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FARM CREDIT PROGRAMS IN WESTERN NIGERIA:
A PROBLEM IN ADMINISTRATION AND
ORGANIZATION DESIGN

DISSERTATION

Presented in Partial Fulfillment of the Requirements for the
Degree Doctor of Philosophy
in the Graduate School
of The Ohio State University

By

Abiodun Ijose, B.A. Hons., M.A.

* * * * *

The Ohio State University
1969

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Prof. Warren F. Lee

School of Public Administration
ACKNOWLEDGMENTS

The author wishes to express his profound gratitude to the Nigerian Institute of Social and Economic Research, Ibadan, Nigeria, for giving him periods of leave of absence in 1969 and 1970 and again in 1974 and 1975 to undertake graduate studies at the Ohio State University. The Rockefeller Foundation of America provided him with a fellowship throughout the first study period and for the twelve months of 1974, and the School of Public Administration at the Ohio State University gave him a student research associateship which included a fee waiver and stipend for his maintenance during the writing of this dissertation. He expresses his gratitude to the Rockefeller Foundation and Professor Clinton V. Oster of the School of Public Administration at the Ohio State University for these generous financial supports.

He places on record the immeasurable help given in his studies and the writing of this dissertation by his adviser, Professor Sven Lundstedt, whose interest in the author and his academic effort is more than could be attributed to the relationship between an adviser and his advisee. It is a genuine christian concern for service.

Many persons assisted in the research that resulted in
this writing. Messrs. S. O. Ayeni, J. B. Agunbiade and M. O. Owolawi helped in administering the questionnaire and coding of responses. Mr. Joseph Okolie of NISER and Mrs. Pat White of Columbus, Ohio, assisted in typing. His sincere appreciation goes to them. He also expresses thanks to all who provided information for this study: the farmers, the staff of the Western State Agricultural and Industrial Investment Credit Corporation and those of the Extension Division of Western State Ministry of Agriculture and Natural Resources, the cooperative assistants in different parts of the Western State of Nigeria, and the Cooperative Unions of Western Nigeria.
DEDICATION

Nature that framed us of our elements,
Warring within our breasts for regiment,
Doth teach us all to have aspiring minds:
Our souls, whose faculties can comprehend
The wondrous Architecture of the world:
And measure every wandering planet's course,
Still climbing after knowledge infinite,
And always moving as the restless Spheres,
Will us to wear ourselves and never rest,
Until we reach the ripest fruit of all,
That perfect bliss and sole felicity,
The sweet fruition of an earthly crown.

--"Tamburlaine the Great,"
(Christopher Marlowe) Lines 869-880.

This writing is dedicated to Olufunmike, Abiola, Adetutu, Olumide, Akinwale, Adenike and Olusegun--members of my family--who endured my absence from home for long stay in the United States during the course of my graduate studies.

Abiodun Ijose
VITA

<table>
<thead>
<tr>
<th>Year Range</th>
<th>Description</th>
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<tbody>
<tr>
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</tr>
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FIELDS OF STUDY

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Studies in Agricultural Credit: Professor Dale Adams and Professor Warren Lee.

Studies in Evaluative Research Methodology: Professor Sven Lundstedt.

PUBLICATION

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CHAPTER I

INTRODUCTION

Several economists like Fabricant, Solow, Kendrick and Denison, to name just a few who have carried out empirical studies on the sources of growth in output, have maintained that a large part of the increase in aggregate production cannot be accounted for in the physical inputs of capital and labor. In discussing this residual factor, after accounting for the contribution of land and capital, Jorgenson debates on whether it is due to human factor, drive for economic efficiency, or disembodied labor-saving technological


change related to better management, organization and work procedures which could reduce labor requirement per unit of output. 5

On the whole, economics of development has given more and more attention to human resources in the efforts to disaggregate the residual factor into recognizable elements. Consideration has also been given largely by social scientists to the inclusion of other factors in the development process among which are organization design, motivation, entrepreneurship, etc.

Many economists, like Rostow, Lewis, Gerschenkron and others, who have referred to stages of economic growth, have hinted broadly on the factor entrepreneurship, but they have not assigned to it the major linking-pin role that facilitates what appears to them to be the stages. This is especially true of Rostow in his discrete stages of growth. 6 It is, however, becoming clearer that "the heart of economic development is the reform and creation of an administrative system capable of carrying it out." 7

Parker, writing about German big enterprises, suggests that


their success depends to a high degree on a division of labor, considerable specialist training and social mobility. Waterston, discussing administrative obstacles to planning and successful implementation of plans, specifically mentions backward personnel practices, dilatory procedures, inadequate organization, the role of budgeting and reporting, and the need for an evaluation of programs. Lewis, in the preface to 'Development Planning,' observes that "The economics of development is not very complicated; the secret of successful planning lies more in sensible politics and good public administration." This statement is equally true of successful plan implementation—especially the need to identify and build into planning and implementation, functional relationships between economic and non-economic variables that have bearing on economic and social change.

Entrepreneurial organization is more than the totality of the abilities of individual managers. According to Harbison, it embraces

---

8 Parker, W. N., Entrepreneurial Opportunities and Response in the German Economy, "Explorations in Entrepreneurial History, October 1954, pp. 28-29.


an array of functions, individuals and abilities required to carry out these functions in a common undertaking. It would appear that this concept is probably most useful in analyzing the prerequisites for successful planning and implementation of development programs and projects. For an organization denotes concrete institution in which real relationships between functions and functionaries are described. It could be quantified to a great extent so that relationships between quantities of capital, labor, managerial resources and variables could be compared.

Organization is the principal factor determining the productivity of labor, assuming that capital and natural resources are available and consistent. Organization could be affected by non-economic factors which determine the behavior of the human beings who act as managers in it, and, to that extent, its efficiency in producing the optimum economic resources possible, could, at least in theory, be affected.

Economic development has largely been programmed, based on the theories and assumptions of technological change and capital formation. Since these two concepts can be operationalized only in an institutional setting, the designing and analysis of institutions should

be given prominence in economic literature. This writer defines institutions as organization and policies which, when consciously integrated, create the environment that helps to bring about planned institutional innovations through the stimulation of the behavior of all levels of employees in an organization and the environment. Harbison explains that institutions may stimulate or impede those kinds of behavior leading to economic growth by their effects on (1) the direct calculation of costs and benefits; (2) relationships between production and distribution (output and income); (3) the order, predictability and probability of economic relationships; (4) knowledge of economic opportunities; and (5) motivations and values.12 Whether institutions, in fact, stimulate or impede planned innovation would depend upon how the different aspects of the organization are related to one another. The job of designing an organization or performing a surgical operation on a sick organization is therefore of prime importance.

**Nature of Problem**

This research is a study of organization design and systems analysis for a farm credit development program. It sets out to explain the effectiveness and viability of a farm credit institution through the design of a management system. It considers organization as the

---

complement to other productive factors--land, capital and labor, and it hypothesizes that the design and administration of a credit program is the most fundamental factor to its success, in the same way that Loomis and Barton, postulating with respect to individual farmers, say that "Technology may be available and economic conditions may justify changes in inputs, but these factors become meaningful in a productivity sense only when the farm manager acts in response to them." 13

Increased farm productivity requires increased availability of land, capital and better technology—including education. In order for new technology to be adopted widely by farmers, capital in the form of credit is required. However, non-institutional sources of credit may not be able to provide the desired volume. Therefore, the governments of most developing countries have agencies for the provision of credit. But, according to the Food and Agricultural Organization (FAO), in many of these countries extensive credit agencies are unsuitable, and they constitute obstacles to the expansion of output of small farms. 14 While commercial banking responds to the


credit needs of large farmers, the greater part of agricultural production is in the hands of individuals and families who are carrying out small farming with little capital. The FAO continues, in the report cited above, "the huge number of producing units, the limited capital resources of the average producers, and the personal nature of each enterprise, cause many of the difficulties inherent in the provision of agricultural credit." The long production period makes it difficult for commercial banks to help. The FAO report concludes this aspect of its analysis by saying, "The financing of land purchase and other forms of long-term mortgage business are highly specialized forms of banking, but even medium-term loans of from three-to-five-years duration, which constitute the type of loan usually required by the small farmer for the purchase of cattle or machinery or for the execution of minor improvements, are outside the usual scope of most commercial banks. Consequently, small farm producers require farm credit provided by special agencies."16

Policy makers in Western Nigeria agree that agricultural production has been greatly limited by a lack of production capital. Consequently, since 1949, there has been a growth of institutions which supply credit to farmers. Figure 1 shows that from 1949 to

15Ibid.

16Ibid.
1973, for example, the state governments have established five different financial institutions to provide short-term credit for all farmers in rapid succession one after another. From 1949 to 1955, the Western Region Development Board (WRDB) was initiated; from 1955 to 1964 the Western Region Finance Corporation (WRFC) was started; from 1964 to 1971 there was established the Western Nigeria Agricultural Credit Corporation (WNACC); from 1971 to 1973 the Western State Agricultural and Industrial Investment Credit Corporation (WSAIIC) was initiated; and in 1973 the Western Nigeria Agricultural Credit Corporation (WNACC) was begun.

These five credit institutions have practically the same goal, to provide short-term credit to all farmers. The administration of these institutions covered the same geographic area of Western Nigeria with the exception that the Mid West Region, now Mid West State, was carved out of the Western Region in 1964, and Colony Province was removed from the remaining Western Region joining Lagos to form Lagos State in 1966.

Oluwasanmi and Alao reporting on the operations of the Western Nigerian Development Board (WNDB) between 1949 and 1955

---

Western Region Development Board
May 1949 to 1955

Western Region Finance Corporation, May 1955 to 1964

Western Nigeria Agricultural Credit Corporation
August 20, 1964 - 1971

Western State Agricultural and Industrial Investment Corporation
March, 1971-73
Separated Into:

Western State Industrial Finance Corporation
1973

Western State Agricultural Credit Corporation
1973

FIGURE I

A Graphic History of Western Nigerian Government Credit Institutions
indicate that only 200 out of the 500 farmers they interviewed accepted short-term loans, but only 44 out of these 200 (8.8%) accepted loans from the Local Loans Board (an agency of the corporation which decided on farmers' eligibility for loans). One-fifth of the farmers had applied without success and complained to the authors about the amount required to be spent on buying from the corporation loan application forms, and bribery. From this brief analysis it would appear that farmers' complaints against the administration of government institutional credit programs existed from their inception. If the government, however, recognized the problem as originating in the design and administration of the program, it would appear that the government merely saw the problem as a result of the multiple objectives which the corporation had to implement. The result was that the government replaced the Western Nigeria Development Board with the Western Region Finance Corporation and charged it to operate loans for industrial, trading and agricultural operations.

Oluwasanmi and Alao in their analysis of the performance of the Western Nigeria Finance Corporation, indicate that loans reached fewer than 4% of the farmers in the Western Region from 1956 to 1963. This is confirmed by column 2 of Table 1, which shows that 90,185 farmers were served out of a possible 3,000,000 farmers.

18 Ibid.
### TABLE 1

Agricultural Loans Issued by the Local Loans Boards of the Western Region Finance Corporation, 1956-1963

<table>
<thead>
<tr>
<th>Category of Loans</th>
<th>Number of Borrowers</th>
<th>Loans Issued</th>
<th>Principal in Default</th>
<th>Interest in Default</th>
<th>Principal in Default as a % of Loans Issued</th>
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</thead>
<tbody>
<tr>
<td>Food Crops</td>
<td>51,724</td>
<td>678,702</td>
<td>281,268</td>
<td>184,811</td>
<td>41.4</td>
</tr>
<tr>
<td>Spraying Equipment</td>
<td>29,295</td>
<td>673,742</td>
<td>347,595</td>
<td>247,150</td>
<td>52.2</td>
</tr>
<tr>
<td>Cocoa Cultivation</td>
<td>5,320</td>
<td>328,567</td>
<td>263</td>
<td>92,492</td>
<td>.08</td>
</tr>
<tr>
<td>Special Farming</td>
<td>547</td>
<td>19,949</td>
<td>7,803</td>
<td>3,106</td>
<td>39.01</td>
</tr>
<tr>
<td>Fishing</td>
<td>3,299</td>
<td>56,243</td>
<td>30,552</td>
<td>20,677</td>
<td>54.3</td>
</tr>
</tbody>
</table>

| TOTAL                     | 90,185              | 1,757,203    | 667,481              | 548,236             |                                             |

Source: Annual Reports of the Western Region Finance Corporation, 1956-1963.
The high default rate shown in column 6 shows poor financial administration.

In 1964 the Western State government once again set up another organization--the Western Nigeria Agricultural Credit Corporation--to provide production credit to farmers. Once again the corporation performed poorly as shown in Table 2. The high default rate registered is evidence of bad financial management, lack of baseline studies and proper evaluation of the performance of previous credit organizations set up by the government, and the non-existence of monitoring and process evaluation that could produce information for correcting the operations of the corporation. The government replaced the Western Nigeria Agricultural Credit Corporation with the Western State Agricultural and Industrial Investment Corporation in 1971, thus confirming the view of Oluwasanmi and Alao that, "In Nigeria, once a particular form of credit organization exhibited built-in weaknesses, the tendency has been to abandon it and create a new one, hoping that the mere process of creating the new organization would ensure the use of credit for productive purposes."¹⁹ Again, this would seem to be a wasteful administrative procedure.

Focus of the Study

One could assume the point of view of a credit policy decision

¹⁹Ibid., p. 73.
# TABLE 2

Loans Issued and Repayments Under the Supervised Credit Scheme 1964-1971*

<table>
<thead>
<tr>
<th>Years</th>
<th>Individuals</th>
<th></th>
<th>Cooperatives</th>
<th></th>
<th>Union/Companies</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Loans</td>
<td>Repayments</td>
<td>Loans</td>
<td>Repayments</td>
<td>Loans</td>
<td>Repayments</td>
</tr>
<tr>
<td>1964/65</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1965/66</td>
<td>2,982</td>
<td></td>
<td>154,855</td>
<td></td>
<td>20,000</td>
<td></td>
</tr>
<tr>
<td>1966/67</td>
<td>38,934</td>
<td>6,255</td>
<td>2,838</td>
<td>56,198</td>
<td></td>
<td>15,804</td>
</tr>
<tr>
<td>1967/68</td>
<td>5,154</td>
<td>11,169</td>
<td></td>
<td>32,088</td>
<td></td>
<td>1,646</td>
</tr>
<tr>
<td>1968/69</td>
<td>13,735</td>
<td>6,381</td>
<td>250</td>
<td>6,817</td>
<td></td>
<td>3,162</td>
</tr>
<tr>
<td>1969/70</td>
<td>35,152</td>
<td>10,146</td>
<td></td>
<td>484</td>
<td>5,640</td>
<td>1,110</td>
</tr>
<tr>
<td>1970/71</td>
<td>98,804</td>
<td>36,727</td>
<td>1,787</td>
<td>3,044</td>
<td>19,653</td>
<td>1,383</td>
</tr>
<tr>
<td>TOTAL</td>
<td>194,761</td>
<td>70,679</td>
<td>160,730</td>
<td>102,988</td>
<td>45,293</td>
<td>23,105</td>
</tr>
</tbody>
</table>

Repayments as % of Loans
<table>
<thead>
<tr>
<th>Individuals</th>
<th>Cooperatives</th>
<th>Union/Companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>36%</td>
<td>64%</td>
<td>51%</td>
</tr>
</tbody>
</table>

*It has been impossible to separate principal from interest because of lack of information.

maker and ask why credit has reached so few farmers. Even in the result of a survey carried out by the author shows that credit from these various institutions has reached only about 8% of the farm firms during a period of 23 years (1949-1972), even though 40.6% of these firms indicated a preference for credit from the state government credit institutions. Research findings in many developing countries show that the situation is not much better in these countries than it has been in Western Nigeria. Hoerger reports that more than half of the agricultural credit supplied by institutions in Peru goes to less than 1% of the farm firms for whom it is intended. Blair, after reviewing the economic and political factors affecting the distribution of credit in developing countries concludes that "the evidence indicates strongly that the upper classes will be the beneficiaries."  


21 Hoerger, Williams, unpublished report of a seminar, Department of Agricultural Economics and Rural Sociology, the Ohio State University, 1967.  

A second question such a decision maker could ask is why the default rate has been so extremely high as shown in Tables 1 and 2. Several scholars have analyzed the causes of poor repayment performance on the part of farmers in developing countries. They attribute such performance to a lack of operational or profitable technology, inadequate marketing systems for farming, and unfavorable external factors like weather and political attitudes which cause farmers to regard government institutional credit as a subsidy or a grant program. Some scholars have focused their attention on farmers' attitudes towards debt repayment—a psychological factor with political undertones—but few have studied the credit institutions themselves in relation to their management processes.

A third question a decision maker could ask might relate the first two questions raised above to the overall effectiveness and

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efficiency of the farm credit organizations in terms of the achievement of their formal objectives. It could be argued that the attainment of these objectives depends upon the design of the farm credit organization. Furthermore, the question so raised could embrace the way in which the human element harnesses the environmental factors with the internal resources of the organization in order to achieve the objectives.

This study will largely be descriptive and will focus on the third question raised above. In particular, it will emphasize the management processes in the internal environment of the credit programs. The changes which are needed to initiate and maintain increased use of production credit for increased agricultural productivity must start with the application of improved managerial decision-making processes—economic, financial, behavioral and systems concepts—to the design of a farm credit organization. It would appear that the political decision makers and the administrators take a viable organization design and management for granted. Economists who have largely dominated the field of research into agricultural credit ignore these two concepts.

There are four parts to this study. The first part deals with the planning process. It attempts to determine the effect of planning on performance. The assumption behind this part is that organization design, definition of program goals and objectives, determination of
criteria for loan making, and the setting of economic and social indicators of performance at the planning stage should determine the subsequent steps of implementation, evaluation and the generation of information for program evaluation and change.

The second part is the implementation process. The theoretical assumptions of this process are that the skill mix for a successful management of an enterprise are technical, human and conceptual; that these are used for coordinating policies in face-to-face interaction with the farmers and in maintaining stability and continuity in relations between the change agents (credit officers) and the farmers with whom they deal.

The third part is the evaluation process. The study attempts to identify the contribution of an evaluation to the success of a credit organization. It is a measurement process which relates performance to planned measurable objectives.

The fourth part is the Management Information System. The study explores the systems used by the corporations for reporting the performance feedback.

Organization of the Study

The analysis which follows is built around these four objectives. Chapter 2 is a review of literature on efficiency and equity considerations as they relate to agricultural credit, the face-to-face administration of an agricultural credit organization and the viability
of an agricultural credit organization. Chapter 3 examines in detail the management system we have applied in analyzing the government agricultural production credit organizations in Western Nigeria. Chapter 4 is concerned with a description of the study area, the collection and the analysis of the data used. Chapters 5, 6, 7 and 8 deal with the four management processes which form a model which we have used in analyzing the farm credit corporations of Western Nigeria. Chapter 9 contains a summary, conclusions, recommendations and suggestions for further research.
CHAPTER II

REVIEW OF LITERATURE

There has been some discussion by scholars of the administration of farm credit in many developing countries but very little on the design of the organization and its effects on management and the achievement of goals. Literature review in this chapter concentrates on what has been written on farm credit administration. Literature on design will be reviewed in Chapter 4 where a management system for farm credit organization is proposed.

Literature on farm credit administration can be grouped for analytical purposes into four main areas. Economic considerations as they affect credit are first; second are equity considerations; the third are farm-credit institution relationships; and the fourth is the viability of credit institutions. All these four areas are related to major issues of concern in farm credit program administration. Such concerns are goals and policies, allocation of credit, interest rate, default, profitability, supervision, technology, lending criteria, performance measures, and collateral.

An analysis of the literature based on the goals listed above
indicates potential conflicts among them. Judith Tendler, reviewing the policy positions of credit institutions in different countries, brings out the potential conflict between a strong stand on default and a consideration of equity when a credit institution is required to effect a transfer of income to a segment of the farming population.\(^1\) Consideration of the viability of the institution would necessitate raising the interest rate, whereas low interest rate is one way by which decision makers hope to affect equity considerations. She goes on to point out how success on equity grounds could hardly help efficiency. It would appear from Tendler's comments, that one cannot focus on any one of these areas of concern without sacrificing one or another of the goals.

**Economic Efficiency Approach**

Hopkin, Barry and Baker argue that the efficiency of credit (leverage) in contributing to the growth of a farm firm depends upon several factors, the most important of which are non-farm drains on cash flow (like withdrawals for consumption and tax payments), interest rate paid on debt, total assets, total

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liabilities and management factor.\textsuperscript{2, 3} They maintain that credit (leverage) could be used to increase the rate of return on farming operations and that the factors mentioned above could constrain the continued growth of the profitability of a farm firm and inevitably, the efficiency of its use of credit.

