>100.0</td>
<td>+17.6</td>
<td>100.0</td>
<td>+49.3</td>
<td>100.0</td>
<td>+25.0</td>
</tr>
<tr>
<td>1975</td>
<td>141.0</td>
<td>+41.0</td>
<td>115.0</td>
<td>+15.0</td>
<td>120.0</td>
<td>+20.0</td>
</tr>
<tr>
<td>1976</td>
<td>178.0</td>
<td>+26.2</td>
<td>133.0</td>
<td>+15.7</td>
<td>154.0</td>
<td>+28.3</td>
</tr>
<tr>
<td>1977</td>
<td>227.0</td>
<td>+27.5</td>
<td>153.0</td>
<td>+15.0</td>
<td>175.0</td>
<td>+13.6</td>
</tr>
</tbody>
</table>

for exports to 17.3% for the CPI.)

These figures on agricultural prices suggest that in the product market, agricultural prices in general have been keeping up and even slightly gaining on other prices in the economy.¹ There is, however, a need to look at the input market. The only agricultural input to be really considered here is labor, because some data are available for agricultural wage rates. Moreover, labor has been the single most important purchased input into agricultural production. Over 70% of farmers' annual farm expenditures are used for paying labor expenses.

To examine what is happening to labor prices, it is important to look at the supply of agricultural labor itself. Table A-4 shows that in absolute numbers, the agricultural labor force increased very little between 1965 and 1978. Also, while the total economically active population grew at 2.0 to 2.2% per annum during these same years, the agricultural labor force was believed to have grown at only around 0.5 to 0.6% per annum. The figures imply that the supply of agricultural labor is barely increasing. This slow rate of growth can be largely accounted for by the outmigration of rural youth to more economically attractive urban areas, thereby causing urban population to grow at the very rapid rate of 4.9% per annum (World Bank World, Development Report, 1980). Thus, while the agricultural labor force is remaining virtually stagnant, the number of people dependent on food from the agricultural sector is rising rapidly. This state of affairs

¹It should be noted that not all price series quoted here (e.g., the food price indices) necessarily reflect farm gate prices. It may be that prices received by farmers are somewhat less than what is suggested by these indices. The price figures should therefore be regarded perhaps as optimistic approximations of what farmers actually receive.
### ECONOMICALLY ACTIVE POPULATION (TOTAL AND AGRICULTURAL)

<table>
<thead>
<tr>
<th>Year</th>
<th>Total '000s</th>
<th>Annual Growth Rate %</th>
<th>Agricultural '000s</th>
<th>Annual Growth Rate %</th>
<th>% of Economically Active in Agriculture</th>
</tr>
</thead>
<tbody>
<tr>
<td>1965</td>
<td>20273</td>
<td>2.0</td>
<td>13467</td>
<td></td>
<td>66.4</td>
</tr>
<tr>
<td>1970</td>
<td>22277</td>
<td>2.0</td>
<td>13825</td>
<td>0.5</td>
<td>62.1</td>
</tr>
<tr>
<td>1975</td>
<td>24665</td>
<td>2.1</td>
<td>14236</td>
<td>0.6</td>
<td>57.7</td>
</tr>
<tr>
<td>1976</td>
<td>25201</td>
<td>2.1</td>
<td>14324</td>
<td>0.6</td>
<td>56.8</td>
</tr>
<tr>
<td>1977</td>
<td>25747</td>
<td>2.2</td>
<td>14406</td>
<td>0.6</td>
<td>56.0</td>
</tr>
<tr>
<td>1978</td>
<td>26301</td>
<td>2.2</td>
<td>14482</td>
<td>0.5</td>
<td>55.1</td>
</tr>
</tbody>
</table>

causes an upward pressure on prices in both the agricultural labor and product markets. The situation can be depicted graphically, as in Figure A-2 below.

FIGURE A-2

GRAPHICAL ILLUSTRATION OF PROBABLE SUPPLY AND DEMAND CONDITIONS IN AGRICULTURAL LABOR AND PRODUCT MARKETS

In Figure A-2, D₁ and S₁ are the original supply and demand curves for farm labor, while P₁ is the equilibrium wage given these demand and supply curves. The supply curve for labor moves out slightly to S₂, depicting the small increase in the labor force shown in Table A-4. The demand curve for labor, however, shifts out much further, resulting in high wages at P₂. The same type of analysis could hold for the product market, as in
Figure A-2(b). However, the degree to which increases in wages in the labor market can be translated directly into increased prices in the product market depends on the elasticities of demand in the product market, and on other factors such as government importation of food items.