Schultz maintains that traditional agriculture as practiced in most developing countries has probably reached its point of highest efficiency and therefore outside capital cannot raise productivity to any great extent.\textsuperscript{4} Hayami and Ruttan share this opinion and argue that agriculture must shift from a human resource base to science base in order to raise productivity and therefore profitability.\textsuperscript{5} Oluwasanmi and Alao, reviewing the experience of the Western Nigeria Agricultural Credit Corporation, share this view and maintain


that at that stage of the organization of peasant farming, productivity could be raised by investing in some known farm practices, improved seeds and fertilizer. Chen's study of the productivity of capital in Taiwanese agriculture concludes that its marginal revenue productivity has been high, indicating that the farmers could profitably use more capital investment and thus additional external borrowing from government credit institutions. Roberts agrees with these views and suggests an educative process to convince farmers of the potential of commercial farming and the use of innovation. The sum total of the opinions of the scholars mentioned above is that the biggest constraint on increased agricultural output has not been lack of credit, but profitable technology. Nesbit, in his study of Chilean agricultural credit situation, and Tinnermier,


on that of Peru, \(^{10}\) reach the same conclusion. This also is the conclusion of Long in his examination of the success of some farm credit programs. \(^{11}\)

Economic efficiency requires that credit as a scarce resource should be allocated according to the supply and demand mechanism of the market. Gonzales-Vega has stated that interest rates are the relative prices which have most crucial relevance to economic decisions. \(^{12,13}\) He suggests that low interest rates which prevail in the agricultural credit programs of most developing countries not only reduce the volume of credit from all sources, but they are not in the best interest of small farmers because such rates encourage inefficient allocation of credit. Long states that economic efficiency

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\(^{13}\) Gonzales-Vega, Claudio and Vogel, Robert, Agricultural Credit in Costa Rica, Associated Colleges of the Mid West, Central American Field Programs, San Jose, 1969.
dictates that interest rates are a most undesirable way of subsidizing farmers. Adams, Bottomley and Chandavarkar, all support the hypothesis that the lower the interest rate charged, the lower the proportion of the share of such loans that go to small farmers.

Gonzales discusses how an administratively-determined low interest rate leads to credit rationing when non-economic factors--political and social connections--are used to grant credit to farmers. He goes on to explain how this has led to the use of credit needed for production for land purchases. Failure to allow economic factors of supply and demand to allocate loans for purposes


which could produce the highest returns lead to delinquency and default. Thus, it has been found that the big farmers default more than the small farmers. These opinions have been confirmed by Eckaus. 20

Equity considerations require that agricultural credit be made available to small farmers who are poor and have frequently been bypassed by economic activities in rural communities in the same way it is made available to large-scale farmers. This implies that all farmers should have equal access to credit regardless of their statuses, their political and social connections or the size of their farm holdings. 21, 22 Many developing countries have regulated the


maximum interest chargeable by their agricultural credit institutions, and, as discussed earlier, these rates are very low. This is being done, so the governments explain, in order to help farmers, especially the small ones, obtain credit needed for increased production. Blair indicates, however, that this equity consideration does not help small farmers because the bulk of such farm credit in the LDCs invariably goes to large farmers. 23

Government institutional credit, in the light of research results referred to above, is no more available to small farmers than are commercial bank loans. Malone refers to the expensive service of small loans, 24 while a number of scholars, including Wilham Hoerger and Millard F. Long, referred to earlier, talk of the high risk involved in such small loans and the consequent probable default. Baker and Eckaus speak of external factors, like weather and political influences, and internal factors, such as managerial skill on the part of the farmer and the credit institution, which account for


default. Oluwasanmi has found as referred to above, however, that large farmers are as delinquent as small farmers.

From these writings, it would appear that equity considerations have not yielded greater loans to small farmers; that the low loan interest rates which governments in developing countries intend to use to foster equity lead to the exact opposite of the intended result. Equity considerations according to Eckaus' analysis are an inappropriate vehicle for providing subsidy to farmers.25

Farmers-Institution Relationships

This is one of the aspects of credit administration which economists ignore perhaps because it is usually analyzed in social, cultural and psychological terms. Gillette and Uphoff in reviewing the cultural and social factors which affect the participation of small farmers in credit programs focus on the social organization within which the borrower and the lender operate, the attitudes and values of each and how these affect the interaction between them (i.e., borrower and lender).26 While the former operates within a bureaucratic hierarchial structure, the latter lives within a hierarchy of


differential status and authority. The borrower tends to look at the lender as patronizing and arbitrary; the lender sees the borrower as uneducated, unwilling to accept innovation, and one who should be taught good credit habits. They conclude that there is no mutual trust and confidence between the two groups owing to difference in knowledge, behavioral expectations and cultural background. Each side, therefore, attributes failure in credit use to the other and there is a tremendous gap in communication and empathy. They go on to emphasize that issues relating to cultural and social factors are as important for the success of a credit program as are economic factors. Specific knowledge of local conditions is required for a successful credit operation.

Blair, after discussing economic factors in the distribution of agricultural credit, speaks of political factors. He explains how at the national, state and local levels administration of credit consists largely of political exchanges between central and local elites. This is manifested in the lack of commitment on the part of these elites to ensure the success of farming credit. The central and local elites want political favors, and only the large farmers could help in

winning large votes by their social and economic connections. The administrators of credit programs at these two levels are affected by red tape at the central level and risk aversion at the local level. The result is that the smaller farmers do not have credit from programs which are set up to help them. Blair also points out that the interface between lender and borrower is sometimes marked by a significant measure of corruption and that this works to the advantage of the rich who could practice it best since they have the liquid capital as well as friends and relations with bureaucratic or political power.28

In summary, the review of literature on the efficiency, equity and farmer-institution relationships point up a number of factors which are crucial to the success of agricultural credit programs. The review indicates the existence of potential conflict between efficiency and equity concerns, and that current performances are not reconciling the two.

Viability of a Credit Institution

Viability of a credit institution depends upon whether clear goals are set for it, and upon the ability of the institution to generate income to cover its operations. This latter point depends,

in the case of agricultural credit organizations, partly upon criteria for loan making, timely availability of other factors of production, the existence of economic infrastructure and institutions like marketing, and lastly the performance standard by which the output of the organization is measured. These issues can be divided into internal and external factors. The literature on the external factors have been reviewed in the preceding sections of this chapter. This section carries a review of the internal factors.

Brake, reviewing the country papers presented at the 1973 AID Spring Review of Small Farmer Credit, suggests that the need for clear objectives is vital for an agricultural credit program.  

He refers to Tendler, who emphasizes that the first requirements for an effective credit institution are specific goals, procedures and evaluation criteria.  

Brake feels that it is basic to decide whether agricultural credit would be used as a mechanism for transfer payment or if it is intended to offer production credit and consequently be a source of economic power to small farmers. In discussing the need for organizational and operational efficiency he mentions that the

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problem of personnel training is a major difficulty. He goes on to emphasize the importance of levels of decision making, coordination of activities and the involvement of clientele in agency decisions.

French emphasizes as conditions for the successful operation of a credit program for farmers the necessity for: (a) decentralized decision making as is the case in the Taiwan program or the Comilla program in Bangladesh; (b) simplified procedures; (c) communication and coordination within the organization; (d) good linkages between the organization and others with which it has to interact to deliver the required services to farmers, and between the credit organization and farmers. He suggests that management practices must be modernized in order to cut down administrative costs. He points out the importance of increasing direct contact between agricultural credit organization personnel, the personnel of organizations supplying inputs to farmers, and the small farmers in order to improve understanding. Untimeliness in the availability of inputs not only creates disincentive, it leads to default in payments. He suggests that an evaluation of a credit program, providing for a systematic and continuing collection of data and feedback of information, makes possible correction of mistakes and eventually the viability of the credit

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institution and the success of the program.

Management at the level of the individual farmer is also an important factor which could make for the viability of a credit institution for farmers. Rask notes that entrepreneurial or managerial services have not been taken note of often by economists in production function analysis. 32 He refers to Thomas who maintains that there exists no research within the field of Agricultural Economics which has directly measured farmers' managerial ability. 33 Rask contends that additional capital could be put to most productive use only when managerial improvements complement it. He then goes on to discuss the management index which he developed for measuring management performance in his study of capital formation and utilization in Southern Brazil. Having examined the build-up of the management index, he concludes "on the average, management performance has a cumulative effect on agricultural production. . . " 34 He brings out


clearly later in the report that as farm size and capital use increase, management factor becomes more and more important, and, therefore, that there are clear inter-relationships between management performance and capital productivity.

Since the productivity of capital (credit) by individual farmers makes up the productivity of all farm firms supported by an agricultural credit organization, individual farmers' managerial performance has to be included in an analysis of the viability of the credit institution that supplies the credit.
CHAPTER III

A MODEL MANAGEMENT SYSTEM

Having reviewed literature on the administration of agricultural credit organization, we will examine in this chapter a model which we used to analyze, ex post facto, the government agricultural credit organizations in Western Nigeria from 1964 to 1973. We have called this initial model a Management System for Rural Credit Administration. Management Systems of this form are largely an underdeveloped tool in agricultural credit theories. Similarly underdeveloped are theories on institution design as they apply to such organizations. These two bodies of theory are combined in this model to identify present and emerging credit problems and the intricate changing linkages binding agricultural production, agricultural credit planning, execution and evaluation, agricultural credit institutional problems and farmers' problems. The system may also help in setting policy priorities, selecting policies for specific implementation, and hastening improvement of the credit organization and individual farmers' agricultural production. The model also encompasses the approach suggested by a number of behavioral scientists like
Likert, 1,2 Seashore,3 Price4 and Bennis5 by emphasizing especially the human aspects of internal functioning in these organizations.

Haberstroh, speaking of the design of an organization, refers to structural characteristics as those which could be described because they remain unchanged for long periods and which could influence or constrain significant aspects of the overall behavior of the organization. Such a design should be capable of being evaluated and be able to cope with the problem of control and innovation. 6 Control becomes necessary according to Barnard, in order to attain the effectiveness of organization's formal objectives. 7 Such an achievement depends upon the human element, which provides a


4Price, James L., Organizational Effectiveness, An Inventory of Propositions (Homewood, 1968).


cooperative social system that leads to efficiency in the attainment of objectives.

Systems analysis has been defined by Haberstroh as "a point of view plus a few ideas integrated into a logical pattern." This point of view is an abstract, symbolic of facets of real objects and how they interrelate. Systems analysis uses formal models with the objective of constructing symbolic representation of the total system which could be used in the empirical phases. The model for this study is a problem-solving system linking the external and internal factors. It explicitly recognizes the dependence of organization on what Friedlander termed open-energy system. This concept implies the dependence of an organization on the transfers of energy within the organization and between the organization and its external environment, i.e., the economic, political and social pressures, and it is reflected in the funding by the government, by agricultural credit organizations, and by the complimentary services to farmers from agencies like the Extension Department of the Ministry of Agriculture and the Cooperative Movement.


Gross has suggested a general-systems model on which the performance and structural objectives of an organization could be based. He suggests that the performance of any organization consists of activities, among others, that satisfy the various interests of people, produce outputs of service and goods, use efficiently inputs in relation to outputs, and acquire resources, guided by conceptions of technical and administrative rationality.

The management system analyzed herein is one in which the concept of viability or efficiency is broadened to include a measurement of performance linked to the achievement of objectives. It, therefore, comprises multiple variables which affect the performance of a government (public) organization set up to advance credit to farmers instead of a single criterion like profitability which could influence a private enterprise. Mascanrehas has put it in the form of a function:

\[ P_t = f(A_1, 2, 3\ldots, B_1, 2, 3\ldots, C_1, 2, 3\ldots) \]

where \( P_t \) is the performance of a public organization, e.g., an


agricultural credit institution;

\[ A_1, 2, 3, B_1, 2, 3, C_1, 2, 3, \] are the different variables.

The suffixes 1, 2, 3 are elements of these variables.

In discussing the framework of the system, one may conceive of it in terms of an identification of objectives, the actual or intended results, the measurement of the discrepancies between these two and identification of the sources of these discrepancies. Each of these points is contained in an overarching concept. Objectives are formulated in the planning process. Actual or intended results are anticipated in plan implementation. And, measurement is seen as part of the evaluation process. This is represented in the black boxes integrated into the whole management system shown in Figure 2 and is divided into inputs, transformation and outputs. The inputs (political factors (2.01), legal factors (2.02), economic factors (2.03), financial factors (2.04) and social factors (2.05) are measurable series of events which occur outside the four black boxes herein labeled 2.06 (Rural Credit Administration Policy Planning and Formation Process); 2.07 (Rural Credit Administration Implementation Process); 2.08 (Evaluation of Rural Credit Administration Processes); and 2.09 (Rural Credit Administration Information System). These four black boxes are transfer functions or transformation processes which form the inputs of the other subsystems. The outputs also are measurable series of events determined by the transformation processes. Each
Figure 2.0

PROPOSED MANAGEMENT SYSTEM
FOR RURAL CREDIT ADMINISTRATION

TRANSFORMATION

Rural Credit Administration
IMPLEMENTATION
PROCESS

1st Order Effects

- Increased Agricultural Production
  e.g., tonnage of rice, maize, cocoa, palm oil, yam, etc.

2nd and 3rd Order effects
Defined as:

- Increased Personal Income
- Increased Return on Farm Equity
- Reduced Personal Indebtedness
- Better Nutrition
- Better Housing
- Rise in Children's Educational Level
- Increase in Tax Base
- Increased Participation in Community Life by Farmers
of these four cycles is further subdivided into cycles of the operating
levels in Figures 3.0 (Steps in Loan-Making Planning Process of an
Agricultural Credit Corporation); 4.0 (Steps in Implementation Pro-
cess of an Agricultural Credit Corporation); 9.0 (Steps in Evaluation
Process of an Agricultural Credit Corporation); and 10.0 (Agricultural
Credit Corporation Management Information System).

Planning Process of a Farm Credit Organization

Tinbergen has identified three chief elements in planning eco-
nomic policy. These are:

(1) looking ahead—planning is part of the increasing tendency of
all human activities to become conscious, leading to increased
forecast sophistication;

(2) coordination—establishing connections between various eco-
nomic factors and thus integrating what looks like the isolated
parts of an economic policy;

(3) attainment of deliberate ends—this implies that planning should
not only help to cure economic ills but bring about sound
development.

Planning as envisaged in this model we are presenting for the
management of farm credit organizations is not merely an academic

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exercise but a practical application of all economic and behavioral theories to move administration of programs to actively seek the involvement of farmers to effect the three steps suggested above by Tinbergen. It demands leadership on the part of administrators and an inspiring candour in communicating with farmers. For, as Lewis rightly suggests, once farmers' perception, interest and enthusiasm are awakened so that they begin to desire progress and opportunities, honest and conscientious administrators could meaningfully initiate plans to help them. If, however, farmers remain indifferent, little could be achieved.

There are a number of constraints on the part of administrators to initiate and follow through the step-by-step planning envisaged in this model. Some of these are:

1. The weight of history of the farm credit corporation with which an administrator is familiar or has been operating—this could immobilize an administrator who is conscious of the need for such planning. It has political undertones both within the organization and the government.

2. Apart from the legacy of institutions referred to above, there is the legacy of the personnel of these institutions who have

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been used to operating in specific ways. The possibility of developing inertia which could impede change could be formidable.

(3) There is also the possibility of political interference and pressure to set unrealistic targets which could distort planning in the direction of big, paper demonstration objectives. To overcome this, therefore, there is the need for a desire to plan and to plan realistically, not only on the part of farm credit administrators, but also of their political bosses.

(4) The problem of lack of information is a formidable one for where there is no reliable data on population, cost of living, prices of farm inputs and outputs, land tenure, data from other agencies like the Ministry of Agriculture (and especially its Extension and Engineering Divisions), and the Cooperatives, where there is no regular mechanism for a feedback of information, planning in a farm credit organization could be terribly hampered or rendered meaningless. In a bigger context, Stolper has called this 'Planning Without Facts.'

(5) Perhaps the most serious problem that could constrain planning for farm credit is a lack of personnel qualified to undertake

planning. Even when qualified, some officials might concentrate on petty details or prefer high visibility plans to strategic feasible plans.

With the views in the foregoing paragraphs as background, we propose the steps on loan-making planning process of an Agricultural Credit Corporation shown in Figure 3. The process comprises:

1. **Definition of program purpose.**

2. **Appraising of pre-planning potentials:**
   - (a) Analysis of farming population characteristics.
   - (b) Analysis of rural financial market structure and possibilities.
   - (c) Analysis of farming productivity.
   - (d) Definition of agricultural production needs.
   - (e) Determination of need for credit.
   - (f) Inventory and analyses of ongoing credit programs.

3. **Setting of targets:**
   - (a) Determination of needs for government farm credit program.
   - (b) Determination of priority target groups and their characteristics.
   - (c) Setting of initial objectives (quantifiable).

4. **Determination of services needed:**
   - (a) Determination of other services needed by target
3.01

3.01-1 Define Initial Program Purposes

3.01-2 Carry out demographic analysis of farming population
- Analyse rural financial market
- Analyse agricultural productivity factors

3.01-3 Identification of different farming target population
- Definition of the plan of institutional credit in rural financial market
- Basis for agricultural productivity
- Development of accurate understanding by the Corporation of Farming Communities

3.04

3.04-1 Identify the population groups among farmers to be served by Credit Corporation

3.04-2 Define credit goals for the Corporation and farmers

3.04-3
Figure 3.0
IN LOAN MAKING PLANNING PROCESS
AGRICULTURAL CREDIT CORPORATION

3.02
3.02-1
Definition of needs for increased agricultural production

3.02-2
End of Process

3.03
3.03-1
Assess current efforts to provide in terms of:
1. Institutional credit program resources
2. Non-institutional credit resources
   - Money lenders
   - Caucus
   - Deferred payment for farm labor
   - Loans from friends and relatives

3.03-2
End of Process

3.04
3.04-3
Establish priorities related to target groups, their production characteristics, and their production credit capacity

3.04-4
Set initial program objectives:
- Number of farmers within each target group to be reached
- Region
- Each credit district
- Time to call for loan applications from farmers
- Time for loan processing
- Time for loan releases to farmers
- Time for repayment collection

3.05
Are goals and objectives feasible?

Go to 3.04
From 3.05

3.06.1

Determine supportive services needs for increased output by target groups:
Agricultural education
Fertiliser
Improved seeds
Water
etc.
In collaboration with the Extension Division of the Ministry of Agriculture)

3.06.2

Detail initial supportive services flow to client (target farmer population) system
In collaboration with the Extension Division & Input Suppliers)

3.07

3.07.1

Describe administrative and management (Supportive Services) and Develop work statements

3.07.2

- Policy Analysis
- Planning
- Personnel and Staff Training
- Legal
- Research and Evaluation
- Information System
- Accounting and Internal Audit
- Procurement and Maintenance
- General Administration

3.07.3

Describe credit administration system and develop work statements
Figure 3.0, continued
Sheet 2

3.06

- Detail program capacity of initial client services system
- In collaboration with extension division and input suppliers
- Maximum quantity of each input required to produce desired output

3.06-3

Go to 3.06-1

3.06-4

3.06-5

Determine time intervals for services to be delivered to clients

3.06-6

Go to 3.06-1

Can farmers get all the supportive services required at the right time and price?

Yes

3.07

- Overall Credit Planning
- Outreach Program
- Intake
- Assessment
- Counseling
- Preparation of Cash Flow and Other Farm
- Firm Analysis
- Preparation of Loan Application with Farmer
- Data Presentation to Local Loan Boards
- Reports to Circle Managers
- Release of Loans to Farmers
- Supervision in Collaboration with Extension Agents and Input Suppliers of Farm Operations,
- Record Keeping of Farmers
- Loan Collection
- Compilation of reports for Information System etc.

3.07-3

3.07-4

3.07-5

Design Organisation and staffing plan for achieving program goals and objectives

3.07-6

Go to 3.07-1

Yes To 3.08

3.07-7

Yes

Can farmers get all the supportive services required at the right time and price?

Organisation Structure ensure achievement of program goals and objectives

- Design Organisation and staffing plan for achieving program goals and objectives

- Orga

- Organisation Structure ensure achievement of program goals and objectives

- Yes To 3.08

- Can farmers get all the supportive services required at the right time and price?

- Organisati

- Organisation Structure ensure achievement of program goals and objectives

- Yes To 3.08

- Can farmers get all the supportive services required at the right time and price?

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- Organisati

- Organisation Structure ensure achievement of program goals and objectives

- Yes To 3.08

- Can farmers get all the supportive services required at the right time and price?
1. Develop Staffing and Training Programs

2. Criteria for selecting:
   (a) Credit Administration Staff
   (b) Supportive Administrative Management Staff
   (c) Renumeration of Staff
   (d) Other incentive plans.

3. Determine and report programs:
   (a) Management
   (b) Management members
   (c) Credit Union Staff
   (d) Supportive
   (e) Farmers

4. Determine and report:
   (a) Preparation
   (b) Appropriation
   (c) Grants
   (d) Preparation
   (e) Appropriation
   (f) Loans

5. Determine sources of Farm Credit Corporation funds

6. Determine State Government appropriation to cover uncollectible loans

7. Grants for capital expenditures

8. Loans from (a) Agricultural Bank
   (b) Commercial Banks
   (c) Security Market

9. Prepare Budget
   (a) Lobby Government for appropriation and grants
   (b) Seek loans
   (c) Float stocks

10. Go back and work from 3.01

11. Is adequate funding forthcoming?
Figure 3.0, Continued
Sheet #3

3.09-1 Determine equipment, transportation and other materials for implementation of Farm Credit Program

3.09-2 Estimate costs of administering program and fix percentage of cost to total credit for farmers in:
   (a) the whole state
   (b) each Credit Region
   (c) each Credit District

3.09-3 Decide policy on total amount of Farm Credit for the year for:
   (a) the whole state
   (b) each Credit Region
   (c) each Credit District

3.11

3.11-1 Determine Operating Policies

3.11-2 Determine Authority and responsibility relationship for:
   (a) Credit Circle Manager
   (b) Credit District Officers
   (c) Local Loans Boards
   - Determine interest rate
   - Collateral Policy
   - Repayment Collection Policy
   - Default Policy
   - Loan making months
   - Loan disbursement months
   - Repayment Collection months
   - Returns required from Regions and Districts
   - Retail loan making procedures
   - Establish performance standard for each level of organisation

3.11-3 Reexamine 3.11-2

Are policies reasonable, clear, realistic, is interest rate policy right?

Yes to 3.12
3.12

Determine Evaluation Policies:
- Indicators for economic progress
- Indicators for social well-being
- Stages of Process evaluation in a year
- Summative Evaluation Policy

From 3.11

3.12-1

3.12-2

Decide Information System
- Research Unit function on general economic condition of the country and the state
- Reports and data from
  - The Management Board
  - Accounting and Audit Unit
  - The Credit Region Manager
  - The Credit District Office
- Types of Daily reports needed
  - "Weekly"
  - "Monthly"
  - "Semi-annual"
  - "Annual"
Figure 3.0, Continued
Sheet 4

3.13

3.13-1

Re-examine all of each step and ensure they fit together

3.13-2

Discuss relevant aspects of plan with:
- Extension Division
- Ministry of Agriculture
- Cooperative Movement
- Farmer groups
- Rural leadership
- Other financial institutions
- Target groups of farmers

3.13-3

Is finalised Program Operating Plan Output Workable?

Yes

Proceed with implementation

No

Go to 3.01
groups, their availability and necessary coordination.

(b) Identification and description of administration and management support services.

(c) Designing of organization and staffing plans for accomplishing goals and objectives.

5. Determination of resource and investment targets:

(a) Establishment of costs and comparison with available resources.

(b) Development of work statements.

(c) Development of detailed cost estimates for each credit region.

(d) Determination of field offices for each credit region and their cost estimates.

6. Formulation of policies and determination of total program operation:

(a) Implementation policies.

(b) Evaluation policies.

(c) Information system policies.

The steps listed above do away with the distinction normally drawn between planning and implementation, between goals set and how these goals are to be achieved. This is because an objective and its fulfillment form a series of interrelated
Thurston, examining the outcomes of some attempted innovations, finds that the best outcomes occurred when specialists who plan programs and operating people are jointly involved in the planning and the operating phases of programs. Bass and Leavitt find, in a series of laboratory experiments, that separation of planning from operating result in poor performance and morale.

The planning process specifies future objectives and details actions designed for their achievement. Furthermore, the planning process is systematic, coordinated, consistent and rational. As Rittle and Weber have put it, planning as it is accepted in the proposed model is an ongoing "cybernetic" affair. It consists of systematic procedures for searching out goals, identifying problems, forecasting changes, inventing strategies, time table and time-sequenced actions, thinking through their consequences, evaluating


the forecasted courses of action, monitoring their performances, and feeding information obtained back into the decision channels in order to make required corrections.

The planning process starts with what could be called a pre-planning step of appraising the potentials for agricultural productivity over the near term and over the longer run. This relates to information on the characteristics of the farming population and the groups into which they could be divided; the nature, levels, structure and direction of past and current farm production of each farming group; the possibilities in financial market; and the need for institutional farm credit which would involve an analysis of previous farm credit programs. This pre-planning process will, it is hoped, reveal the entrepreneurial talents in the farming population, their financial capabilities and needs, and how to approach a program that could motivate them. It is not intended that the analysis involved in this pre-planning process would lead to precise definition of the amount of growth achievable, but if well carried out, it could provide a rational basis for at least some rough judgments on the questions raised and provide better basis for farm credit planning.

Secondly, the planning process identifies farm credit needs and goals. These goals would enable the board of an agricultural credit institution to organize and explain the operation of the
institution in a number of general work statements; to operationalize these statements in actual experience with farmers; and to predict the result of such experience.

The objectives of performance and results have to be set in the following areas: (1) the target population to be served; (2) physical and financial resources; (3) credit officer performance; and (4) productivity target. The first is basic, the second is constraining and depends upon the government and the credit rating of the organization by commercial banks; the third depends upon the human element in the organization; and the fourth is the end result which is the main rationale for the existence of the organization.

Figure 2 shows some of the outputs expressed as economic and social indicators which are expected to flow from increased agricultural production (second and third order effects). These are: increased personal savings; increased return on farm equity; reduced personal indebtedness; better nutrition; better housing; rise in the growth of education for farmers' children; increased tax base; and increased participation in community life by farmers. The ways in which these economic and social concerns could be achieved are addressed in credit planning. It is this aspect of credit planning which makes the farmer the center of all issues which relate to agricultural credit and management—the major force behind any effort to increase productivity of farm firms and the viability of an
organization set up to provide credit for that purpose.

**Steps in the Implementation of an Agricultural Credit Organization**

Implementation of a program takes place within the structure of an organization which is generally thought of in terms of an organization chart like Figure 12 and a set of position descriptions. A more useful and wider definition is that structure encompasses the entire complex of institutions and habits of thought which govern the behavior of the organization which is hereby conceived as the collectivity of the human beings in the organization. The elements of structure considered in the proposed model management system are: authority relationship, hierarchy and the graduation of power within an organization, the need for decentralization, human relations in an organization, management as a function, executive development programs, and departmentalization.

Authority relationship depends upon legitimacy which in turn is determined by social acceptance of institutional structure and is manifested in interaction among people. The hierarchy of authority within an organization based upon effective factorization and delegation of tasks reflects the degree of decentralization and

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specialization of operation. All these concepts could be productive or disfunctional depending not upon the elegantness of the structure but upon supportive human relations.

Smith, discussing the implementation of policies, voiced the neglect of policy implementation process by scholars who have analysed models for policy making. He went on to assert the view maintained by several scholars, aid donors to developing countries as well as by knowledgeable people in and the governments of the developing countries themselves, that even when these governments are committed to a particular policy, there is a dearth of administrative capacity. The causes of this failure are many: lack of qualified personnel, insufficient commitment to the policy by management and administrators, poor planning, lack of understanding, and lack of social-psychological alignment with the beneficiaries of a program. All these have been mentioned by many scholars. What only a few have emphasized is the failure to plan a


systematic implementation process.

A plan cannot accomplish itself, however systematic it may be, even though it is a most important first step in thinking through a projected development effort. Ward, discussing the problems of development planning in India, commented that Indian planning has been stronger on formulation than implementation.²⁴ Although this comment relates to the planning of a whole economy, it is nonetheless true of a program like farm credit. The essence of the matter is that planning should be a guide to implementation, which, in turn, later becomes a guide to any required revision of the original plan. Bognar aptly describes these characteristics when he says "Implementation is different from the plan, for the latter is made only while the former is going on day by day, hour by hour, in the most varied fields."²⁵ The prime purpose of planning is to improve the chance of implementation. So, the effectiveness with which a plan is implemented, is determined to a large extent by the preparatory work preceding its formulation and the systematic manner in which the plan is made.


Several factors are required for implementing a plan:

1. There is first and foremost a need for political commitment. As Woodrow Wilson pointed out, "politics sets the tasks for administration." Waterston also states that good administration and activities at the lower level depend on firm and constant commitment of the political leadership.

2. Technical factors—These are infrastructural investment, the training, number and mobility of the personnel of the executing agency.

3. The administrative capacity and resources of the agency of change—this factor is akin to the preceding one. It relates in the main to effective supervision of implementation process, to coordination of all supportive services and program elements, and to efficiency in the utilization of resources available for the program.

4. Flexibility—this refers to the ease of modifying a plan during the course of its implementation as a result of process evaluation, additional information, increase or decrease

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in the funding required for the program, etc.

5. Simplicity and clarity of administrative procedures and practices.

6. Effective organizational machinery or structure for coordinating activities and essential services.

7. The compatibility of the ethos and style of the administration with the client or target groups who are to be served through the program. This is the face-to-face interaction between administrators and the publics they serve, and it requires clear understanding of the social psychological characteristics of the different target groups. Without this knowledge there is likely to be friction.

All the issues raised in the preceding paragraphs have guided us in proposing the systematic steps in the implementation process for farm credit administration which are described in Figure 4. Its essential features are:

(a) the need for personnel efficiency and understanding of implementation process;

(b) an awareness on their part of the effects which a possible injection of credit could have on farmers;

(c) an awareness of the effect which the performance of farmers could have on the efficiency and viability of their credit institution;
(d) an awareness of the other needs for a successful use of credit, e.g., improved seeds and fertilizer;

(e) the need for feedback to reflect tensions or smooth performance between components of implementation process; the need to complete all preparation for loan making at the right time, timely releases of loans and intensive efforts to collect repayments, the need to hold credit officers responsible for results after vesting them with adequate authority; the place of appropriate incentive for good performance in order to motivate officers.

Implementation is the stage at which face-to-face interactions occur between credit institution officials and farmers. This stage is principally characterized by communication—what Rogers and Shoemaker call "SMCR, A Source(S) sends a Message (M) via certain Channels (C) to the Receiving individuals (R)." 28 Each of these four elements in communication or diffusion of credit knowledge and application is vital. The model, evidently patterned on Shannon's information theory model, 29 helps to bring to the


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(e) the need for feedback to reflect tensions or smooth performance between components of implementation process; the need to complete all preparation for loan making at the right time, timely releases of loans and intensive efforts to collect repayments, the need to hold credit officers responsible for results after vesting them with adequate authority; the place of appropriate incentive for good performance in order to motivate officers.

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4.18

Full loan operation

4.18.1

Loan Repayment

Collection Program

4.18.2

Contact Marketing

Agencies to withhold

at the right time

4.18.3

Collect repayments

farm products (when
held by Marketing
Agencies)

4.18.4

Report loan

and develop

new approach

has been

planned

4.18.5

All data available

to other

concerned

according

to Report

Distribution Plan

4.15.1

Faults pointed

out by Process

Evaluation are

corrected

4.15.2

Report written

Evaluations are

4.15.3

Loan Repayment

Collection Program

4.15

Process Evaluation

Indications made

available to other

concerned

4.14.1

Information System

- processes

Evaluation

and Loan District

Officers carry out

Process evaluation

4.14

Evaluation

and Loan District

District

Officers carry out

Process evaluation

4.13

Information System

- processes

Evaluation

and Loan District

Officers carry out

Process evaluation

4.12

Information System

- processes

Evaluation

and Loan District

Officers carry out

Process evaluation

4.11

Information System

- processes

Evaluation

and Loan District

Officers carry out

Process evaluation

4.10

Information System

- processes

Evaluation

and Loan District

Officers carry out

Process evaluation

4.9

Information System

- processes

Evaluation

and Loan District

Officers carry out

Process evaluation

4.8

Information System

- processes

Evaluation

and Loan District

Officers carry out

Process evaluation

4.7

Information System

- processes

Evaluation

and Loan District

Officers carry out

Process evaluation

4.6

Information System

- processes

Evaluation

and Loan District

Officers carry out

Process evaluation

4.5

Information System

- processes

Evaluation

and Loan District

Officers carry out

Process evaluation

4.4

Information System

- processes

Evaluation

and Loan District

Officers carry out

Process evaluation

4.3

Information System

- processes

Evaluation

and Loan District

Officers carry out

Process evaluation

4.2

Information System

- processes

Evaluation

and Loan District

Officers carry out

Process evaluation

4.1

Information System

- processes

Evaluation

and Loan District

Officers carry out

Process evaluation

3.1

Information

- processes

Characteristics

3.0

Information

- processes

Characteristics

2.1

Information

- processes

Characteristics

2.0

Information

- processes

Characteristics

1.1

Information

- processes

Characteristics

1.0

Information

- processes

Characteristics

0.1

Information

- processes

Characteristics

0.0

Information

- processes

Characteristics

-
of loans
farm pro-
tion is
rised by
al Officers
xtension
artment
id Credit
rict

Are production inputs correctly used? Yes

Compile records of farm production process and use of loans

Send data to Information System

Send data to Information System

- Provide incentive for affected officers
  - Cash
  - Certificate of appreciation
  - Leave with pay
  - Scholarship etc.

Has farmer used credit profitably? Yes

Motivate by promise of bigger loan

Proceed with Program Evaluation (Summative)

If loans of farm production is revised by extension
- Provide incentive for affected officers
- Cash
- Certificate of appreciation
- Leave with pay
- Scholarship etc.

No
forefront the prime place of training for credit officers in the features of the channel they are using—the message, its attributes and the receivers (the ecosystem and the social system of the farmers).

The role of credit officers who are the change agents that deal with the farmer at the farm firm level have been categorized by Rogers and Shoemaker as development of change; establishment of change relationship; diagnosis of problems; creation of intention to change in a client; translation of intent into action; stabilization of change and prevention of discontinuances; and achievement of terminal relationship. Each of these requirements have been incorporated into the model proposed.

Programs are implemented by people—managers and operatives. In the case of a farm credit organization, implementation involves the board of directors, managers, field staff and the staff of agencies providing the supportive services. While the discussion of training relates to all these, that of selection and placement relate to the management and the field staff. Personnel selection, placement and training of an organization is most relevant to the effectiveness of an organization, and our model management system has been built on the assumption that Katz's three-skill approach for

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effective administration is relevant to a farm credit organization. These skills are technical--for performing technical activities, human--for understanding and motivating individuals and groups, and conceptual--for coordinating and integrating all the activities and interests of an organization for achieving its objectives. 31

Acquisition of the three skills mentioned above depends to a considerable degree upon personnel selection, placement and training. Technology, politics and the need for effectiveness and efficiency demand that increasing emphasis be placed on investment in the acquisition of these skills by people. The objective of training and personnel development is to get people involved in administering a farm credit program to think, act and communicate in terms of efficiency in performing their tasks and to create a social structure with anchored norms and habits conducive to efficient operation.

In advocating selection, placement and training, Dunnette indicates that the aim is to place a person in jobs perfectly suited to him in order that he could utilize his abilities, temperament and motivations to the best advantage of the organization. 32 To achieve this


goal, personnel selection should involve an analysis of jobs and job circumstances (this implies determination of criteria for success); the types of human behaviors that constitute successful performance of jobs in relation to their environment, and how these behaviors could best be described and analyzed through tests of doing or performance rather than traits, even though our model also calls for a recognition of differences between people. Differences in intelligence or cognitive abilities, motor skills, and patterns of behavior could best be ascertained by an evaluation of on-the-job performance.

Personnel decision-making is never-ending. It encompasses not only a diagnosis of individuals through pre-employment testing and performance tests, and evaluation on the job as well as job analysis as discussed in the preceding two paragraphs, but it also involves job design and re-design, career counseling and guidance, personnel development and training, and the removal of organizational constraints which could inhibit individual performance so as to provide a climate conducive to growth.

Career counseling, guidance and development, involve the relationship between a manager and his subordinates. This relationship is a function of communication and interaction-influence which

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set the tone of the organizational environment. As Barnard states, "organization results from the modification of the actions of individuals through control of influence . . . . "34

The process of influence in an organization occurs over time and through training. Schein, following Lewin's work, indicates that this comprises three stages:

(1) Unfreezing--this occurs through altering of forces acting on people so that by affecting their stable equilibrium they are motivated to want change.

(2) Changing--which occurs through identification with persons they come across in work situations or training and their internalization of attitudes.

(3) Refreezing--the integration of the newly-acquired attitudes into the individual's personality, his emotional relationship and work. 35

Technological advances, organizational complexity and the need for human relations (most important for credit officials who interact with farmers) all call for management development and training program.


Training for a farm credit organization should be concerned with human relations, organization structure, work methods, management practices, personnel practices, data gathering, reporting analysis and use. All should be geared to problem finding and problem solving. It should also be borne in mind that all development is self-development, and it is a long-range process so that training activities should be tailored to the man. The company climate should be such as to help his learning.

In order to achieve the objectives set out in our discussion of personnel selection, placement and training, a farm credit organization needs a behavioral policy. Such a policy is contained in the findings of behavioral studies reported in Likert. Likert specifies that certain behaviors are highly correlated with successful implementation of an organization's objectives. While it is true that the studies supporting these conclusions were conducted in American and European industrial firms, they do serve as a starting point in the formation of behavioral policies for


implementing farm credit programs in either a developed or developing economy. Naturally, the important influences of the culture and life styles of a nation need to be considered in any culture exploration. Consequently, we are offering these as conditional policies with the thought, however, that the face validity of most of them is high. They seem to reflect a universal human condition.

These conditions identified below borrow from Likert's (1968) organizational variables, fully shown in Appendix A. However, they have been interpreted by us in keeping with the specific attributes described in Figures 5, 6, 7 and 8.

**FIGURE 5**

**PROFILE OF CHARACTERISTICS OF RELATIONSHIP DESIRED BETWEEN A FARM CREDIT ORGANIZATION AND A FARMER**

<table>
<thead>
<tr>
<th>Variables of Relationships</th>
<th>Optimal Behavioral Policy for Farm Credit Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Leadership process used: (a) Extent to which farmers have confidence and trust in credit officers.</td>
<td>Complete confidence and trust in all matters.</td>
</tr>
<tr>
<td>(b) Extent to which credit officers, in turn, have confidence and trust in farmers.</td>
<td>Complete confidence and trust.</td>
</tr>
<tr>
<td>(c) Extent to which farmers in solving their farming problems generally try to get credit officer's ideas and opinions and make constructive use of them.</td>
<td>Always get ideas and opinions and always tries to make constructive use of them.</td>
</tr>
</tbody>
</table>
FIGURE 5 (continued)

2. Character of motivational forces:
   (a) Manner in which motives are used.
       Increased farm credit as rewards based on compensation system developed through participation, group participation and involvement in setting goals, improving methods, appraising progress towards goals, etc.

   (b) Extent to which motivational forces conflict with or reinforce one another.
       Motivational forces generally reinforce one another in a substantial and cumulative manner.

   (c) Attitude of farmers towards other members of the farm credit organization.
       Favorable, cooperative attitudes with mutual trust and confidence.

3. Character of communication process:
   (a) Amount of interaction and communication between farmer and farm credit organization aimed at achieving the objectives of the organization.
       Much with both individuals and groups.

   (b) Downward communication with farmer:
       (1) Where initiated.
           Initiated at all levels of the farm credit organization.

       (2) Extent to which communications are accepted by farmers.
           Generally accepted, but if not, openly and candidly questioned.

   (c) Upward communication:
       (1) Farmers feeling of responsibility for initiating accurate upward communication.
           Considerable responsibility felt and much initiative; all relevant information communicated.
FIGURE 5 (continued)

(2) Accuracy of upward communication from farmer to different levels of farm credit organization.

(d) Psychological closeness of credit officials to farmers (i.e., friendliness between credit officials and farmers).

How well does credit officer know and understand problems faced by farmers?

4. Character of interaction-influence process:
   (a) Amount and character of interaction.

   (b) Extent to which farmers can influence the goals, methods and activity of farm credit organization at district and regional levels.

      (1) As seen by farm credit officer.
      (2) As seen by farmers.