Empirical evidence on agricultural wages suggests that these wages have indeed been rising at a fairly fast rate. A look at Table A-5 shows that wages recorded an average annual increase (in nominal terms) of 26.4% for the years 1972 to 1978, for which data are available. Given an average annual inflation rate of 17.5% in the same period, it means that agricultural wages recorded an approximate increase of 8.9% in real terms.

**TABLE A-5**

<table>
<thead>
<tr>
<th>Year</th>
<th>Rate per Day (₦)</th>
<th>Percent Annual Increase (Nominal)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1972</td>
<td>0.88</td>
<td></td>
</tr>
<tr>
<td>1973</td>
<td>0.89</td>
<td>1.14</td>
</tr>
<tr>
<td>1974</td>
<td>1.10</td>
<td>23.6</td>
</tr>
<tr>
<td>1975</td>
<td>1.58</td>
<td>43.6</td>
</tr>
<tr>
<td>1978</td>
<td>3.00*</td>
<td>30.0 per annum</td>
</tr>
</tbody>
</table>

*This figure comes from the author's own field investigations among farmers, as no official figures are available for that year.

Looking at the agricultural product prices for the years 1972-1978 (either from the food and export index, Table A-1, or the implicit price deflator, Table A-3), it seems that agricultural product prices, though rising, barely kept pace with (in fact, they slid behind) the prices for agricultural labor. Such a situation could then be responsible for a dampened effect on agricultural output, including marketed surplus.

The fact that agricultural product prices are barely keeping up with rises in the price of agricultural labor suggests, as has been mentioned earlier, that there must be factors deterring the transfer of production cost increases to output price increases. It could be that the demand for foodstuffs, for example, is fairly price elastic, or that the supply curve for foodstuffs has somehow been shifted out further than would be presumed from Figure A-2(b). Since the foodstuffs grown (yams, cassava, millet, etc.) are staples, implying that the demand for them should be relatively price inelastic, the second explanation as to why agricultural product prices should be slightly lower than expected is more appealing. The supply curve for staple food items (or near substitutes for staples) could be shifted out through increased government imports of food items, such as cereals (namely, wheat for bread and rice). Table A-6 shows that cereal imports have indeed increased substantially in absolute and relative terms in recent years. Rice imports, in particular, have made impressive gains. More importantly, though, cereal imports per capita, which remained fairly stable at around 0.004 to 0.007 metric tons per capita from 1966 to 1975 (see Table A-7), have increased dramatically by over 100% on a per capita basis from 1976 to 1978. This could, then, account for a dampened effect on domestic food prices.
TABLE A-6
TOTAL CEREAL IMPORTS AND RICE IMPORTS AS PERCENT OF AGRICULTURAL AND FOOD IMPORTS