5. Character of decision-making process:
   (a) To what extent are decisions made by credit officer for farmer or by participation of farmer and consensus.
FIGURE 5 (continued)

6. Character of goal setting or ordering:
   (a) Manner in which usually done. Production goals of a farmer is usually established by means of participation between the farmer, the credit officer and an extension officer.

   (b) Are there forces to accept, resist or reject goals? Goals are fully accepted by all concerned, both overtly and covertly.

7. Character of control process:
   How accurate are the measurements and information used to guide and perform the control function, and to what extent do forces exist within the farm credit organization or in the relationship between farmer and the farm credit organization to distort and falsify this information?

   Strong pressures to obtain complete and accurate information to guide behavior of farm credit officer, the extension officer and the farmer; hence, information tends to be complete and accurate.

FIGURE 6

PROFILE OF CHARACTERISTICS OF RELATIONSHIPS DESIRED BETWEEN THE LENDING DEPARTMENT AND THE OTHER DEPARTMENTS AT THE HEAD OFFICE OF A FARM CREDIT ORGANIZATION

<table>
<thead>
<tr>
<th>Variables of Relationships</th>
<th>Optimal Behavioral Policy for Farm Credit Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Extent to which service departments have confidence in the lending department.</td>
<td>Complete confidence and trust in all matters.</td>
</tr>
</tbody>
</table>
FIGURE 6 (continued)

2. Extent to which the staff of the lending department feels free to discuss important things with and obtain ideas and opinions about farm loans from the staff of the other departments at the head office and whether constructive use is made of them in solving problems.

Chief loan officer and other members of the lending department feel free to discuss things about farm loans with the heads and members of the other departments at the head office.

3. Amount of responsibility felt by the head of departments for achieving the goals set by the lending department.

Heads of departments feel real responsibility for the goals set by the lending department and behave in ways to implement them.

4. Character of communication process:
   (a) Amount of interaction and communication aimed at achieving loan-making objectives.

   Much between heads of departments and between staff members of one department with another department.

   (b) Direction of information flow.

   Down, up and with peers.

   (c) Accuracy of information exchanged between departments.

   Accurate.

   (d) Psychological closeness between heads of other departments and the head of the lending department.

   Heads of other departments know and understand the problems of the head of lending department very well.

5. Character of interaction-influence process:
   (a) Amount and character of interaction.

   Extensive, friendly interaction with high degree of confidence and trust.
FIGURE 6 (continued)

(b) Amount of cooperative teamwork present.

Very substantial amount throughout the head office.

6. Character of decision-making:
   (a) To what extent are decision makers in one department aware of problems in other departments?

Generally quite well aware of problems.

(b) Extent to which technical and professional knowledge available in one department is used in decision-making in other departments.

Most of what is available anywhere within the organization is used.

(c) Does the decision-making process in one department help to create the necessary motivations in other departments that may be involved in carrying out the decisions?

Substantial contribution by decision-making processes to motivation to implement.

7. Character of goal setting or ordering:
   (a) Manner in which usually done.

Except in emergencies, goals are usually established by means of group participation.

(b) Are there forces to accept, resist or reject goals?

Goals are fully accepted, both overtly and covertly.

8. Character of control process:
   (a) Extent to which review and control process are concentrated in one department or within departments.

Widespread responsibility for review and control.
FIGURE 6 (continued)

(b) Extent to which there is an informal organization present and supporting or opposing goals of formal organization at the head office.

Informal and formal organizations are one and the same; hence all social forces support efforts to achieve organization's goals.

(c) Extent to which control data (e.g., accounting, auditing, productivity) are used for self-guidance or group problem solving by heads of departments and other staff members of departments in a punitive, policing manner.

Used for self-guidance and for coordinated problem solving and guidance, not used punitively.

FIGURE 7

PROFILE OF CHARACTERISTICS OF RELATIONSHIPS DESIRED BETWEEN THE HEAD OFFICE AND THE FIELD OFFICES. (THIS COULD BE USED TO APPRAISE RELATIONSHIPS BETWEEN THE HEAD OFFICE SECTION OF LENDING DEPARTMENT AND THE FIELD OFFICES OR BETWEEN ANY OTHER DEPARTMENT (HEAD OFFICE) AND THE FIELD OFFICES

Variables of Relationships

1. Leadership processes used:
   (a) Extent to which superiors have confidence and trust in subordinates.

Optimal Behavioral Policy for Farm Credit Organization

Complete confidence and trust in all matters.
FIGURE 7 (continued)

(b) Extent to which superiors behave so that subordinates feel free to discuss important things about their jobs with their immediate superior.

(c) Extent to which immediate superior, in solving job problems generally tries to get subordinates' ideas and opinions and make constructive use of them.

2. Character of motivational forces:
   (a) Manner in which motives are used.

(b) Amount of responsibility felt by each member of farm credit organization for achieving organization's goals.

3. Character of communication process:
   (a) Amount of interaction and communication aimed at achieving farm credit organization's objectives.

(b) Direction of information flow.

(c) Extent to which downward communications are accepted by subordinates.

Subordinates feel completely free to discuss things about their job with their superior.

Always gets ideas and opinions and always tries to make constructive use of them.

Economic rewards based on compensation system developed through participation, group participation and involvement in setting goals, improving methods, appraising progress toward goals, etc.

Personnel at all levels feel real responsibility for farm credit organization's goals and behave in ways to implement them.

Much with both individuals and groups.

Down, up, and with peers.

Generally accepted, but if not, openly and candidly questioned.
(d) Accuracy of upward communication via line.

(e) Psychological closeness of superiors to subordinates (i.e., how well does superior know and understand problems faced by subordinates?)

4. Character of interaction-influence process:
   Amount and character of interaction.

5. Character of decision-making process:
   (a) At what level in organization are decisions formally made?

   (b) To what extent are decision makers aware of problems, particularly those at lower levels in the organization?

   (c) Extent to which technical and professional knowledge is used in decision making.

   (d) To what extent are subordinates involved in decisions related to their work?

   Accuracy.

   Knows and understands problems of subordinates very well.

   Extensive, friendly interaction with high degree of confidence and trust.

   Decision making widely done throughout farm credit organization, although well integrated through linking process provided by overlapping groups.

   Generally quite well aware of problems.

   Most of what is available anywhere within the organization is used.

   Are involved fully in all decisions related to their work.
FIGURE 7 (continued)

(e) Are decisions made at the best level in the farm credit organization so as to motivate consequences (i.e., does the decision-making process help to create the necessary motivations in those persons who have to carry out the decisions?)

Substantial contribution by decision-making processes to motivation to implement.

6. Character of goal setting or ordering:
   (a) Manner in which usually done.
   (b) Are there forces to accept, resist, or reject goals?

Except in emergencies, goals are usually established by means of group participation.
Goals are fully accepted both overtly and covertly.

7. Character of control processes:
   (a) Extent to which the review and control functions are concentrated.
   (b) Extent to which there is an informal organization present and supporting or opposing organization.

Quite widespread responsibility for review and control, with lower units at times imposing more rigorous reviews and tighter controls than top management.
Informal and formal organization are one and the same; hence all social forces support efforts to achieve organization's goals.
### FIGURE 8

**PROFILE OF CHARACTERISTICS OF RELATIONSHIPS DESIRED BETWEEN THE FARM CREDIT ORGANIZATION OFFICIALS AND THOSE OF AGENCIES PROVIDING SUPPORTIVE SERVICES**

<table>
<thead>
<tr>
<th>Variables of Relationships</th>
<th>Optimal Behavioral Policy for Farm Credit Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. (a) Extent to which agency providing supportive services has confidence in the farm credit organization.</td>
<td>Complete confidence and trust in all matters.</td>
</tr>
<tr>
<td>(b) Extent to which officials of the farm credit organization behave so that officials or representatives of agency supplying supportive service feel free to discuss important things about the services provided by their organization with officials of the farm credit organization.</td>
<td>Officials or representatives of agencies providing supportive services feel free to discuss things about the services being provided with officials of the farm credit organization.</td>
</tr>
<tr>
<td>(c) Extent to which officials of farm credit organization in solving farm credit problems generally try to get ideas and opinions of officials or representatives of agencies providing supportive services and make constructive use of them.</td>
<td>Always get ideas and opinions and always try to make constructive use of them.</td>
</tr>
</tbody>
</table>

2. (a) Amount of responsibility felt by agency providing supportive services for achieving the goals of the farm credit organization. | Personnel of agency providing supportive services feel real responsibility for achieving farm credit organization's goals and behave in ways to implement them. |
3. Character of communication process:
   (a) Amount of interaction and communication aimed at achieving farm credit organization objectives. Much with individuals and with groups.

   (b) Direction of information flow. Between heads of organizations and between peers.

   (c) Psychological closeness of officials of agency providing supportive service and officials of farm credit organization (i.e., how well do officials of agencies providing supportive services know and understand problems faced by farm credit organization?) Know and understand problems of farm credit organization very well.

4. Character of interaction-influence process:
   (a) Amount and character of interaction. Extensive, friendly interaction with high degree of confidence and trust.

   (b) Amount of cooperative teamwork present. Very substantial amount.

5. Character of decision-making process:
   (a) To what extent are decision makers in an agency providing supportive services aware of problems both at the head office and at the field office levels of the farm credit organization? Generally quite well aware of problems.
FIGURE 8 (continued)

(b) Extent to which technical and professional knowledge available in an agency providing supportive services is used in decision making by another agency providing supportive services or by the farm credit organization.

Most of what is available anywhere in any of the agencies is used.

(c) To what extent are officials or representatives of one agency providing supportive services involved in the decisions of another agency when such decisions are related to the services being provided by the former agency?

Are involved fully in all such decisions.

(d) Does the decision-making process of the farm credit organization help to create the necessary motivations in the agencies providing services who have to make contribution that would help to carry out the decisions?

Substantial contributions by decision-making processes to motivation and to implement.

6. Character of goal setting or ordering:

(a) Manner in which usually done.

Whenever it is desirable, goals are established by means of joint participation.

(b) Are there forces to accept, resist or reject goals?

Such goals are fully accepted both overtly and covertly.
Steps in the Evaluation of an Agricultural Credit Organization

The formal objectives of an organization are not necessarily the common purposes that unify it (the organization). The actions of human beings are not determined exclusively by economic factors. This means that in an economic organization, human beings do not necessarily maximize profits. An organization's motivation may be survival, the well-being of its directors or members, etc. Whatever it is, the common purpose of an organization must be measurable if the degree of its attainment is to be estimated. Furthermore, an organization could have many purposes; there could be conflicting purposes among members and/or clients of an organization. Whatever it is, a common purpose must be clearly, explicitly formulated for the organization. The design of such common purpose must be an exercise involving the various levels of the organization in order to make it acceptable.

The purpose or objective of an organization must be measurable in order for it to be capable of motivating members of the organization, and a standard or norm must be agreed upon as a yardstick for measurement and reporting. For the evaluation of the performance of an organization to be productive, the volume of report must be the right amount required rather than undigestible
reports. It should reflect real goals; incentives should be tied to evaluation reporting. A performance measurement system should be reviewed constantly in order for it to become the main determinant of organizational effectiveness. It should not be made the main basis for an unsympathetic comparison of individuals or groups to the extent that reward-punishment actions are based on it.

The main purpose of an evaluation is the provision of information that could help in decision-making about programs, to be able to make comparisons of an outcome and what could have happened if the program is not instituted. Finch states that "evaluation is a necessary foundation for effective implementation and judicious modifications of our existing programs. . . . Evaluation will provide the information we require to strengthen weak programs, fully support effective programs, and drop those which simply are not fulfilling the objectives intended by the Congress


40 Some persons propose evaluations to delay making decisions, some to legitimate decisions already made or to vindicate an existing program or satisfy a condition of grants. For the purpose of this study, evaluation is recommended to help in planning and implementing a development program.
when the programs were originally enacted.\textsuperscript{41} It links the
operation of a program to planning and programming and provides
information for incremental upgrading of programs. This view on
the use of evaluation are confirmed by a good number of other
scholars. Scriven\textsuperscript{42} and Guba\textsuperscript{43} emphasize the role of evaluation
in the improvement of programs; Campbell\textsuperscript{44} and Ross\textsuperscript{45} talk of
judgment about the worth of programs; Glenman, Jr.\textsuperscript{46} takes the
points of view of policy makers who are involved in the allocation
of resources.

\textsuperscript{41} Finch, Honorable Robert, H., U.S. House of Repre-
sentatives, Committee on Education and Labor, Hearings on the
Extension of Elementary and Secondary Programs, Part IV,
Joseph S. et. al. Federal Evaluation Policy (The Urban Institute,

\textsuperscript{42} Scriven, Michael, "The Methodology of Evaluation," in
Tyler, R. W., Cagne, R. M., and Scriven M., eds. Perspectives


\textsuperscript{44} Campbell, Donald T., "Reforms and Experiments," American

\textsuperscript{45} Rossi, Peter H., "Boobytraps and Pitfalls in the Evalua-
tion of Social Action Programs, Proceedings of the Social Statistics
Section (Washington, D.C., American Statistical Association, 1966),
pp. 127-132.

\textsuperscript{46} Glenman, Thomas K., Jr., "Evaluating Federal Manpower
Programs-Notes and Observations," Memorandum RM 5743-OEO,
prepared for the Office of Economic Opportunity (Rand Corporation,
Santa Monica, California, September 1969).
The need for an evaluation of a program is made more imperative by the desire to find out not only the first generation effects of a program but the second, third etc. order effects. Any course of action could have many possible results and there also could be inherent errors associated with these results. Therefore, there is need for timely feedback about both positive and negative effects of programs. This type of feedback involves the total information process which highlights primary and second-order effects of programs or organization actions, which could then be fed back to the organization for the purpose of comparison with the desired performance.

Four types of evaluations can be distinguished: (1) Program impact evaluation relates to the overall effectiveness of a program in meeting the objectives set for it. (2) Program strategy evaluation is the relative effectiveness of different techniques used in a program. (3) Project evaluation assesses the effectiveness of single projects in achieving stated objectives. (4) Project rating provides information in respect to the relative success of local level projects operating within a bigger program. Any of these types of evaluations can be carried out through an impressionistic inquiry, questionnaires or interviews, field experiments (with treatment groups and control groups) or experimental demonstrations without control groups but with control over input and process.
Weiss discusses five basic stages of evaluation: These are:

(1) finding out what the goals of a program are; (2) translating these goals into indicators of goal achievement which could be measured;
(3) collecting data on the indicators with respect to subjects that have been exposed to the program; (4) collecting data on corresponding groups of control groups that have not been so exposed; (5) comparison of data on the participants of the program and the control groups with respect to the goal criteria.

The goal of the agricultural credit institutions is increased agricultural productivity. Mills has defined such goals as the prerequisites for economic progress. Conceptually, evaluation takes as points of reference performance dimensions, performance measures and performance norms. The first is defined as important indicators of farmers' welfare; the second defines the measures that could indicate progress in achieving this welfare;


the third represents socially accepted ideals or standards with which actual performance has to be compared. In practice, the three phases are operationalized in an evaluation process since indicators need to be rendered measurable to make them meaningful, and the measures require ideals with which they could be compared.

There are many problems taken into account in the model evaluating program proposed by us:

(1) Because evaluation deals with people and programs in real life situations, it is not easy for an evaluator to justify interference in the full operation of a program. The evaluator has to take special care in his strategy and choice of point of interference. In the case of a farm credit program, we have the activities as shown in Figure 9 divided into discrete stages so that it is possible to study each stage without creating much disruption in the free flow of program activities.

(2) The goals of a program are not always simple and clear cut. The legislature under the pressure of interest groups may find it difficult to spell out neatly the goals of a program. In our model, we have taken care that the nebulous goals set out by the legislature are translated into clear, quantifiable objectives by the management of a farm credit organization,
(3) The staff of a program may not cooperate with evaluators. We proposed in our model that evaluation be done in-house and that the staff of the various departments, especially heads of departments, contribute to the definition of goals and have a hand in aspects of the evaluation—subject to the overall guidance of an Evaluation and Research Unit of the organization.

(4) There are generally great difficulties in getting control groups. This, however, should not constitute an insuperable problem in a developing country where farm credit program can reach only few farmers at a time even within a target population group.

(5) Lack of faith in evaluation by administrators. This is critical and requires commitment by the management of an organization to overcome. It calls for the location of an Evaluation and Research Unit high on an organization structure so that it reports to the president or chairman.

(6) There is great difficulty in designing indicators of performance which evaluators have to employ. Marion and Hardy, referred to above, point up clearly the weaknesses of evaluating performance measures—that they are relative; that there is considerable problem of establishing weight for aggregating several measures into one indicator; that the
operationalization of theoretical norm or accepted ideal is troublesome; that measures of performance may have narrow foci; and that performance measures tell history (they do not tell why things happen or make forecast for the future; they may point up wrong casual relationships). 50

Per capita income has three major limitations:

(i) It is an aggregate and does not reflect structure and distribution. It is a general measure.

(ii) It does not take care of values outside the monetary sphere.

(iii) It is a market-based concept and does not take care of goods and services which do not pass through the market.

In order to rectify the weakness of the per capita measurement, scholars have been working on designing measurements of levels of living which embrace several components like health, housing, nutrition, community participation, etc. The main problem with this development, however, is the selection of these components, the establishment of relationship between them, and their combination into synthetic indicator of development.

The evaluation process proposed by us takes into account the views of the scholars mentioned above. It sets out to guide in answering three questions:

1) effectiveness--have targets set in planning been achieved by implementation?

2) significance--has the achievement made by the operation of the program contributed to economic and social development of farmers?

3) efficiency--has the cost to the agricultural credit organization and to the farmer been reasonable?

We have proposed the selection of few indicators--nine in all--on which analysis and data could be easily gathered without many sophisticated techniques. We do not attempt to synthesize them into an overall indicator of performance since they are few and concrete. Comparison over time within the same organization could be made, although such a comparison may not be emphasized. What the model is intended to achieve is trend. The nine indicators are:

- increased personal savings;
- increased return to farm equity;
- reduced indebtedness;
- improved housing;
- increased tax base;
- improved education of farmers' children;
- increased participation in community life;
- improved nutrition and technical efficiency (use of inputs and management
practices. The first six are measurable in money terms (Naira), the seventh in calories, the eighth on a scale of leadership and participation, and the ninth on productivity in terms of individual input-output ratios (i.e., input of technology like fertilizer, seed, etc., and output of cocoa, palm produce, rice, maize, cattle, etc.).

Apart from the evaluation of the performance of farmers to provide index of productivity and social change, the viability of an agricultural credit institution is also an important index of performance and should compliment the farmers' performance measure to present a total picture of the achievement of goals. The suggested indicators for this purpose are: the ratio of administrative costs to total loans granted; the ratio of principal loans in arrears 30 days after due date (most loans are given out to farmers at approximately the same time in Western Nigeria since their farm operations are similar); ratio of interests earned to administrative costs; total uncollectible debts at specified times; default rate; staff turnover; and ratio of number of applicants for loan to total number granted in a year (all these could apply to headquarters, regional and district level operations).
Management Information System of an Agricultural Credit Organization

The term management information system refers to either engineering and scientific uses of computer or administrative retrieval system for information or both. To most people it implies the computer application mentioned. In many developing countries, however, where an information system is planned for an agency or a program, it could mean a manual or semi-manual system for collection, storage, processing, retrieval and dissemination of information for decision making. The model we have proposed in Figure 10 is manual, but it is capable of being easily converted for computer application when it is considered that a benefit cost analysis justifies such conversion. Because of this possibility our discussion would be on management information system as conventionally understood.

The view of the management information system proposed is the applications view in contrast to the systems view held by computer specialists in which they regard the system as a generalized data base management system or an automated file management system. Our applications view classifies the system into sub-systems according to the uses to which it is put. Such uses are financial, personnel, logistics, productivity, strategic and/or operational planning, budgeting, and auditing. The
Figure 10.0
AGRICULTURAL CREDIT CORPORATION
MANAGEMENT INFORMATION SYSTEM

D.15
Farm Credit
Corporation
Information System
Data Bank

D.16
Data
Analysed and
Stored in
Data Bank

D.17
-Data retrieved
-Reports are
prepared and
sent to

D.11
Faro Credit
Corporation
Information System

Feedback Loop

Management Board
Credit Regional
Office Managers
Office Districts
Office Managers
Extension Districts
Ministry of
Agriculture
proposed system also is functional in terms of meaningful taxonomy. In this way these sub-systems form the nervous system of the farm credit management system we have proposed; it is the life blood that carries 'nutrient' (information) for planning and implementation of policies and an evaluation of performance.