<table>
<thead>
<tr>
<th>Year</th>
<th>Cereal Imports Value $000s</th>
<th>As Percent of Total Agricultural Imports</th>
<th>As Percent of Food &amp; Animal Imports</th>
<th>Rice Imports Value $000s</th>
<th>As Percent of Total Agricultural Imports</th>
<th>As Percent of Food &amp; Animal Imports</th>
</tr>
</thead>
<tbody>
<tr>
<td>1966</td>
<td>24147</td>
<td>27.2</td>
<td>29.6</td>
<td>346</td>
<td>0.4</td>
<td>0.4</td>
</tr>
<tr>
<td>1967</td>
<td>20551</td>
<td>22.0</td>
<td>23.8</td>
<td>398</td>
<td>0.4</td>
<td>0.5</td>
</tr>
<tr>
<td>1968</td>
<td>16562</td>
<td>18.7</td>
<td>20.3</td>
<td>72</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td>1969</td>
<td>27652</td>
<td>30.6</td>
<td>32.1</td>
<td>71</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td>1970</td>
<td>33489</td>
<td>26.7</td>
<td>29.1</td>
<td>190</td>
<td>0.2</td>
<td>0.2</td>
</tr>
<tr>
<td>1971</td>
<td>48603</td>
<td>28.6</td>
<td>31.0</td>
<td>71</td>
<td>0.04</td>
<td>0.05</td>
</tr>
<tr>
<td>1972</td>
<td>54164</td>
<td>27.7</td>
<td>30.2</td>
<td>75*</td>
<td>0.02</td>
<td>0.04</td>
</tr>
<tr>
<td>1973</td>
<td>77973</td>
<td>33.5</td>
<td>35.7</td>
<td>1680*</td>
<td>0.4</td>
<td>0.7</td>
</tr>
<tr>
<td>1974</td>
<td>115955</td>
<td>36.0</td>
<td>43.6</td>
<td>2379</td>
<td>0.7</td>
<td>0.9</td>
</tr>
<tr>
<td>1975</td>
<td>141860</td>
<td>24.8</td>
<td>31.9</td>
<td>3800</td>
<td>0.7</td>
<td>0.9</td>
</tr>
<tr>
<td>1976</td>
<td>241903</td>
<td>31.5</td>
<td>39.8</td>
<td>32138</td>
<td>4.2</td>
<td>5.3</td>
</tr>
<tr>
<td>1977</td>
<td>444772</td>
<td>36.3</td>
<td>45.0</td>
<td>218000</td>
<td>17.8</td>
<td>22.0</td>
</tr>
<tr>
<td>1978</td>
<td>703500</td>
<td>50.0</td>
<td></td>
<td>419000</td>
<td>26.8</td>
<td></td>
</tr>
</tbody>
</table>

*Figures for these two years tend to be contradictory in the 1972 and 1973 yearbooks.

TABLE A-7

PER CAPITA CEREAL IMPORTS (1966-1978)

<table>
<thead>
<tr>
<th>Year</th>
<th>Population</th>
<th>Cereal Imports</th>
<th>Imports Per Capita</th>
</tr>
</thead>
<tbody>
<tr>
<td>1966</td>
<td>59,950,000</td>
<td>224000</td>
<td>0.004</td>
</tr>
<tr>
<td>1967</td>
<td>61,449,000</td>
<td>166000</td>
<td>0.003</td>
</tr>
<tr>
<td>1968</td>
<td>62,985,000</td>
<td>147970</td>
<td>0.002</td>
</tr>
<tr>
<td>1969</td>
<td>64,560,000</td>
<td>236695</td>
<td>0.004</td>
</tr>
<tr>
<td>1970</td>
<td>66,174,000</td>
<td>317913</td>
<td>0.005</td>
</tr>
<tr>
<td>1971</td>
<td>67,856,000</td>
<td>449284</td>
<td>0.007</td>
</tr>
<tr>
<td>1972</td>
<td>69,581,000</td>
<td>392000</td>
<td>0.006</td>
</tr>
<tr>
<td>1973</td>
<td>71,350,000</td>
<td>441850</td>
<td>0.006</td>
</tr>
<tr>
<td>1974</td>
<td>73,163,000</td>
<td>389270</td>
<td>0.005</td>
</tr>
<tr>
<td>1975</td>
<td>75,023,000</td>
<td>477430</td>
<td>0.006</td>
</tr>
<tr>
<td>1976</td>
<td>76,977,000</td>
<td>851600</td>
<td>0.011</td>
</tr>
<tr>
<td>1977</td>
<td>78,982,000</td>
<td>1273880</td>
<td>0.016</td>
</tr>
<tr>
<td>1978</td>
<td>80,600,000</td>
<td>2007190</td>
<td>0.025</td>
</tr>
</tbody>
</table>

1 Because of the lack of a proper census in Nigeria since 1963, population estimates for the country from various sources differ substantially. The population estimates used in the table are World Bank estimates. They lie on the higher range of estimates. The Food and Agricultural Organization's (FAO) population figures are lower. Using these figures, for instance, the cereal imports per capita would be slightly higher as shown below:

<table>
<thead>
<tr>
<th>Year</th>
<th>Imports Per Capita</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td>0.006 metric tons per capita</td>
</tr>
<tr>
<td>1975</td>
<td>0.007 &quot;</td>
</tr>
<tr>
<td>1976</td>
<td>0.013 &quot;</td>
</tr>
<tr>
<td>1977</td>
<td>0.019 &quot;</td>
</tr>
<tr>
<td>1978</td>
<td>0.029 &quot;</td>
</tr>
</tbody>
</table>

It would seem, therefore, that farmers are currently caught in a squeeze between rising prices for agricultural labor and dampened prices for agricultural output. In this situation, the supply of agricultural output, or more likely, of the marketed surplus, would tend to suffer.
**APPENDIX B**

FERTILIZER AND LABOR USE: COOP MEMBERS AND NON-COOP MEMBERS COMPARED IN FOUR INCOME GROUPS

(All Money Values in N)

<table>
<thead>
<tr>
<th>Income Groups</th>
<th>(1) Number</th>
<th>(2) % Using Fertilizer</th>
<th>(3) Mean Fert. Exp.</th>
<th>(4) Mean Fert. as % of Farm Exp.</th>
<th>(5) Mean Labor Exp.</th>
<th>(6) Mean Lab. as % of Farm Exp.</th>
<th>(7) Mean Farm Income</th>
<th>(8) Mean Total Cash Income</th>
<th>(9) Mean Off-Farm Income</th>
<th>(10) Mean Farm Income + Mean Farm Exp.</th>
<th>(11) Mean Farm Income + Mean Farm Exp.</th>
<th>(12) Mean Number of Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-400</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coop Members</td>
<td>7 out of 11</td>
<td>63.6 5.3</td>
<td>62.3 92.5</td>
<td>5.7</td>
<td>67.4 212.7</td>
<td>278.2</td>
<td>65.5 2.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5.3 (7)</td>
</tr>
<tr>
<td>Non-Coop Members</td>
<td>9 out of 20</td>
<td>45.0 2.4</td>
<td>57.9 85.1</td>
<td>2.8</td>
<td>68.0 173.3</td>
<td>216.3</td>
<td>43.0 2.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6.1 (14)</td>
</tr>
<tr>
<td>Borrowing Informally</td>
<td>5 out of 13</td>
<td>38.5 2.2</td>
<td>66.3 92.6</td>
<td>2.4</td>
<td>71.6 156.2</td>
<td>217.7</td>
<td>61.5 1.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5.8 (9)</td>
</tr>
<tr>
<td>Not Borrowing Informally</td>
<td>4 out of 7</td>
<td>57.1 3.0</td>
<td>42.3 71.4</td>
<td>4.2</td>
<td>59.2 205.1</td>
<td>213.7</td>
<td>8.6 2.9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6.6 (5)</td>
</tr>
<tr>
<td>401-800</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coop Members</td>
<td>16 out of 18</td>
<td>88.9 20.4</td>
<td>156.7 234.2</td>
<td>8.7</td>
<td>66.9 407.5</td>
<td>534.9</td>
<td>127.4 1.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10.8 (15)</td>
</tr>
<tr>
<td>Non-Coop Members</td>
<td>8 out of 10</td>
<td>80.0 8.2</td>
<td>182.4 234.3</td>
<td>3.5</td>
<td>77.8 441.9</td>
<td>513.9</td>
<td>72.0 1.9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6.1 (8)</td>
</tr>
<tr>
<td>Borrowing Informally</td>
<td>5 out of 6</td>
<td>83.3 9.0</td>
<td>125.0 182.8</td>
<td>6.9</td>
<td>68.6 437.7</td>
<td>499.3</td>
<td>61.6 2.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6.7 (5)</td>
</tr>
<tr>
<td>Not Borrowing Informally</td>
<td>3 out of 4</td>
<td>75.0 7.0</td>
<td>268.5 311.5</td>
<td>2.3</td>
<td>86.2 448.3</td>
<td>535.8</td>
<td>87.5 1.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5.0 (3)</td>
</tr>
<tr>
<td>801-1600</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coop Members</td>
<td>23 out of 26</td>
<td>88.5 19.4</td>
<td>216.5 349.7</td>
<td>5.5</td>
<td>61.9 928.1</td>
<td>1126.9</td>
<td>198.8 2.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>11.7 (24)</td>
</tr>
<tr>
<td>Non-Coop Members</td>
<td>9 out of 13</td>
<td>69.2 19.2</td>
<td>233.6 355.8</td>
<td>5.4</td>
<td>65.7 952.0</td>
<td>1214.0</td>
<td>262.0 2.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>27.5 (8)</td>
</tr>
<tr>
<td>Borrowing Informally</td>
<td>4 out of 7</td>
<td>57.1 16.7</td>
<td>175.7 315.4</td>
<td>5.3</td>
<td>55.7 969.0</td>
<td>1110.7</td>
<td>141.7 3.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>9.5 (4)</td>
</tr>
<tr>
<td>Not Borrowing Informally</td>
<td>5 out of 6</td>
<td>83.3 22.1</td>
<td>301.2 403.0</td>
<td>5.3</td>
<td>74.7 932.2</td>
<td>1334.5</td>
<td>402.3 2.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>45.5 (4)</td>
</tr>
<tr>
<td>1600 and Above</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coop Members</td>
<td>26 out of 28</td>
<td>92.9 89.1</td>
<td>703.5 1189.7</td>
<td>7.5</td>
<td>59.1 2707.1</td>
<td>3240.1</td>
<td>533.0 1.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>49.5 (26)</td>
</tr>
<tr>
<td>Non-Coop Members</td>
<td>12 out of 13</td>
<td>92.3 68.5</td>
<td>671.5 867.6</td>
<td>7.9</td>
<td>77.4 2168.2</td>
<td>3425.5</td>
<td>1257.3 2.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>55.3 (9)</td>
</tr>
<tr>
<td>Borrowing Informally</td>
<td>3 out of 4</td>
<td>75.0 40.0</td>
<td>555.0 772.3</td>
<td>5.2</td>
<td>71.9 1896.0</td>
<td>2532.0</td>
<td>636.0 2.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>23.5 (2)</td>
</tr>
<tr>
<td>Not Borrowing Informally</td>
<td>9 out of 9</td>
<td>100.0 81.1</td>
<td>723.3 910.0</td>
<td>8.9</td>
<td>79.3 2289.2</td>
<td>3822.6</td>
<td>1533.4 2.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>64.4 (7)</td>
</tr>
</tbody>
</table>