In designing our management information system, there are two groups vital to its success and constituting its environment. These are the producers of data and information (they constitute sub-systems or components) and the users. With regard to the former, the most important thing is to make them aware of the need for data and information and to work through the system with them in order to achieve accuracy, cooperation and trust. Producers are identifiable by the sources of data which are: (1) administrative records, (2) surveys and (3) laboratory experiment or controlled field study. In the case of a farm credit corporation, these sources are the Management, Accounts, Audit, Personnel and Budgeting Units, field offices, input suppliers, and other agencies outside the organization who could provide data on general economic conditions and demographic characteristics.

The users of data and information from a management

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information system are policy makers, program managers, evaluators of programs, researchers, various levels of government and interest groups. In order that an information system may produce data and information useful for decision making, planning and control, there must be a careful conceptual analysis of the link between problems as seen by the decision makers and the data that could reasonably be collected by the producers. The management information system, therefore, becomes not only a coordinating center for producers or users but the 'linking pin' between the producers and users of data and information. To facilitate these roles, the system should carry out the following exercises:

1. check present and future need for quantitative information and plan its operation on the findings;
2. build its data and information planning upon the goals of the organization and the performance measures set;
3. be familiar with the types of decisions the organization makes and structure the collection, analysis and dissemination of data and information to provide these on a timely, regular and usable basis;
4. design information and data gathering mechanics in such a way as to minimize the burden of collection on respondents;
5. design a simple system for coding data and information on department, unit or agency and geographic basis; for filing
and the storage of data; and for classifying processed data ready for dissemination;

(6) assure producers of the privacy of data both personal and organizational;

(7) ensure that measurements are standardized and popularized among the producers to aid eventual integration, analysis and use. This also requires the designing of formats for reporting data in order that agencies and departments may supply not just what their special interests dictate to them, but data relevant to the needs of users.

A management information system is a centralized facility. It, therefore, calls for an organized flow of data and information. Such a dissemination arrangement must be carefully worked out so that data that is not required at a decision-making point is not made available there. Failure to observe this condition leads to communication overload both at the levels of the system and at the decision-making points. Overload generally results in increased entropy and noise in the system eventually leading to reduced efficiency. The transmission of optimum amount of information calls for a trade-off between efficiency and redundancy.

It has been indicated above that the system proposed for the Western Nigeria farm credit organizations is manual but that it could be computerized when the situation calls for it. A number of
issues guided us in making this proposal:

(1) The volume of work will not be large enough to justify the expenses of installing and running a computerized management information system.

(2) There could be a problem of getting someone with a good knowledge of Computer Science to run the system all the time.

(3) Guaranteed response time for maintenance calls may not be sufficiently rapid.

Even though a manual system lacks the advantages of an automated system like the speed with which a computer aggregates, calculates, checks reports, scans files, selects particular items for records, storage and retrieval of data are simple and can be carried out with the minimum of supervision. The essential requirements of accuracy and completeness of records can be met in both manual and automated systems.
CHAPTER IV

FIELD STUDY AND SAMPLE DESCRIPTION OF

PROTOTYPE PROBLEM

The need for statistical framework to provide a basis for farm credit policies and for day-to-day administration has been recognized by many people in most developing countries where programs for collecting data and information required for economic and social policies have not been well developed. In order to obtain information for decision-making on farm credit for individual farmers or target groups of farmers who are most in need of assistance and to make farm credit available where production could be raised most profitably, a farm credit organization could encourage special studies of its operations and the performance of farmers. The need for the use of surveys for gathering data and information is the more compelling in a situation like that in Western Nigeria where most of the farmers are illiterate and farm records are kept by only very few. Besides, it takes some education to appreciate the advantages of such activity. Even the personnel of farm credit organizations who should be most concerned with such
records see, in the main, the considerable cost of keeping records
in the form of time and additional staff. Most of them do not bother
to consider the positive effects of record keeping and the costs of
failure to keep records. The failure to keep records means that
monitoring of programs like farm credit cannot be done effectively
and efficiently. In the absence of this type of information gathering
and process evaluation, a survey is the most rewarding avenue for
obtaining some information that could be used to perform input and
outcome evaluation.

In planning this study, the first step was the determination of
its purposes and scope. We wanted to find out (1) the needs or
requirements for credit for farm production by different farming
target populations in the Western State of Nigeria and how these
needs are being met; (2) the performance of the farm credit corpo-
rations established in the state especially since 1966 in relation to
the satisfaction of these needs; (3) the internal operations of these
corporations in order to know what factors could contribute or
impede their effectiveness.

In the sections which follow in this chapter, we shall give a
brief background information on the agricultural situation in the
state and the organization structure of the farm credit corporations
set up by the Western State of Nigeria since 1964. This is preli-
minary to discussing the design of the survey, the scheme of
sampling, interviewing for the collection of data and the analysis of records and documents of the farm credit corporations.

**Background Information on Agricultural Situation in the Western State of Nigeria**

The Western State of Nigeria covers three ecological zones: the northern savannah zone, the central cocoa belt and the southern rain forest belt—as shown in Figure 11. Each of these zones constitutes a farm resource situation. Farms within each zone are similar with regard to the main requirements for agricultural enterprises, the size of farm holdings, the need for family and hired labor, physical features like types of soil, vegetation, humidity, rainfall and temperature. Each of the three zones or agricultural resource situations could be further subdivided into smaller zones for the purpose of presenting a more thorough analysis. For our purpose, however, it is sufficient to emphasize that zone 1, the northern savannah belt, is the region where the bulk of the food crops of the state is produced. These are yam, cassava, rice, maize, cowpeas, melon, and millet. Cotton, tobacco and kenaf are also very important. Cocoa and kolanuts do grow but not as well as in zone 2. Zone 2 is the central cocoa belt; it is woodland savannah and is the main cocoa producing region of the state. Oil palm, coffee, rubber and citrus are produced but not as well as in zone 3. Also produced are yams, maize, cocoyam and cassava. Zone 3,
Figure 11

AGRICULTURAL RESOURCE SITUATIONS
WESTERN STATE OF NIGERIA

SCALE 1:2,000,000

LEGEND OF REGIONS ANALYZED

- Area R.S. 'A' Northern Savannah Zone
- Area R.S. 'B' Central Cocoa Belt
- Area R.S. 'C' Southern Rainforest Belt
KEY

--- International Boundary

--- State Boundary

--- Divisional Boundary

--- Resource Situation Boundary

--- Credit Circle Boundary
the southern rain forest belt, is the region where palm trees abound and palm oil plantations have been developed. Also developed are rubber plantations. Cassava and maize are the main food crops, although yam and rice are also produced. Kolanut is an important cash crop. Some cocoa and coffee are also grown.

Of importance to a consideration of farm credit operation in the state is the land tenure system which is community owned, allowing each member of a family to develop a family plot. In cities and settlements, family land could be legally transferred to persons outside the particular family for building or industrial projects. In the last two decades the practices of selling family farm lands has also developed. In any case of land sale, however, all heads of families must agree and sign the deed of transfer before a magistrate in order to make the sale legal. Communal ownership makes it hazardous for a financial institution to accept land as a collateral for loans because land cannot be alienated in case of a payment default. Furthermore, it could constrain someone with entrepreneurial spirit from investing his off-farm funds in the growth of his farm firm especially in the cultivation of permanent crops like cocoa, citrus, etc. The system therefore is not conducive to the growth of farm firms through financial leverage.
The organization of the farm credit corporations which have been set up one after another in Western Nigeria are practically the same. In this discussion we shall concentrate on the Western Nigeria Agricultural Credit Corporation (WNACC) (1964-1971) and the Western State Agricultural and Industrial Investment Corporation (WSAIIC) (1971-1973). Figure 12 shows the organization and management structure of the latter.

The head office of WSAIIC is divided into Loans, Legal, Accounts, Audit and Administration departments. These departments in theory are set up to provide central services for loan operations and, therefore, are meant to be in service relationship with the Loans department which is supposed to be the line department. In practice, however, they operate as if they are the line departments.

The Western State is divided into three circles for the purpose of farm credit administration as shown in Figure 11. These are Ibadan, Egba and Akure farm credit circles. Each circle comprises a number of administrative districts each of which constitutes a loan area under an assistant credit officer. There are in all 34 such districts. Each district has a number of local loans committee areas (there are 104 such local loans committees) set up to appraise
Organization and Management Structure of the Agricultural and Industrial Sector

- Farm Management Office
  - Staffed by the Extension Div. of the State Min. of Agric. by special arrangement

- Estates Office
- Legal Office
- Machine Section
- Wages Section
- Cash Office Accounts

- Abeokuta Circle
- Ibadan Circle
- Akure Circle
- (Each circle under an agric. superintendent required to work with Circle Credit Office)

- Individual Loans
- Group & Cooperative Loans
  - (a) Abeokuta Circle (circle credit officer)
  - Ibadan Circle (circle credit officer)

- Agric. Assistants required to work with Asst. Credit Officer
  - 3 Secretary areas
  - 2 Secretary areas
FIGURE 12

of the Agricultural Section of the Western State Agricultural Industrial Investment Corporation

34 loan offices under Assistant Credit Officers (one in each Administrative district plus an Assistant Agricultural officer as in (b). 104 local advisory committees (Number in each district depends upon size, population).
applications for farm loans from the vantage position of their local knowledge of the applicants--especially with regard to credit worthiness.

The staff of the Farm Management Unit are on secondment from the Extension Division of the State Ministry of Agriculture and Natural Resources to provide technical support in the form of agricultural education and practices without which farm credit may not be put to productive use by farmers. The Corporation is, however, making efforts to train some of its staff in extension work at the schools of Agriculture at Akure and Ibadan.

**Hypotheses for the Study**

The hypotheses for this study derive from the model management system discussed in Chapter 3. There are four as follows:

Hypothesis 1. The most important determinant of the effectiveness of a farm credit program is organization design and management. This is based on the work of Haberstroh\(^1\) and leads to the exploration and analysis of the components of an effective organization structure.

Hypothesis 2. Systems analysis approach in the design of a farm credit organization, integrating the structure of the organization

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to its output through performance, will enable the organization to
maximize its objectives. This is based on the concepts expounded by
Churchman, Ackoff, Thurston and several others, and it leads to
a consideration of the relationships between the different units of a
farm credit organization, the relationship between the farm credit
organization and agencies that provide supportive services, and the
effects of the environment on the operations of the organization.

Hypothesis 3. Organization climate determines the efficiency
and effectiveness of a farm credit organization which in turn
impinges on the degree of the achievement of objectives. This
hypothesis is based on the work of Likert, Bennis, Whyte, and

2Churchman, C. West, The Systems Approach (New York:

3Ackoff, "Towards a System of Systems Concepts," Manage-

4Thurston, P. H., "Systems and Procedures Responsibility,"
Harvard University Graduate School of Business Administration,
Division of Research, 1959.


6Bennis, Warren, "Towards a Truly Scientific Management:
The Concept of Agricultural Health," Industrial Management Review,

7Whyte, W. F., Men at Work (Homewood, Illinois: Dorsey,
1961).
it leads to the exploration of the communication, interaction and leadership at the head office and the field operations of the farm credit organizations analyzed in this dissertation.

Hypothesis 4. Failure to plan systematically and to use evaluation process and management information system to find out and correct deficiencies in a farm credit program could lead to poor repayment performance, low coverage of the farming population and the target groups being addressed, and the distortion of the goals of a farm credit organization by concentrating loans in the hands of large and medium size farmers to the neglect of small farmers. This hypothesis is based upon the studies of Brake,\textsuperscript{8} Long,\textsuperscript{9} and Tendler.\textsuperscript{10} It leads to an investigation of the planning and implementation processes of a farm credit corporation concentrating particularly on the budgeting, accounting, auditing and the activities of the board of directors of the organization.

\textsuperscript{8} Brake, John, Institutions and Industrial Issues, AID Analytical Papers, Op. Cit.

\textsuperscript{9} Long, Millard F., Conditions for Success of Public Credit Programs, AID Analytical Papers, Op. Cit.

\textsuperscript{10} Tendler, Judith, The Trouble with Goals of Small Farmer Credit Programs, AID Analytical Papers, Op. Cit.
The Design of the Study

This study takes on the character of a field study and a survey. Of course, the difference in both types of studies is a matter of the degree of scope and depth. The four hypotheses discussed above determined the universe studied. It is the officials of the Western State Agricultural and Industrial Investment Corporation (agricultural loan section), the farmers and the staff of the agencies which provide supportive services, that is, the Extension Division of the Western State University of Agriculture and Natural Resources, the Cooperative Movement, and the field staff of the Cooperative Division of the Ministry of Trade.

As a field study the author made an in-depth study of the operations of Western State Agricultural and Industrial Investment Corporation, examining the various departments and their records and practices. In particular, the author studied the budgets, account books, statements of income and expenditure, the balance sheets for the years 1964-1972, loan obligations from 1964-1972, auditors' reports and personnel policies. The Western Nigeria Agricultural Credit Corporation and the Western State Agricultural and Industrial Investment Corporation were analyzed. In addition, leadership, communication, decision-making and interaction-influence processes in the Western State Agricultural and Industrial Investment Corporation were studied. The loan files of some farmers were studied.
at circle and district credit levels in order to obtain information on
the processing of applications for farm loans, criteria for loan
making, volume of loans approved, loan disbursement, and the
repayment pattern of loans.

In selecting published and unpublished data like the accounts,
audit, annual reports and data on the use of farm inputs, we were
concerned with (1) the representativeness of the documents, (2)
their adequacy, and (3) the reliability of the records. We believe
these three tests make for the reliability of the interpretation of
these records by this researcher and the validity of the findings.

The question of representativeness was solved by the fact that
all the records mentioned above for the years 1964 to 1972 were
examined. The issue of adequacy is another matter. We would
discuss in Chapter 6 the fact that data flow from the field offices to
the head office was not well organized and forthcoming in a timely
manner. This, however, would not invalidate what was available
especially in the account books and the auditors' reports. Relia-
bility hinged on the professional qualifications and experiences of
the staff of Accounts, Audit and Administration departments as well
as those of the external chartered auditors who testified to the
content validity of what was recorded. The use of records from all
sources discussed above enabled the researcher to cross-check the
data obtained.
As a survey, the study set out to investigate the issues delineated in the four hypotheses from the universe discussed earlier in this section of this dissertation. In particular, samples of the following persons were interviewed:

(i) the assistant credit officers and the local loans clerks on the planning, the implementation and evaluation processes, the information system and other coordinating mechanisms employed by the corporation internally, and they were interviewed in relation to the cooperation required from other agencies--the Extension Division of the Western State Ministry of Agriculture and Natural Resources, the Cooperatives and the Cooperative Division of the Ministry of Trade (Western Nigeria); (The study was also designed to probe the leadership, communication, and interaction processes within the Western Nigeria Agricultural and Industrial Investment Corporation.)

(ii) the extension officers who were expected to relate to the credit officers, the assistant credit officers and the local loans clerk of the credit corporation (WSAIIC);

(iii) the field officers (cooperative assistants) of the Cooperative Division of the State Ministry of Trade;

(iv) farmers in the state in order to evaluate the performance of the credit corporation from their point of view.
In addition, the study design included interviews of the chief loans officer of the Western Nigeria Agricultural and Industrial Investment Corporation, the three circle credit officers of the corporation and the Secretary of the Western Nigeria Cooperative Union.

The study is exploratory, designed not only to find the significant variables which make institutional design and management the most important factor in the effectiveness of a farm credit organization, but also to reveal the relationships between the variables—organization design, program planning, implementation, evaluation and information system.

The staff of the Extension Division of the Ministry of Agriculture who were in charge of the settlements selected, who dealt with loan making and who educated the farmers in the application of improved practices to their crops were interviewed. In all, 25 local loans officers, 25 assistant superintendents of Agricultural Extension, 7 superintendents of Agricultural Extension and 9 cooperative assistants were interviewed. These figures represented 25% of the officers in each organization surveyed.

The first objective in the formulation of our questionnaire was to translate our research objectives into questions in order to obtain data that could shed light on the performance of farm credit corporations in Western Nigeria. The second objective was to assist in motivating respondents to communicate the required
information. To achieve this, our questions were systematic, sequential, and designed to be socially and psychologically acceptable by respondents. The third objective was to ensure that respondents provided checks of reliability and validity by designing questions which could bring out information on the same issues from farmers, farm credit officers, extension agents and cooperative assistants. In this way, information and data could be compared. These data and information could also be checked against those obtained from records.

The basic issues to which our questions were addressed were the planning, operating and evaluating processes and the information system maintained by the Western State Agricultural and Industrial Investment Corporation as well as the Western Nigeria Agricultural Credit Corporation that preceded it. The questionnaire for farmers aimed at finding out the result of the implementation process, the perception farmers had of the credit corporations, and the interpersonal relationships between farmers and the officials of the farm credit corporations. We also raised questions to find out the interpersonal relationships between farm credit officers and the staff of other collaborating agencies like the extension agents on the one hand and the farmers on the other, as well as interaction influence, communication and leadership processes between staff at all levels of the farm credit corporation.
In order that the actual administration of questionnaire may be productive, we carried out preparatory work of selecting supervisors from the second and third year classes of the Department of Agricultural Economics, University of Ibadan, and interviewers from first year classes (there were some who were non-University students but with the basic qualifications of the West African School Certificate which is equivalent to the twelfth grade in the United States secondary education system). The problems to be investigated were explained and defined. The supervisors and interviewers were thereafter trained in the methods of filling in schedules, contacting people, winning their confidence and interviewing. All these formed part of detailed instructions of the technical, organizational and administrative aspects of the study which were prepared and used.

The tabulation of data by the computer followed our coding guide for questions. Out of the basic tabulation from the computer we carried out secondary tabulation of computation and combined related data in order to reduce data presentation to the most essential and significant tables required for reporting in Chapters 5, 6, 7 and 8.
CHAPTER V

THE PLANNING PROCESS IN THE FARM CREDIT CORPORATIONS OF WESTERN NIGERIA

The purpose of analysis in this study is to determine how much of the model management system described in Chapter 3 has been applied in the Western Nigeria Agricultural Credit Corporation from 1964 to 1971 and in the Western State Agricultural and Industrial Investment Corporation from 1971 to 1973. This is being undertaken in order to explain the level of viability or efficiency in these farm credit organizations. The starting point in this examination is the planning process in the two corporations. It is worth bearing in mind that although we are examining two corporations, their planning processes, policies, personnel, objectives and other management practices are the same. The only difference between the two is that the former concentrated all its activities on farm credit program while the latter combines this with an industrial credit program.

Identification of production credit needs of farmers. -- This involved an analysis of: (1) farming population characteristics; (2) rural financial market; (3) level of farming productivity; (4) the factors
of agricultural production which the farming population needed for increased productivity; and (5) an inventory and analysis of on-going credit programs in the state. The aim in making these five assessments was to determine the need for a government farm credit program by the different farm target population groups in the state.

Neither corporation, to our knowledge, carried out, or caused to be carried out, a study of the characteristics of farmers in the state. An in-depth study of all documents, minutes and responses to questions by officers at all levels of the corporations in 1970 and 1972 indicated there had not been commissioned any special study of the farmers who were the corporations' clients on the ground that the officers of the corporations knew the farmers very intimately as members of the same cultural and socio-economic groups. Such knowledge of the farmers as they possessed were cultural bound assumptions, not easily subjected to objective analysis on their part. Because the corporations did not understand objectively the values, attitudes and beliefs of the different target farmer groups they were required to provide with farm credit, they could not appreciate how they (the farmers) might respond to formal farm credit programs. For example, attitudes towards thrift could become cultural norms, and the decision of a farmer to invest in fertilizer could be determined by expected economic returns as much as by norms and social pressures of his peers.
The meaning of credit to a farmer could depend upon the attitude of the society to credit. A farmer could regard farm credit as debt, and if debt is tabooed in that society, the farmer may not come forward to obtain farm credit. The credit officer on the other hand regards farm credit as a most desirable farm subsidy which the farmer lacks and which he (the farmer) should gladly come forward to obtain. For some, farming indebtedness could be a sign of failure. For others, farm credit could be regarded as their share of public revenue.

In Table 7 (in Chapter 1) is shown the poor repayment performance by farmers during 1964 to 1971. How much of the failure to repay loans was due to low productivity or poor economic performance or cultural norms or an acceptance of the loans provided as their share of largesse from the government has not been determined. A farm credit program faced with such high default by farmers ought to investigate the cause(s) of such actions.

The two farm credit corporations being discussed were required by their enabling laws to provide farm credit for large and medium farmers, the cooperatives and small farmers. A study of the characteristics of the four groups of farmers would reveal that there was potential conflict in the operation of the program as
pointed out by Judith Tendler. This would call for a major structural and operational modification in the corporations or a remedial law to highlight the special need for farm credit by small farmers. Systematic planning would have revealed this problem.

Studies of the rural capital market and the different farm credit programs in the state would reveal weaknesses and gaps in the market which could be corrected in any current farm credit program in the state. A study by the author of the corporations' files, documents, and responses to questions by officials of the corporation did not reveal that such a study was commissioned by the corporations except those mounted by the state government into its statutory corporations of which the farm credit corporation in the state was one. These studies requested by the state governments, in so far as they affected the farm credit corporations, did not mandate a study of credit needs by the different farm target population groups. As will be shown later on, the corporations had no evaluation unit to carry out process, output and impact evaluations. Neither was there a well-planned and executed information system. There was, therefore, no apparent means of ascertaining the need for farm credit by the target populations through a study of the rural market.

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capital market performance.

Goals and Objectives. -- The goals and objectives of a farm credit organization can be satisfactory only if based upon a clear and accurate analysis of needs for farm credit by the farming population. It has been shown earlier on that these needs were not well identified. The characteristics of the farming population were not studied. The farmers were not segmented into clearly defined target groups. While the different enabling laws setting up the corporations meticulously set out the goals and objectives of these organizations and the organizations themselves explain in several memoranda their goals and objectives, these statements mean very little in the absence of hard data. The objectives of the Western Nigeria Agricultural Credit Corporation (1964-1971) and the Western State Agricultural and Industrial Investment Corporation (1971-1973) [these were also the objectives of the two organizations that provided farm credit to farmers in the old Western Region--The Western Region Development Board (1949-55) and the Western Region Finance Corporation (1955-64)], were to make and supervise the use of short, medium and long-term agricultural loans. Without data on how many farmers in each target group a farm credit organization was to reach in a specified period in each farm credit district, each farm credit region, and in the state, generalized statement of
goals and objectives cannot mean much. For example, the budgets of the Western Nigeria Agricultural and Industrial Investment Corporation for the years 1971/72 and 1972/73 show that £N 90,000 and £N 370,000 were budgeted for short, medium and long-term loans to farmers. There was no breakdown to indicate how much was to be loaned during each year in each district to each of the three groups mentioned. These figures could not, therefore, be used effectively as a control and performance measurement; and so they offered very little guidance for credit program implementation and evaluation.

The boards of directors of the farm credit corporations were responsible for establishing the corporations' goals and objectives. For a board to be effective, it must be based on functional membership. In the case of the Western State Agricultural and Industrial Investment Corporation, up to 1973, the board consists of seven civil servants:

1. The Permanent Secretary, Ministry of Economic Planning, Western State;

2. The Chief Agricultural Officer, Ministry of Agriculture

2The membership list is obtained from the memorandum submitted by the Western State Agricultural and Industrial Investment Corporation to the Economic Intelligence Unit of London, appointed by His Excellency the Military Governor of the Western State of Nigeria to study some corporations and companies in the Western State of Nigeria, 1971, p. 2.
and Natural Resources, Western State;

3. The General Manager, Western State Agricultural and Industrial Investment Corporation;

4. The Registrar of Cooperatives, Ministry of Trade and Industry, Western State;

5. The Chief Accountant, Western State Agricultural and Industrial Investment Corporation;

6. The Principal Assistant Secretary, Ministry of Economic Planning and Reconstruction, Western State;

7. The Senior Investment Officer, Ministry of Trade and Industry.

There are three major problems which make the composition of the board considerably ineffective in setting goals and objectives for the corporation. First, the occupants of these civil service positions were performing well and were experts in their own rights and in their ministries. The records of the corporation indicate they were clean and honest. Most of them, however, were not necessarily knowledgeable in the assignments of the corporation, which was in reality a financial institution. Moreover, the administrative experiences of most of them were not in business and financial management. A farm credit corporation, unless it is expected to be perpetually dependent upon government yearly appropriations, must operate along business-type lines and enjoy
substantial autonomy. By filling the board with civil servants, the corporations were subjected to unlimited civil service control. This made it difficult for the board to avoid civil service red tape and bureaucracy. To make matters worse, the overall control of personnel--hiring and firing--was vested in the Statutory Corporations Services Board. This board had been accused by many, including the Economist Intelligence Unit referred to earlier, of not giving sufficient attention to functional areas of personnel management like management development, manpower planning and organizational planning.

Secondly, only two of these directors were full time and these were employees of the corporation. External directors from financial and investment institutions (banks, etc.), the business and the academic communities, with knowledge in related and pertinent fields of activities, would probably produce a balanced contribution to sound farm credit policy making in general and an identification of operational goals and objectives in particular. This view was probably the factor that motivated the enunciation of part II, paragraph 5 (3) of "The Western State Agricultural and Industrial Investment Corporation Edict 1971" (carried over from the Western Nigeria Agricultural Credit Corporation of 1964). The paragraph reads:
"As far as possible, approximately one-half of the members of the corporation shall be persons having sound knowledge or experience in agricultural or cooperative organization or be practicing farmers; and approximately the other half shall be persons having sound knowledge of or experience in business, economic, financial or industrial affairs or operations."

Thirdly, the Chief Loans Officer who was the chief farm loan executive for the corporation is not a member of the board.

The cumulative result of the three issues raised in the previous paragraphs was that the board of the corporation was not able to establish adequate, valid and operational short and long-term objectives for farm credit management. This led to the absence of operational annual and/or longer-term plans and the use of the annual civil service incremental budgeting, which in the case of Western Nigeria did not employ a planning-programming approach.

Clear and operational goals and objectives lead to clear and operational policies which in turn could lead to successful program implementation and evaluation. These will also feed back into goals and objectives which, in the case of a financial institution like the Western Nigeria Agricultural Credit Corporation or any of the other corporations that were set up in Western Nigeria, were economic and social development. The impact which the different farm credit
corporations had on these overall goals and objectives cannot easily be assessed without quantifiable performance measures or pre-determined objectives towards which the corporations should work. These objectives should be in terms of loans made, total cash advanced, collections made, total number and amount of delinquency cases, the ultimate advantages of the operations in the form of increased agricultural production leading to increased personal savings, better housing, better education for borrowers' children, improved calorie intake, improved tax base for the government, and reduced personal indebtedness.

There is no valid means of ascertaining how much the board was guided by the development plans of the state. A development plan to be effective and capable of correction midstream must be a plan with an annual evaluation built in, on the basis of which the following year's activities are adjusted. That is, it should be an adaptive system. The board of the corporation did not adopt this principle in order that an evaluation of the implementation process of the program could reveal the shortcomings in goals set and resources made available. This type of approach is the one that could have led to an adjustment of the farm credit corporation for future periods.

The absence of clear, quantifiable objectives and performance measures meant that the farm credit corporations in Western
Nigeria were not guided by predetermined objectives. In the absence of the penalty imposed by the market forces on a private financial enterprise, rigorously predetermined performance indicators are the only guide that could help to achieve the maximization of the objectives of the farm credit corporation. This will ensure that the management of the corporation has the means through adequate information and feedback to achieve cost control. That this was not so can be seen from Table 3.

**TABLE 3**

WNACC'S Administrative Costs, 1964-1971

<table>
<thead>
<tr>
<th>Year</th>
<th>1 Loans Issued</th>
<th>2 Admin. Cost</th>
<th>3 Admin. Cost as % of Loans Issued</th>
<th>4 Imputed Annual Interest at 5%</th>
<th>5 Total Admin. Cost (Admin. Cost Plus Interest)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1964/65</td>
<td>-</td>
<td>503,490</td>
<td>-</td>
<td>-</td>
<td>503,490</td>
</tr>
<tr>
<td>1965/66</td>
<td>177,375</td>
<td>78,865</td>
<td>44.5</td>
<td>14,190</td>
<td>93,055</td>
</tr>
<tr>
<td>1966/67</td>
<td>32,140</td>
<td>84,783</td>
<td>263.8</td>
<td>2,571</td>
<td>87,356</td>
</tr>
<tr>
<td>1967/68</td>
<td>16,882</td>
<td>73,372</td>
<td>434.6</td>
<td>1,350</td>
<td>74,722</td>
</tr>
<tr>
<td>1968/69</td>
<td>11,195</td>
<td>77,250</td>
<td>689.1</td>
<td>896</td>
<td>78,146</td>
</tr>
<tr>
<td>1969/70</td>
<td>14,559</td>
<td>81,830</td>
<td>558.9</td>
<td>1,165</td>
<td>82,995</td>
</tr>
<tr>
<td>1970/71</td>
<td>65,976</td>
<td>107,390</td>
<td>162.9</td>
<td>5,278</td>
<td>112,668</td>
</tr>
</tbody>
</table>

The Western Nigeria Agricultural Credit Corporation obtained the bulk of its funds from the state government, interest free. In order to calculate the cost of its operations, however, a 5% interest charge on grants and appropriations from the state government has been used (5% has been used because that was the interest charge imposed by commercial banks on loans for most part of the period being discussed). The result is shown in column 4 of Table 3. Uncollectible debt which should have been added to administrative costs and interest charges could not be calculated because the corporation regarded them as recoverable or assets on their books. This is not, however, a great disability for our analysis, for administrative costs as a percentage of loan alone (column 3) shows the seriousness of the situation. The reader will note the inordinately high administrative costs associated with loans issued. If the program had adequate cost control measures, these administrative costs would be much lower. A feedback of information at appropriate times and to the right decision center makes possible control and correction of a program. Feedback can be made possible mainly through an evaluation and information system, both of which, as reported earlier, were not well developed.

Plan for supportive services for credit use. --The main services required to support farm credit in Western Nigeria in order to
achieve increased productivity were extension education and inputs (i.e., improved seeds and fertilizer). The Extension Division of the Ministry of Agriculture provided the education and the improved seeds and facilitated the provision of fertilizer. It would appear that the farm credit corporations in Western Nigeria took this plan of the Ministry of Agriculture on faith without a study of the feasibility and effectiveness of the program. Without these cooperating inputs farm credit is ineffective. If the farm corporations had considered systematic planning as a prerequisite to the success of the farm credit programs, they would have been more involved with the Ministry to assure availability of fertilizer and improved seeds at the right time, place and price. Table 4, which shows the views of farmers on the supply of these inputs indicates that these inputs were not so available. The responses of the farmers were obtained by us through a random sampling reported in Chapter 4. Perhaps the farm credit corporation should have tried an experiment of getting these inputs supplied by enterprises operating in accordance with highly competitive commercial principles. Such enterprise could be several individuals, each pursuing profit maximization, or a large organization could be created. The idea is to test the feasibility of some non-government agencies supplying the inputs in timely manner at pre-determined places. The farm credit corporation could guarantee loans to these individuals or organizations
from commercial banks and influence the Ministry to subsidize the sale to target farmer groups according to a rate agreed with the suppliers.

**TABLE 4**

**Availability of Production Inputs**

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>NUMBER OF RESPONDENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Available at the Right</td>
</tr>
<tr>
<td></td>
<td>Place</td>
</tr>
<tr>
<td></td>
<td>Time</td>
</tr>
<tr>
<td></td>
<td>Price</td>
</tr>
<tr>
<td>Improved Seeds</td>
<td>Yes</td>
</tr>
<tr>
<td>Fertilizer</td>
<td>Yes</td>
</tr>
</tbody>
</table>


Training programs for directors, management staff and farmers. -- The farm credit corporations did not evolve training programs for their directors, top management staff and the farmers. Table 5 shows the basic qualifications of the 25 credit assistants who were in direct contacts with the farmers and who were interviewed by us in 1973 as reported in Chapter 4.
TABLE 5
Qualifications of Credit Assistants

<table>
<thead>
<tr>
<th>Highest Educational Standard Attained</th>
<th>Class 5 Secondary</th>
<th>Modern Three</th>
<th>Standard Six</th>
<th>Grade II Teachers</th>
<th>Below Standard Six</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Respondents</td>
<td>3</td>
<td>4</td>
<td>6</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>Total Number of Respondents</td>
<td>12.00</td>
<td>16.00</td>
<td>24.00</td>
<td>12.00</td>
<td>36.00</td>
</tr>
<tr>
<td>Percentage = 100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


The highest training in farm credit management by these credit assistants was obtained in courses offered at the School of Agriculture, Akure. Table 6 shows that of the 25 credit assistants interviewed, only 4 got this training, 16 were introduced to credit management through in-service training, and 5 were through seminars.
**TABLE 6**

Types of Training Received by Farm Credit Assistants

<table>
<thead>
<tr>
<th>Variables</th>
<th>Number of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have not learned farm credit administration at any time</td>
<td>0</td>
</tr>
<tr>
<td>Learned farm credit administration at School of Agriculture, Akure</td>
<td>4</td>
</tr>
<tr>
<td>In-Service Training</td>
<td>16</td>
</tr>
<tr>
<td>At Seminar</td>
<td>5</td>
</tr>
</tbody>
</table>

Source: Interview responses of the field staff of Western State Agricultural and Industrial Investment Corporation, 1973.

Of these 25 respondents, 21 felt that the training they had was inadequate while the 4 trained in Akure felt that it was adequate.

An examination of the training provided in the School of Agriculture, Akure, for agricultural assistants shows that the school did not offer credit administration in its training program--the school was specifically set up to train extension agents to push approved agricultural practices rather than the provision of credit or management practices. Of the 621 farmers interviewed for this study, 80% indicated they would happily attend demonstrations of approved management practices and group meetings for training in the use of farm credit.
It is clear from the preceding two paragraphs that the training given the credit assistants who were in face-to-face contacts with farmers was inadequate, that the policy on recruitment standard was wrong, that there were urgently-required training programs for all levels of staff and the management, and that there was adequate motivation on the part of farmers to participate in educational experiences of a formal kind.

Summary

It would appear that the farm credit corporations in Western Nigeria did not consider the systematic planning of farm credit management vital to the success of the programs. They allowed the actual process of loan making to dictate policies rather than for policies to be set through a planning process by the board. This implies that the board of management abdicated its fundamental duty to the farm credit staff. The Economic Intelligence Unit, a firm of consultants retained by the state government to study its statutory corporations, rightly reminds that "the role of the board of directors should be considered to be that of policy making, the establishment of objectives and custodian of the shareholders' (i.e., government) interests. The board should not be concerned with
the approval of specific loans."³

Because interest rates were low, large farmers were encouraged to engage in forms of political corruption and were able to manoeuvre small farmers in obtaining loans. The corporation used non-economic factors to ration farm credit. This was, however, not the main explanation for the poor coverage, poor repayment performance and other problems of the corporations. The basic reason lay in a lack of planning.

Furthermore, because of the neglect of formal planning, the administrative costs became excessive and overall efficiency of administration was low. Table 7 shows that the funding of the corporations, though inadequate, could not be blamed for low coverage of loans. Loans reached few farmers because there was no adequate planning. In order to drive home this point, we report that from 1965 to 1970, 18 group loans were made. In 1972, with the inspiration of AID personnel who worked with the Western Nigeria Agricultural and Investment Corporation, some planning was made which put into effect a system of loan funds allocation. Wide-scale loan approval without adequate funds was thereby prevented. During the first three months of that year, 28 group loans totaling £N 16,330

³The Economic Intelligence Unit Report to His Excellency, the Military Governor of the Western State of Nigeria, Military Governor's Office, Ibadan, Nigeria, January 1972, p. 163.
were made. The administrative consequences of formal planning even of a limited kind are striking in contrast to a system with little or no planning.

### TABLE 7

**Capitalization of the Supervised Agricultural Loan Scheme 1964-1974**

<table>
<thead>
<tr>
<th>Year</th>
<th>Capitalization £N</th>
<th>Sources</th>
<th>Total Loans Made £N</th>
<th>Total Repayments Collected £N</th>
</tr>
</thead>
<tbody>
<tr>
<td>1964/ 65</td>
<td>250,000</td>
<td>Marketing Board</td>
<td>177,837</td>
<td>41,525</td>
</tr>
<tr>
<td>1965/ 66</td>
<td>75,000</td>
<td>&quot;</td>
<td>41,772</td>
<td>27,695</td>
</tr>
<tr>
<td>1966/ 67</td>
<td>36,750</td>
<td>Govt. Appr.</td>
<td>122,089</td>
<td></td>
</tr>
<tr>
<td>1967/ 68</td>
<td>175,000</td>
<td>Marketing Board</td>
<td>5,154</td>
<td>74,205</td>
</tr>
<tr>
<td>1968/ 69</td>
<td>36,750</td>
<td>Govt. Appr.</td>
<td>13,985</td>
<td>32,721</td>
</tr>
<tr>
<td>1969/ 70</td>
<td>125,630</td>
<td>&quot;</td>
<td>40,792</td>
<td>32,730</td>
</tr>
<tr>
<td>1970/ 71</td>
<td>31,850</td>
<td>&quot;</td>
<td>121,244</td>
<td>58,704</td>
</tr>
<tr>
<td>1971/ 72</td>
<td>250,000</td>
<td>&quot;</td>
<td>65,976</td>
<td>49,001</td>
</tr>
</tbody>
</table>

CHAPTER VI

THE IMPLEMENTATION PROCESS OF THE FARM CREDIT CORPORATIONS OF WESTERN NIGERIA

We have found in Chapter 5 that sound farm credit management policies were not established through the planning process of the Western Nigeria farm credit corporations. In this chapter we wish to examine the implementation process to find out further not only the effects of this lack of sound planning, but what has been achieved despite this situation by the farm credit corporations. It is proper to remark at the onset that the farm credit corporations did achieve some measure of success. The management and staff were hard working despite the odds against them. These odds relate to inadequate and untimely release of funds by the governments. They were also honest in so far as records did not reveal official corruption and abuse. The objective of this study, however, is to measure the operations of the corporations against the standard set out in the model implementation process discussed in Chapter 3 in order to establish relationships between the various elements of implementation process. This type of analysis necessarily
highlights deficiencies in order to be able to come up with suggestions for improving the system.

**Internal administration of the Western Nigeria Agricultural Credit Corporation and the Western State Agricultural and Industrial Investment Corporation.** -- For proper functioning, the farm credit department should be regarded as 'line' and other units like accounting, internal audit, legal, personnel, etc., should be in staff positions. In actual practice, however, this important distinction in management responsibility and status was not applied in either corporation. The service units were all given more or less equal status with the farm loans department. The result was that they regarded themselves, in the main, as accounting, auditing, personnel, legal departments and not merely facilitative units at the headquarters set up to provide services that could expedite the plans of the farm loans department. In actual fact, the Accounts Unit was given a status higher than that accorded the Farm Loans Department by a seat on the management board given to the chief accountant, whereas the chief loans officer was not so reorganized.

The main result of the denial of line position to the Farm Loans Department was a lack of proper coordination of the operations of the farm credit corporations. This situation was worsened by the fact that no deputy-general manager was appointed for either
The responses to a survey of the staff of the Western State Agricultural and Industrial Investment Corporation revealed that the attitude of heads of departments to the chief agricultural loans

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1 The Western State Agricultural and Industrial Investment Corporation Edict, 1971, clause 17(2), Government Press, Ibadan, Nigeria.
officer was one of suspicion and misinterpretation of intention as against favorable cooperative attitude which is most desired as indicated in Figure 6. The desired leadership of the chief loans officer for productive farm credit implementation was, therefore, absent as it was in farm credit planning reported in Chapter 5.

The character of the communication process in relation to the amount of interaction and communication aimed at achieving the organization's objectives among the staff at the headquarters of the Western State Agricultural and Industrial Investment Corporation was minimal, because the chief loans officer had not the authority to request the other departments to carry out specific policies. He was not only a 'policy taker' rather than 'policy maker,' he lacked the authority commensurate with his responsibility for effective loan making policies.

Communication should ideally be initiated at all levels of farm credit corporation and a coordinating center should be incorporated into its design. This coordination was non-existent except through the General-Manager who had too much on his hands. Psychological distance rather than closeness was the situation among the heads of the departments on the one hand and the chief loans officer on the other. The implication of this was that these heads could not know and understand adequately the problems of the loan making department. They were closer to their peers in the accounting.
auditing, legal and personnel units in the state government ministries. This situation affected the character of interaction-influence, the character of decision-making process in loan-making matters, and the extent to which the technical and professional knowledge, available in these departments in staff positions, were brought to bear on loan-making process in the farm credit organizations.

For decision making to contribute most effectively in a farm credit organization, it should largely be based on group pattern as shown in Tables 6 and 7 rather than man-to-man or department-to-department. Similarly, goal setting or ordering could be most beneficial only if the departments in staff positions regard themselves as responsible to the loan-making department and were required by the structure and management policies of the organization to place their expertise at the service of loan making rather than at the service of purely accounting, auditing, legal and personnel services. The corporations were farm credit, financial institutions and not accounting, audit, law or personnel organizations.