*Numbers in parentheses in column (12) refer to number of respondents for whom this information was available.

SOURCE: Field surveys.
APPENDIX C

STATISTICAL METHOD CHOSEN FOR THE DIFFERENCE OF MEANS TEST

Because of the data difficulties discussed in Chapter One, the fairly simple Subprogram Breakdown from the Statistical Package for the Social Sciences (SPSS) was chosen for testing the differences in the means of the various variables of interest for the coop members and non-coop members groups. This program provides means, sums, standard deviations, etc. for different population subprograms as desired. It also provides the one-way analysis of variance, which allows statistical testing of the differences in the means printed by the Subprogram Breakdown. Specifically, the analysis of variance permits the testing of the null hypothesis that the different subpopulation means are not significantly different. Stated in an alternative fashion, it permits the testing of the hypothesis that

\[ \mu_1 = \mu_2 = \mu_n, \] where \( \mu \) = subpopulation mean

The actual testing of the null hypothesis is done by comparing a computed F-ratio or F-statistic (provided in the one-way analysis of variance for each set of means being compared) with the known sampling distribution of the F-ratio (given in most statistics textbooks). The F-ratio is defined as

\[ \frac{\text{Between-groups mean square}}{\text{Within-groups mean square}}. \]

The computed F-ratio is compared to the sample distribution F-ratio to see if, given a pre-chosen level of significance, the computed F is as large or larger than the known sample distribution F. This will enable a
determination to be made as to whether the null hypothesis should be rejected or not. If the computed F is as large or larger than the known sample distribution F, at the chosen level of significance, then the null hypothesis of no statistically significant difference in the means can be rejected. If the computed F-ratio is less than the known F-ratio of the sampling distribution, the null hypothesis cannot be rejected.