Table 8 shows the loans and loan collections made from 1964 to 1971. It has not been possible to know how much of the collections represent repayments of the principal amounts loaned and how much represents interest payments on these principals. Similarly,
it has not been possible to determine how much of the amounts loaned were outstanding. This is because the accounts were not kept in such a manner as to provide these types of information relevant to the performance of a farm credit organization.

**TABLE 8**

Loans and Collections
*(24 August, 1964 through 31 March, 1971)*

<table>
<thead>
<tr>
<th>Loan Type</th>
<th>Amount Approved (Principal)</th>
<th>Amount Due (Principal)</th>
<th>Amount Repaid (Principal) and Interest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooperative Loans to Small-Scale Farmers</td>
<td>152,855</td>
<td>152,855</td>
<td>102,988</td>
</tr>
<tr>
<td>Cooperative Group Loans</td>
<td>53,168</td>
<td>30,622</td>
<td>23,105</td>
</tr>
<tr>
<td>Individual Loans to Medium and Large Scale Farmers</td>
<td>194,761</td>
<td>109,097</td>
<td>70,674</td>
</tr>
<tr>
<td>Collection on Loans made by Predecessor Corporation</td>
<td>400,784</td>
<td>292,574</td>
<td>106,767</td>
</tr>
<tr>
<td>Grant Total</td>
<td>400,784</td>
<td>292,574</td>
<td>389,667</td>
</tr>
</tbody>
</table>

Source: Memorandum submitted by the Western State Agricultural and Industrial Investment Corporation to the Economic Intelligence Unit, 1972.
The accounts were not kept so as to reveal the cost of administering credit in each circle and each district. It was not possible to construct the farm credit history of a farmer from the financial record of a farmer as kept in the accounts department. These are issues of prime importance for a successful farm credit administration. Organization structure and policies are the prime instruments for affecting these matters, but the structure of the corporations and their policies as enunciated did not lend themselves to this service.

The farm credit circles in reality were branches of the corporations operating through credit districts. The credit districts were like the field offices of a rural bank. They should be in a position to develop loan portfolios. Consequently, the status of each farm credit circle officer should indicate authority for a full banking operations with the attendant responsibility of affecting policies set by the management board. Authority to approve loans should reside with the circle credit officers and the district assistant credit officers. It is realized that this would call for a comprehensive monitoring program and an enhancement of the sense of responsibility of these officers. The board of the corporation which should concern itself with general overall policies, however, decided to burden itself with the approval of virtually every loan. An experiment to delegate approval authorization of loans in 1971
was changed in August of that year according to the minutes of the board when it decided to reassemble authority to approve all loans.

Table 9 shows the impracticality of this decision.

**TABLE 9**

Hypothetical Computation of Loan-Making Activities in 1971 to Illustrate the Problem of Over-Centralization of Loan-Making Authority

<table>
<thead>
<tr>
<th>Variables</th>
<th>Number of Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of loans for individuals and groups</td>
<td>5,000</td>
</tr>
<tr>
<td>Number of farmers involved</td>
<td>14,000</td>
</tr>
<tr>
<td>Number of months for loan making</td>
<td>3</td>
</tr>
<tr>
<td>Number of statutory board meetings during the loan-making months</td>
<td>3 (one a month)</td>
</tr>
<tr>
<td>Possible number of loans that could be approved in a month</td>
<td>1666.6</td>
</tr>
<tr>
<td>Possible maximum duration of a meeting</td>
<td>8 hours</td>
</tr>
<tr>
<td>Possible number of loans that could be approved per hour of board sitting in order to deal with all applications</td>
<td>209</td>
</tr>
</tbody>
</table>

Source: Computed from the records of the Western State Agricultural and Industrial Investment Corporation.

It is obvious that the board could not have carefully examined 209 applications for loans in one hour. Besides taking
away the responsibility from the credit officers, the action of the board rendered of little worth the existence of the local loans committees set up at the district level in accordance with the enabling law to examine the eligibility of farmers who applied for loans.

Table 7 indicates the optimum behavioral policy which should characterize the relationship between the senior officers of the Western Nigeria farm credit organizations and junior officers. The variables scaled in that figure relate to issues of relative freedom to plan and execute work, the flow of communications, psychological closeness of superior to subordinate officers, responsiveness of superior officers to suggestions from subordinate officers and the involvement of subordinate officers in decision making. On each of these, based on Likert's scale and Lundstedt's interpersonal risk scale shown in Appendix B, the Western State Agricultural and Industrial Investment Corporation scored well below the optimum. We can illustrate with the issue of relative freedom in carrying out laid down policies. Table 10 shows an analysis of the responses of 25 district credit officers interviewed on this issue.
TABLE 10

Relative Freedom Allowed to Subordinate Officers in Carrying out Policies Laid Down by the Corporation

<table>
<thead>
<tr>
<th>Variables</th>
<th>Number of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>No freedom allowed subordinate officers</td>
<td>23</td>
</tr>
<tr>
<td>Has to take instructions on all issues</td>
<td>23</td>
</tr>
<tr>
<td>Reasonably supervised</td>
<td>0</td>
</tr>
<tr>
<td>Complete freedom allowed</td>
<td>0</td>
</tr>
<tr>
<td>Given power to act on some issues without reference to superior officers</td>
<td>2</td>
</tr>
</tbody>
</table>

Source: Interview responses of the Staff of the Western State Agricultural and Investment Corporation, 1973.

These responses take on added meaning when it is known that the subordinate officers indicated that their assignments consisted of:

1. locating credit-worthy farmers;
2. distributing loan forms;
3. recommending farmers for loans;
4. releasing monies to farmer after loan approval;
5. preparing farm-home plans;
6. supervising loan administration;
7. helping farmers to obtain farm inputs.
These are largely routine assignments which subordinate officers trained to do the job should be allowed to carry out without minute-by-minute direction and supervision.

The flow of communication was downward through the hierarchy except that returns from district credit officers flowed upwards through the hierarchy. The responses from officers at all levels show that decision making was limited to superior officers without the involvement of lower-level district credit officers who were in direct contact with farmers. On the degree of psychological closeness, 20 out of 25 junior officers interviewed indicated that superior officers did not find it necessary to know and understand their problems.

The sum total of the organizational characteristics revealed by the analysis above is that the management practices in the farm credit corporations appear to be the traditional autocratic, master-servant relationships and not the participative responsive system regarded as optimum in the management system model identified in Figure 7.

Through the circle officers and the district credit officers, the objectives of the farm credit corporation was translated into action. The character of interaction-influence process should be such that the general-manager, the chief loans officer or other officers from the headquarters of the corporation visited circle
offices frequently, held staff meetings with circle, district and
credit officers and met farmers who used farm credits. Responses
to the question on how many such visits were made to the circle
and district offices reveal that from 1964 to 1972, the chief loans
officer made on the average two visits to each circle office and none
was made by the general-manager or other superior officers from
the headquarters.

Coordination between the farm credit corporation and
agencies providing supportive services.--Table 11 shows the amount
of coordination and interaction between the district credit officers
and the staff of the Extension Division who were expected to
provide extension education and be in charge of fertilizer and
improved seeds-inputs which farm credit was required to
finance.

**TABLE 11**

Interaction - Influence Between District Credit Officers
and Other Local Level Officers Providing Services
Essential to Successful Uses of Farm Credit

<table>
<thead>
<tr>
<th>Variables</th>
<th>Number of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of district credit officers</td>
<td>25</td>
</tr>
<tr>
<td>interviewed</td>
<td></td>
</tr>
<tr>
<td>Number who contacted district</td>
<td>9</td>
</tr>
<tr>
<td>extension officer</td>
<td></td>
</tr>
</tbody>
</table>
Table 11 shows poor coordination between the district
credit officers and district extension agents. In view of the fact that the extension department was responsible for extension education and that it organized the provision of fertilizer and improved seeds, it is small wonder that farmers complained seriously of the insufficiency of these inputs at the right time, place and price. The farm credit corporation apparently did not consider it its duty to work closely with the agency providing the services. Without these inputs, farm credit would not lead to increased productivity and a farm credit corporation would become ineffective and unviable.

Table 12 shows the amount of interaction between the 25 extension officers at the district levels and officers of other agencies dealing with credit and related matters as reported by the extension officers.

**TABLE 12**

Interaction - Influence Between Extension Officers and Officers of Other Agencies

<table>
<thead>
<tr>
<th>Variables</th>
<th>Number of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of district extension officers interviewed</td>
<td>25</td>
</tr>
<tr>
<td>Those who complained of lack of joint district credit and extension officers' meeting</td>
<td>12</td>
</tr>
<tr>
<td>Those who complained of lack of joint project---success evaluation</td>
<td>13</td>
</tr>
</tbody>
</table>
TABLE 12 (continued)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Number of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Those who recommended joint meetings with district credit officers</td>
<td>20</td>
</tr>
<tr>
<td>Those who attended local credit advisory committee meetings</td>
<td>11</td>
</tr>
<tr>
<td>Those who attended meetings of cooperative societies and unions when loans to farmers were being considered</td>
<td>5</td>
</tr>
</tbody>
</table>

Source: Surveys of institutions connected with farm credit and supportive services, 1973.

Again, the amount of interaction-influence is appallingly low, confirming the responses of the district credit officers tabulated in Table 12.

TABLE 13

Interaction - Influence Between Cooperative Assistants and Other Local Level Officers Dealing With Farm Credit and Supportive Services

<table>
<thead>
<tr>
<th>Variables</th>
<th>Number of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of cooperative assistants interviewed</td>
<td>9</td>
</tr>
<tr>
<td>Number who knew of Western State farm credit programs</td>
<td>9</td>
</tr>
</tbody>
</table>
TABLE 13 (continued)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Number of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Those who indicated their major activity in connection with farmers' effort to obtain loans was helping them to obtain loan forms</td>
<td>9</td>
</tr>
<tr>
<td>Those who were satisfied with the collaboration achieved between cooperative assistants and local extension officers</td>
<td>4</td>
</tr>
<tr>
<td>Those who recommended correlation of itineraries of local extension and credit officers and cooperative assistants</td>
<td>8</td>
</tr>
<tr>
<td>Those who suggested monthly meetings of local extension and credit officers and cooperative assistants</td>
<td>7</td>
</tr>
</tbody>
</table>

Source: Survey of Institutions connected with farm credit and supportive services, 1973.

Table 13 again reveals lack of coordination between the local officers dealing with farm credit and the supportive services. The cooperative assistants thus corroborated the views of district credit officers and extension officers.

Approved agricultural production practices. --Even though officials of the farm credit corporation and the Extension Division of Western State Ministry of Agriculture and Natural Resources spoke of the use of key farming practices, records did not show that the
former got the latter to revise the 1966 hand-out on these practices in order that officials of all agencies connected with the provision of farm credit and farm inputs as well as the farmers may be conversant with the latest practices. The officials of the farm credit corporation did not circulate any publication on the recommended rate of nutrient (fertilizer) applicable to types of crops planted by farmers in Western Nigeria, i.e., cocoa, maize, rice and food crops. The loan agreement forms included a requirement that the approved practices be adopted and indicated that the adoption formed part of the contract. For this to be effective, farmers should be trained in these practices in order that they may internalize these practices and apply them.

Approved business practices.--At the time of interviewing officers of the farm credit corporation in 1973, no new comprehensive approved business practices had been put together to form the basis of training programs for members of the farm credit corporations' board of directors, employees of the corporation, borrowers of farm credit, members of the local loan advisory committees and the district extension officials. Such training programs should involve (1) indoctrinating new employees and others who newly join any group that deals with farm credit and related services; (2) policies, procedures and work organization for all
concerned; (3) training for professional groups and (4) periodic refresher courses. An effective training program is one key to the success of any financial institution. The farm credit corporation had no training section, neither did it commission any outside organization to provide the type of training mentioned above.

While analyzing Table 5 in Chapter 5, we raised the issue of the basic and professional qualifications of the assistant credit officers who were in direct contact with farmers. The low qualifications of the staff called to question the personnel selection and placement policies of the farm credit corporations. If descriptions of the various jobs had been made, the types of knowledge and the kinds of behavior required for successful job performance were analyzed, the corporation would have been able to formulate methods for identifying the academic, professional and human qualities necessary for the jobs. Our analysis of the personnel practices of the corporations leads us to conclude that this matter was not carefully thought through. Personnel selection and placement program was weak, and analysis of personnel decisions in terms of costs related to setting up and implementing personnel selection procedures (and costs associated with errors in decisions made) were probably not made.

Related to the issues raised in the paragraph above is an assessment of the training needs in the farm credit corporations.
This was discussed in Chapter 5 where Table 6 was analyzed. It was pointed out in that chapter that the corporations had not instituted a reasonable training or in-service program for the staff and that the training provided at the School of Agriculture, Akure, did not adequately emphasize farm credit administration. As reflected in Table 14, the field officers of the corporation, realizing their academic and professional limitations, desired further training.

**TABLE 14**

Need for Training as Expressed by District Credit Assistants

<table>
<thead>
<tr>
<th>Variables</th>
<th>Number of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of credit assistants interviewed</td>
<td>25</td>
</tr>
<tr>
<td>Credit assistants who considered their training inadequate for their assignments</td>
<td>21</td>
</tr>
<tr>
<td>Credit assistants who considered their training adequate</td>
<td>4</td>
</tr>
<tr>
<td>Credit assistants who considérèd the corporation could adequately provide the training needed</td>
<td>5</td>
</tr>
</tbody>
</table>


In the light of the analysis above, we found that agricultural credit corporations in Western Nigeria did not revise the
manual produced in 1964 even though a good number of the concepts, resources, objectives, internal organization climate and the total environment within which the corporation operated changed continuously, and new approaches were being adopted. Some descriptive essays were issued sometime, but these did not come up to carefully-prepared manuals of regulations and instructions. Such manuals should explain the organization—its policies, criteria and operations; its funding and fiscal affairs; its mechanism for coordination with all agencies providing supportive services; its accounting and audit procedures; its forms and records required; its training programs; its short and long-range plans and forecasts; its information system; its evaluation procedures and performance standards; its relationship with the different farmer target groups; the characteristics of the different target groups of farmers; and its loan collection program.

Approved agricultural production practices, approved business practices, and program administration guides and manuals form instruments for orientation programs which a farm credit

corporation should mount for all its staff—especially new ones at all levels. There were a number of meetings of the corporations' staff both at the headquarters and the circles, but they were not geared towards comprehensive orientation to the goals and operations of the corporation in the way envisaged in the paragraphs above.

Promotion drive for farm credit program among farmer target groups. — The records of the Western Nigeria Agricultural Credit Corporation and the Western State Agricultural and Industrial Investment Corporation were almost lacking in credit promotional program or references to it. Superior officials indicated that no special budget had been set aside for promotional activities because there was no felt need to do this since demand for farm credit was always greater than the supply. In 1971/72 and 1972/73 £50 was budgeted for the advertisement of the corporations' activities each year. These amounts are so small that they could be disregarded.

An analysis of the farmers who obtained farm credit from the corporations between 1964 and 1971 reinforces our argument for special promotional drive aimed at the different farmer target groups. Table 15 shows a breakdown of families who obtained these loans between 1964 and 1971, and it indicates the extent of the practice of concentrating loans on farmers already tried and known in the farm credit program.
BREAKDOWN OF FAMILIES SHOWING FIRST-

<table>
<thead>
<tr>
<th>Year</th>
<th>Individual Loans</th>
<th>Cooperative Societies</th>
<th>Unions</th>
<th>Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>1964/65</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1965/66</td>
<td>17</td>
<td>775</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>1966/67</td>
<td>329</td>
<td>5</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1967/68</td>
<td>25</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1968/69</td>
<td>114</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1969/70</td>
<td>325</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>1970/71</td>
<td>735</td>
<td>8</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1,545</td>
<td>789</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

Source: Annual and Auditors' reports of the Western State Agricultural and Industrial
TABLE 15

TIME AND REPEAT APPLICANTS FOR LOANS, 1964-1971

<table>
<thead>
<tr>
<th>Loans Approved</th>
<th>No. of Farm Families</th>
<th>Total Numbers</th>
<th>Total Farm Families Assisted</th>
<th>% of Families Obtaining Loans for First Time</th>
<th>% of Families Repeating Loans</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</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>776</td>
<td>23,250</td>
<td>793</td>
<td>23,267</td>
<td>6</td>
<td>94</td>
</tr>
<tr>
<td>5</td>
<td>150</td>
<td>334</td>
<td>479</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>25</td>
<td>25</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>1</td>
<td>30</td>
<td>115</td>
<td>144</td>
<td>2</td>
<td>98</td>
</tr>
<tr>
<td>1</td>
<td>3</td>
<td>326</td>
<td>328</td>
<td>5</td>
<td>95</td>
</tr>
<tr>
<td>1</td>
<td>10</td>
<td>513</td>
<td>745</td>
<td></td>
<td></td>
</tr>
<tr>
<td>793</td>
<td>23,946</td>
<td>2,338</td>
<td>25,338</td>
<td>38</td>
<td>572</td>
</tr>
</tbody>
</table>
In 1971/72, 3,000 farmers received loans and only 6% of these were first-time borrowers. In 1972/73, 3,487 farmers received loans and 10% of these were first-time borrowers. On the whole, the majority of farmers who obtained farm loans each year had been in the farm credit programs before the Western Nigeria Agricultural Credit Corporation was set up in 1964. The main reason the corporations were not conscious of this situation was not merely the result of supply and demand for farm loans (as the superior credit officers would lead one to infer from their explanation of the reason there was no special budget for farm credit promotional program). The real reason was a failure to identify clearly the farmer target groups (segmentation of clients), their cultural, social, economic and demographic characteristics, with a view to addressing specific promotional messages to reach them. It is probably true that 80 to 90% of those who obtained loans from the two corporations being examined (from 1964 to 1973) were large farmers with some admixture of medium-size farmers, literate and with good social, economic and political connections. This is an issue which will have to be researched later. Table 16, however, lends weight to these assumptions since cooperatives, unions and companies are run by literates or large farmers. The individuals served are also likely to be literate, fairly well-off, farmers in the communities. Our comments do not imply that these groups ought
### TABLE 16

**ANALYSIS OF LOANS SHOWING RELATIONSHIP BETWEEN INDIVIDUAL AND GROUP LOANS**

<table>
<thead>
<tr>
<th></th>
<th>Number of Loans Approved</th>
<th>Amount of Loans Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Groups</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total No. of Loans</td>
<td>Total No. Loans</td>
</tr>
<tr>
<td></td>
<td>Indiv- Cooper- Coop-Tot-</td>
<td>Indiv- Cooper- Coop-Tot-</td>
</tr>
<tr>
<td></td>
<td>iduals Cooperative</td>
<td>iduals Cooperative</td>
</tr>
<tr>
<td></td>
<td>Total ual fives Unions</td>
<td>Total fives Unions</td>
</tr>
<tr>
<td></td>
<td>Total nies Groups</td>
<td>Total nies Groups</td>
</tr>
<tr>
<td></td>
<td>1,545</td>
<td>389,522</td>
</tr>
<tr>
<td></td>
<td>789</td>
<td>321,460</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>77,580</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>13,006</td>
</tr>
<tr>
<td></td>
<td>793</td>
<td>412,046</td>
</tr>
</tbody>
</table>

| Number of loans to reach segment of clients as % of total no. of loans | 66 | 33.8 | 0.15 | 0.15 | 34.10 | 100.00 |

| Amount loaned per individual or group | - | - | - | - | - | 252 | 407 | 37,790 | 6,503 | 176,24 |

Source: Computed from Table 16
not to be served, but they are meant to convey the idea that small, illiterate farmers were probably bypassed by the activities of the farm credit corporations and that promotional programs should have been mounted to reach them.

The channels of communication or channels for promoting the credit program are as important as the contents of the messages they carry in order for these messages to reach the target groups to which they are directed. This is a diffusion process. It is a human interaction in which a person communicates knowledge of an innovation or a new idea to another person who does not know of the new idea through a channel of information which links the two persons. The social relationship between these two persons would determine whether the one with the knowledge would communicate it to the other person. Social relationships also could influence the effect of the telling on the receiver. The choice of channel by the sender could also influence the acceptance or rejection of innovation by the receiver. For instance, mass communication such as radios, television, film, newspapers, magazines, etc., could have tremendous effects for communicating information, whereas for persuasion purposes inter-personal channels involving face-to-face exchange between persons is more effective.