In order to compare the two F-ratios, it is necessary to know the degrees of freedom associated with a computed F. This is provided in the one-way analysis of variance. It is also necessary, as implied above, to choose a level of significance. This is the same as making the decision of how often to risk rejecting the null hypothesis when it is true. The level of significance chosen for this study is the conventionally accepted one of 5%. This means that the author is willing to risk rejecting the null hypothesis when it is true about one time in 20.

Suppose, as an example (of the use of the F-ratio and significance level), the mean farm incomes of coop members and non-coop members were to be compared to see if there were statistically significant differences between the two means. The null hypothesis in this case would be that the mean farm income for coop members (N = 1800) is not significantly different (in a statistical sense) from the mean farm income for non-coop members (N = 1750). Suppose the computed F-ratio for the comparison = 0.234, the degrees of freedom for this F = 1, 71 and the pre-chosen significance level = .05.

A look can be taken at the F distribution in a statistics textbook (e.g., Winkler and Hays, *Statistics*, 1975) to see what the F-ratio is for the chosen level of significance and the degrees of freedom. Such a look
shows that an F of 4 or larger is needed in order to reject the null hypothesis. Since the computed F above is 0.234, the null hypothesis of no statistically significant difference in the two mean incomes cannot be rejected. That is, the observed difference of N 50 between the mean incomes could have been due to a sampling error. It is not a truly significant difference (in the statistical sense).

As can be seen in the tables (e.g., Table 4-12 in Chapter Four), the one-way analysis of variance also provides given levels of significance associated with each F. This level of significance can be compared directly with the pre-chosen significance level of .05 for the study without comparing the F-ratios. If the computed level of significance for each F is higher than .05 (e.g., 0.21), then the null hypothesis cannot be rejected because of the greater than acceptable (.05) risk of rejecting the null hypothesis when it is true.

For purposes of this study, the null hypothesis can thus only be rejected at significance levels of .05 or lower.

APPENDIX D

QUESTIONNAIRE ADMINISTERED ORALLY TO RECIPIENTS
(COOP MEMBERS) AND NON-RECIPIENTS
(NON-COOP MEMBERS) OF FORMAL CREDIT

General Information

1) Name _____________________________________________________________

2) Age ____________________________________________________________

3) Occupation (principal) _____________________________________________

4) Other occupation(s) or source(s) of income ____________________________

5) For farmers: What is acreage of farmed land? _________________________

6) What crops do you grow? __________________________________________

7) Education: How many years of schooling did you have? ________________

8) Number of dependents _________________________________

Income (approximate)

9) For farmers: How much did you produce last year in physical
quantities? (stacks of yam, bags of grain, etc.) ___________________________

10) How much did you sell and at what price per selling unit? ______________

11) How much in total did you make from selling of produce last year
(last farming/harvesting season)? ______________________________________

12) Do you estimate your family ate as much as you sold, twice as much,
three times as much? ________________________________________________

13) Did you obtain income or did your family members obtain income from
other occupations? If yes, how much? _________________________________

14) Did you obtain income from other sources? How much? ________________
Borrowing

15) Did you in the past year borrow from any source--formal or informal? Where?

16) How did you happen to hear about the credit?

17) Do you normally take loans from formal institutions?

18) What was the precipitating factor that made you decide to get a loan last year?

19) How much did you borrow?

20) What processes did you go through to get the loan? Fill out application forms? Bring collateral or guarantor? Others?

21) How much did application forms and fees cost you? Did providing collateral or guarantor cost you anything? How much?

22) Did you have to travel to obtain the loan? If yes, how many trips did you make altogether? How much did travel cost you each trip?

23) Did you have to miss any days or half-days of work during the application process?

24) Did you make cash or other gifts to people who helped you during the application process? How much?

25) Any other expenses incurred?

26) What was the interest charged you on the loan?

27) What was initially the more important concern to you in getting the loan--the interest charge or the ease of obtaining the loan?
27) (continued)
   If the rate of interest on the loan had been doubled, would you
   still have taken it? __________ If it had been tripled? __________
   For Non-Coop Members: Given average size of coop loan in your village,
   would you have been willing to take the loan if the interest paid had
   been doubled? __________ Tripled? __________

28) What did you buy for your farming operations last year (fertilizer,
    seeds, irrigation, labor, etc.)? ________________________________

   At what cost per item? ________________________________

   Did you buy the same items the year before? ________________________________
   In the same quantities? ________________________________

   What was your total estimated need for farming funds? ________________________________
   Where did the money come from? ________________________________
   Was some of it the loan? ________________________________
   Did you get some from other sources? ________________________________

29) What were you able to do financially in your family last year that
    you were not able to do before? ________________________________

30) Do you have any marketing or storage problems? ________________________________
    Of what nature? ________________________________

31) Were you able to pay off your formal loan as scheduled? __________
    Why or why not? ________________________________

32) Do you feel government or formal institutions are easier to deal with
    than other sources as far as loans are concerned? __________
    Why? ________________________________

33) Do you feel governments are easier to deal with as regards defaults?
    __________ In which way? ________________________________
33) (continued)
What reprisals do you see other lenders take? ________________________________

34) Is there any part of the year when you need loans more than some other?

What do you usually do in this case? ________________________________

Non-Recipients of Formal Credit:

35) Did you know that credit could be had for your operations? ____________

36) Why did you not ask for a loan? ________________________________

37) Who got the loans in this area? ________________________________

Participation in Informal Activities

38) Did you borrow from an informal lender--relative, friend, rotating organization, moneylender, etc.--last cropping/harvesting season?

For what purposes? ________________________________

How much? ____________ On what terms? ________________________________

If you also had a formal loan, which one did you pay back first?

Why? ________________________________

How many times altogether did you borrow from informal lenders last year? ________________________________

39) Do you belong to any informal savings and credit association?

How many altogether? ________________________________

Any especially for farmers? ________________________________ How do the organizations operate? ________________________________
40) How much do you contribute in each one? ____________________________
Any surcharge for separate credit fund? ____________________________

41) If you belong to a rotating credit and savings association, did you receive any lump sum contribution last year? ____________________________
What did you use it for? ____________________________
This year? ____________________________

42) If you borrowed from an informal lender as stated in the previous question: When were you supposed to repay the loan(s)? ____________________________

Did you repay in installments or all at once? ____________________________
What were the interest charges on the loan(s)? ____________________________
Did you have to have collateral or a guarantor? ____________________________
Were you able to repay on time? ____________________________ If not, what were the consequences? ____________________________

43) Do you feel a need to borrow more than you do now from either formal or informal sources? ______________ For what purposes? ____________________________

How would you repay? ____________________________

44) Did you lend money to anyone in the past year? ____________________________
How much and on what terms? ____________________________

Savings Activities

45) Apart from your contributions, do you have any cash savings elsewhere? ____________________________

46) Where do you save this: bank, cooperative, other formal institution(s), informal places not previously mentioned? ____________________________

47) Do you know you can save in a bank? __________ Do you have a savings account at a bank? __________ Why or why not? __________
48) Do you know interest is paid on deposits at banks? _________________
    Do you know you can borrow from a bank? __________________________
    Have you borrowed? ________________ Why or why not? ________________

49) Do you see any difficulties with formal savings and credit systems,
    e.g., banks, cooperatives, post office, etc.? _______________________
    What don't you like about them? _________________________________
    What do you like? ____________________________________________

50) Do you see any difficulties with informal systems? ___________________
    What don't you like? _________________________________________
    What do you like? ____________________________________________

51) What are your priority needs for finances in this place? ____________
    Do you think that the totality of formal and informal institutions
    available to you satisfy your needs? _______________________________
    What other financial services do you perceive you need? ____________

Assets

52) Did you have any livestock last year? (cattle, goats, chickens, etc.)?
    __________________________________________________________________

    Did you have bicycles, motorcycles, or other vehicles? _______________
    __________________________________________________________________
Integration of Formal and Informal Systems

53) If you belong to an informal credit and savings society, do you think your society would be willing to deposit some of its funds in a bank? ________________________________

Would the society be willing to take loans from the bank? __________

What problems do you foresee with this? ________________________________

54) Do you estimate that the amount you spent in total on both farming and non-farming activities (including loan repayment) last year exceeded or fell below the amount received from your farming and other activities? ________________________________

By roughly how much? ________________________________

How did you make up for the gap if expenditures exceeded income? ________________________________

What did you do with the surplus, if income exceeded expenditures? ________________________________
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