The explanation above is meant to show that the innovation decision process of knowledge during which a farmer is exposed to
the existence of farm credit, persuasion in which the individual forms a favorable or unfavorable attitude towards farm credit, decision in which farmer engages in activities leading to a choice to ask for farm credit or not, and confirmation in which the farmer seeks assurance that his decision is right are stages which require different messages and approaches by a district farm credit officer.

Table 17, showing the responses of farmers to the sources of information and their reactions to this information, reveals that the promotional activities had not only been meager but had not been well planned.

**TABLE 17**

<table>
<thead>
<tr>
<th>Channels Used for Promotional Drives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variables</td>
</tr>
<tr>
<td>Heard of farm credit through radio</td>
</tr>
<tr>
<td>Credit information received from extension officers</td>
</tr>
<tr>
<td>Credit information received from district credit officers</td>
</tr>
<tr>
<td>Information obtained from friends and neighbors</td>
</tr>
<tr>
<td>Information obtained from newspapers</td>
</tr>
</tbody>
</table>

Western Nigeria is a state where radio coverage from the state government radio and the Nigerian Broadcasting System reached many people every day. A substantial part is also covered by television stations operated by the state government and the federal government. The Information Service of the state government had fleets of vehicles equipped with cinema projectors in each administrative division of the state. In addition, all national and local newspapers were available in most population centers daily. Even though as discussed above many people consider that person-to-person contact is best for persuasion, for the dissemination of information on farm credit, the media mentioned above were possible channels for reaching farmers but they were not tried very much by the farm credit corporations. For persuasion, the face-to-face personal contacts could have been coupled with socio-culturally effective traditional ways through leaders of opinion, elders, family heads of households, etc. If these socio-cultural channels were coupled with contacts through friends and relations, more late adopters and laggards in the different farmer target groups could probably have been reached.

Table 18 shows the breakdown of the number of the various categories of officials of the agricultural section of the Western State Agricultural and Industrial Investment Corporation in 1972. While the number of field-level operating officials, i.e., credit
assistants grades II and III, could profitably be increased, sufficient use was not made of those in the different locations—as is reflected in the survey response shown in Table 17. What was required was promotional planning which involved a sizeable budget, use of various channels, credit officers (well-oriented to interact with the different farmer target groups), good knowledge of the characteristics of these groups (which should be reflected in the messages the channels carry), and a follow-up program to determine the effectiveness of the channels and the messages.

Coordination of farm credit operation with farming cycles.—Timeliness is essential in all phases of farm credit operation. Table 19 shows the need to coordinate loan-making processes with the different stages of farm operations. While the corporation sometimes starts collecting applications for new loans in November, responses to our questionnaire by farmers who applied for farm production loans and by officers of the cooperative unions and societies, Extension Division and the Western State Agricultural and Industrial Investment Corporation show that the collection of these applications started in several years as late as February. Because of this lateness in receiving applications for loans, excessive red tapes and the concentration of loan approval authority in the board of directors, loan processing took, at the least, six months. This means that in many years, the processing could
TABLE 18

The Distribution of the Staff of the Agricultural Section of the Western State Agricultural and Industrial Investment Corporation - 1972

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ibadan</td>
<td>1</td>
<td>-</td>
<td>13</td>
<td>18</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Akure</td>
<td>1</td>
<td>-</td>
<td>12</td>
<td>15</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Abeokuta</td>
<td>1</td>
<td>1</td>
<td>9</td>
<td>16</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Source: Records of the Western State Agricultural and Industrial Investment Corporation.
not be completed until July or August. In some instances, it took up to one year or more for a farmer who applied for a farm production loan to know the result of his application. This means that such farmers knew of the fate of their applications only after the harvesting of the crops for which they applied for loans. Tables 20, 21 and 22 explain the responses of farm district credit officers and the farmers to questions on the issue of timeliness of farm credit from the Western Nigeria Agricultural Credit Corporation and the Western State Agricultural and Industrial Investment Corporation.

Since planting is done within the months of March and April (and part of May in some areas of the state), the responses of farmers tabulated above indicate that loans approved for them were not released until June for almost all the farmers who applied for loans in January. Fifty-four% (336 out of 621) did not receive their loans until after 12 months, when the crops they grew after putting in their applications for loans had been harvested. It is no surprise, therefore, that 90% (556 out of 621 farmers) expressed strong dissatisfaction with the timing of the release of loans to them, and only 65, i.e., 10%, expressed satisfaction. The common complaints of these farmers were the bureaucratic red tape of the farm credit corporation and the time-consuming procedures both in the consideration of applications and the release of loan proceeds. It is most probable that loans released at the wrong time would be
### Coordination of Farm Credit Operations

<table>
<thead>
<tr>
<th>Essential completion Dates</th>
<th>October-November-December</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farm credit Operating Cycle</td>
<td>(a) collection of loan applications.</td>
</tr>
<tr>
<td></td>
<td>(b) repayment collections.</td>
</tr>
<tr>
<td></td>
<td>(c) data collection on current year farm performance.</td>
</tr>
<tr>
<td>Farming cycle</td>
<td>marketing of farm products</td>
</tr>
<tr>
<td>Sources: Questionnaire responses</td>
<td></td>
</tr>
</tbody>
</table>
**TABLE 19**

Operation with Farming Cycle in Western Nigeria

<table>
<thead>
<tr>
<th>January-February</th>
<th>March-April</th>
<th>May-June-July-August-September</th>
</tr>
</thead>
<tbody>
<tr>
<td>processing of loan by district credit officers, financial analysis of past performance and future prospect for <em>prima facie</em> qualified applicants for farm credit (in collaboration with the district extension officer and the cooperative officer).</td>
<td>disbursement of loans by district credit officer.</td>
<td>supervision of the use of loan by the district credit officer and the district extension officer.</td>
</tr>
<tr>
<td>cultivation and other preparation activities of farm id.</td>
<td>planting of crops</td>
<td>fertilizing, spraying of crops, weeding of farms.</td>
</tr>
</tbody>
</table>

...by farmers, credit, extension and cooperative officers, 1973
TABLE 20

Responses of Farm Credit District Officers on the Timeliness of Loans

<table>
<thead>
<tr>
<th>Cause of Lateness</th>
<th>Number of Respondents (25)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delay of approval at the headquarters caused lateness in availability of credit to farmers</td>
<td>Yes 16 No 9</td>
</tr>
<tr>
<td>Political influence in loan making lead to loans being given to non-credit-worthy farmers</td>
<td>Yes 16 No 9</td>
</tr>
</tbody>
</table>

Source: Questionnaire by the Western State Agricultural and Industrial Investment Corporation District Credit Officers, 1972.

TABLE 21

Length of Time Taken to Process Applications

<table>
<thead>
<tr>
<th>Length of Time</th>
<th>Number of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>After 2 months</td>
<td>2</td>
</tr>
<tr>
<td>After 3 months</td>
<td>2</td>
</tr>
<tr>
<td>After 6 months</td>
<td>16</td>
</tr>
<tr>
<td>After 12 months or more</td>
<td>2</td>
</tr>
</tbody>
</table>

Source: Questionnaire responses by the Western State Agricultural and Industrial Credit Corporation District Credit Officers, 1972.
TABLE 22
Responses of Farmers on the Timeliness of the Release of Loans by the Western Nigeria Agricultural Credit Corporation and the Western State Agricultural and Industrial Investment Corporation

<table>
<thead>
<tr>
<th>Length of Time</th>
<th>Number of Respondents (621)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farmers who received loans 3 months after application</td>
<td>65</td>
</tr>
<tr>
<td>Farmers who received loans 6 months after application</td>
<td>220</td>
</tr>
<tr>
<td>Farmers who received loans 12 months after application</td>
<td>336</td>
</tr>
</tbody>
</table>

Sources: Questionnaire responses by farmers in the Western State of Nigeria, interviewed in 1972.

converted to consumption purposes resulting in reduced farm production unless farmers could obtain funds from other sources. Conversion of production loans to consumption would invariably adversely affect the repayment of loans. This explains in a large measure the high default rate shown in Tables 1, 2 and 3.

The analysis of the economic and financial returns to the farm firm to be granted loans was based on a Farm and Home Plan which a district credit officer was required to prepare. This analysis is crucial. As shown in Figure 13, it consists of three parts: "Last year's farm and home operation," "New crop year planned operation" and "Purpose of approved loan."
<table>
<thead>
<tr>
<th>Expenses</th>
<th>Last Year's Expenses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Family</td>
<td>Farm</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>New</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Put</td>
<td></td>
</tr>
<tr>
<td>Spray</td>
<td>Fertilizer</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Example of filling in the table with specific expenses.
<table>
<thead>
<tr>
<th>Purpose of Approved Loan</th>
<th>Loan Payment Plan</th>
<th>Improved Practice (s)</th>
<th>Signature of Thumb Print</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date Due</td>
<td>Amount Due Including Interest</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**FARM AND HOME OPERATION**

<table>
<thead>
<tr>
<th>Loans Amount</th>
<th>Income (Cash &amp; Kind)</th>
<th>Other Income</th>
<th>Net Income</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CROP YEAR PLANNED OPERATION</th>
<th>Estimated Income</th>
<th>Actual Income</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**FIGURE 13**

Farm and Home Plan
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
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<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total family living expenses</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>
<td></td>
</tr>
<tr>
<td>Non-farm business expenses</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>
<td></td>
</tr>
<tr>
<td>Total education family living &amp; non-farm business expenses</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>
<td></td>
</tr>
</tbody>
</table>

**FIGURE 14**

*Family Living Budget*
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total operating sales</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></td>
<td></td>
</tr>
<tr>
<td>Total capital sales</td>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Total non-farm income</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Total income (cash in flow)</td>
<td></td>
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<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Total operating expenses</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>
<td></td>
</tr>
<tr>
<td>Total capital expenditures</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>
<td></td>
</tr>
<tr>
<td>Total other expenditures</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>
<td></td>
</tr>
<tr>
<td>Cash outflow</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>
<td></td>
</tr>
<tr>
<td>Cash inflow - Cash outflow</td>
<td></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></td>
</tr>
</tbody>
</table>
While the Farm and Home Plan could provide some insight into the previous operations of an applicant for farm loan, it cannot pinpoint his real financial strengths and weaknesses. It is necessary to prepare, in addition to last year's farm and home operation, a simple family living budget shown in Figure 14 and cash-flow projections showing monthly in-flow and out-flow of cash, shown in Figure 15 in order to know when the farmer would really need loans for farm production. From the information obtainable from Figures 13, 14 and 15, a brief statement of receipt and expenditure to show probable net profit or loss could be made. The essence of this matter, however, is to ensure that the short calculations required do not create another red tape and delay quick action. In order to prevent this the district credit officers need to be trained.

Summary

The document titled "Loan-Making Procedure for Medium and Large-Scale Farmers" which was revised and put out by the Western Nigeria Agricultural Credit Corporation in May, 1966, and the documents titled "Procedure for Loans to Small-Scale Farmers through Registered Cooperatives Societies," issued in August 1966, and "Cooperative Union Loans," all detailed some procedures to be followed in loan processing. The problem which the corporations faced, therefore, was not due to lack of some form
of direction, although these manuals were not updated frequently, as they should have been. The problems were those of effective management, lack of delegation of authority for loan approval at the district and circle levels, and the practice of over control by the board of directors who got involved in almost all loan approvals. The local loans committees and the cooperative societies were not given much operational responsibility except to express opinion on eligibility of applicants for farm production loans. In other words, decision making on loan matters remained at the very top of the organization and all levels in the farm credit structure were bound by these decisions. This accounts for the lateness in deciding upon loans and the untimely release of loan proceeds.

In the same way as the circle and district credit officers should be given adequate authority and responsibility for loan making, disbursement of loans should continue to be made through them. In order to prevent fraudulent practices, a suggestion would be made in Chapter 9 for payment of loans through checks with proper identification of payees. In addition, loan collection should continue to be made through the circle and district credit offices provided a weekly or even more frequent checks are made by the staff of the Accounts Department of receipts and bank lodgements. This issue will be elaborated upon in Chapter 9.

The organizational climate of the farm credit corporations
was not much conducive to the participative management required for successful farm credit programs. Communication, interpersonal risk taking, interaction-influence, quality of leadership, delegation of responsibility, and the perception of officers have been low and counter-productive. The interfaces among the district assistant credit officers and the farmers, among officers at different levels, among the chief loans officer and the supportive departments at the head office, among the loans department (head office) on the one hand and the circle and district credit offices on the other, and among the circle and district credit officials and the officials of the agencies providing supportive services needed to be organized and realigned in order to coordinate activities of the corporations to the advantage of increased farm productivity leading to improved changes in the economic and social level of living of farmers.
CHAPTER VII

THE EVALUATION PROCESS OF THE FARM CREDIT CORPORATIONS OF WESTERN NIGERIA

Evaluation as defined in Chapter 3 is the process of assessing the effectiveness and efficiency of an on-going program in order to decide whether to continue the program, drop it, modify it, or increase, reduce or maintain the level of funding. It also is a means of assessing the impact of a program on a target group to whom it is addressed. In this way it facilitates the comparison of performance with predetermined standards. The essence of this definition is effectiveness and efficiency. To determine effectiveness and efficiency, one needs accurate input and output data and predetermined performance or production measures. Evaluation relies on data.

Evaluation is an after-the-fact score-keeping activity generally undertaken to find out what has happened, whether it is carried out on an on-going program or it is a summative operation. It helps to explain past trends and could indicate future trends resulting from planned economic and social changes.
When the definition above and the model described in Chapter 3 were used in analyzing the farm credit corporations in Western Nigeria, the first finding was that none of the farm credit corporations ever planned an evaluation of its performance either during a planning or implementation process or at the end of any activity in their programs. None commissioned any outside organization to evaluate its performance. Performance standards were not set on any farm credit activity. Furthermore, as will be shown in Chapter 8, no comprehensive data were generated from their operations which could have been used in performance evaluation.

There are a number of units of a farm credit corporation that could be analyzed for data in order to evaluate its performance. These are (1) the budget, (2) the books of accounts, (3) the audit reports, (4) the annual reports, (5) personnel evaluation reports, (6) manuals of practices, (7) hand-outs issued from time to time and (8) the performance of borrowers. In addition to these, survey reports produced by independent scholars and reports produced by agencies, either government or private, whose activities are closely related to the operations of a farm credit organization could be helpful.

The budget. --Table 23 shows the most important line items in the farm credit portion of the 1972-73 budget of the Western State
Agricultural and Industrial Investment Corporation. This was the main planning document of the corporation and it set no performance standards. The votes were not broken down into centers of responsibility, i.e., credit circles and credit districts. There were no data on expected productivity and no supporting document to show what the credit offered to a farmer was expected to achieve. Rather, the budget provided substantial information on personnel--their number and salaries. The only reference to loanable fund for farmers was sub-head 37. From this line item, we know that the amount budgeted for loans to large, medium and small-scale farmers in 1971/72 was £N 90,000, out of which £N 65,976 was disbursed. The author could not obtain adequate reason for under-utilization of the appropriation. Such an explanation could shed much light on performance. It is, however, known that a substantial part of the appropriation that year was not released in time by the state government. The jump from £N 90,000 in 1971/72 to £N 370,000 in 1972/73 is phenomenon, but the document does not explain this over fourfold rise.

The books of accounts will be discussed in Chapter 8 under Management Information System in connection with the collection of data for decision making. For the moment we report that they contained no performance measures; interest and principal payments were not separated in the ledger of each borrower; there was a high
### TABLE 23

Budget for the Farm Credit Section of the Western State Agricultural and Industrial Investment Corporation, Fiscal Year, 1972/73

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Headquarters</td>
<td></td>
<td></td>
<td></td>
<td>Personal Emoluments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>53</td>
<td>1</td>
<td>1</td>
<td></td>
<td>Loan Officer, Scale 10</td>
<td>2,060</td>
<td>1,850</td>
<td></td>
</tr>
<tr>
<td>54</td>
<td>1</td>
<td>1</td>
<td></td>
<td>Stenographer, Scale 33</td>
<td>480</td>
<td>460</td>
<td></td>
</tr>
<tr>
<td>55</td>
<td>1</td>
<td>1</td>
<td></td>
<td>Higher Executive Officer, Scale 27</td>
<td>1,620</td>
<td>1,400</td>
<td></td>
</tr>
<tr>
<td>56</td>
<td>4</td>
<td>4</td>
<td></td>
<td>Executive Officers, Scale 19</td>
<td>3,980</td>
<td>3,290</td>
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</tr>
<tr>
<td>57</td>
<td>8</td>
<td>8</td>
<td></td>
<td>Clerical Officers, Scale 35</td>
<td>3,450</td>
<td>2,930</td>
<td></td>
</tr>
<tr>
<td>58</td>
<td>4</td>
<td>4</td>
<td></td>
<td>Clerical Assistants, Scale 35</td>
<td>1,200</td>
<td>870</td>
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</tr>
<tr>
<td>(b) Field Officers</td>
<td></td>
<td></td>
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</tr>
<tr>
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<tr>
<td>59</td>
<td>4</td>
<td>4</td>
<td></td>
<td>Credit Officers, Scale 16</td>
<td>4,760</td>
<td>4,020</td>
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<tr>
<td>60</td>
<td>3</td>
<td>4</td>
<td></td>
<td>Assistant Credit Officer, Scale 17</td>
<td>3,790</td>
<td>3,320</td>
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<tr>
<td>61</td>
<td>1</td>
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<td></td>
<td>Supervising Credit Assistant</td>
<td>1,040</td>
<td>920</td>
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<tr>
<td>62</td>
<td>4</td>
<td>4</td>
<td></td>
<td>Senior Credit Assistant, Scale 35</td>
<td>2,170</td>
<td>2,000</td>
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<tr>
<td>63</td>
<td>7</td>
<td>3</td>
<td></td>
<td>Credit Ass., Grade I, Scale 35</td>
<td>1,060</td>
<td>1,770</td>
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<tr>
<td>64</td>
<td>35</td>
<td>40</td>
<td></td>
<td>Credit Ass., Grade II, Scale 35</td>
<td>15,050</td>
<td>12,150</td>
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<tr>
<td>65</td>
<td>66</td>
<td>66</td>
<td></td>
<td>Credit Assits, Grade III, Scale 35</td>
<td>24,850</td>
<td>19,940</td>
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<tr>
<td>66</td>
<td>6</td>
<td>6</td>
<td></td>
<td>Typists, Grades I, II, III, Scales 35, 36, 37</td>
<td>2,640</td>
<td>1,270</td>
<td></td>
</tr>
</tbody>
</table>
TABLE 23 (continued)

<table>
<thead>
<tr>
<th>Sub-head</th>
<th>Establishment Approved 1971/72</th>
<th>Esti mates 1972/73</th>
<th>Details of Expenditures</th>
<th>Personal Emoluments Estimate 1972/73</th>
<th>Approved Estimate 1971/72</th>
<th>Actual Expenditures £N</th>
</tr>
</thead>
<tbody>
<tr>
<td>67</td>
<td>3</td>
<td>3</td>
<td>Clerical Assistants, Scale 35</td>
<td>960</td>
<td>730</td>
<td></td>
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<tr>
<td>68</td>
<td>3</td>
<td>3</td>
<td>Messengers, Scale 38</td>
<td>890</td>
<td>510</td>
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<tr>
<td>69</td>
<td>1</td>
<td>1</td>
<td>Motor Boat Driver, Scale 36</td>
<td>370</td>
<td>330</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>57,580</td>
<td>46,960</td>
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<tr>
<td>8 (c)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>8</td>
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<td></td>
</tr>
<tr>
<td>25</td>
<td></td>
<td></td>
<td>Staff Training</td>
<td>1,000</td>
<td>1,000</td>
<td>195</td>
</tr>
<tr>
<td>26</td>
<td></td>
<td></td>
<td>Local Advisory Committee</td>
<td></td>
<td></td>
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<tr>
<td>28</td>
<td></td>
<td></td>
<td>Members' Claims</td>
<td>1,000</td>
<td>1,500</td>
<td>166</td>
</tr>
<tr>
<td>28</td>
<td></td>
<td></td>
<td>Periodicals and Library</td>
<td>150</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>37</td>
<td></td>
<td></td>
<td>Loan to Farmers (short, medium long term)</td>
<td>370,000</td>
<td>90,000</td>
<td>65,976</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td>Interest on Cooperative Society Loans</td>
<td>3,000 3,000</td>
<td>949</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td>Interest on medium and small scale loans</td>
<td>10,000 10,000</td>
<td>4,867</td>
<td></td>
</tr>
<tr>
<td>Sub-head</td>
<td>Approved Estimates</td>
<td>Details of Expenditures</td>
<td>Estimate 1972/73</td>
<td>Approved Estimate 1971/72</td>
<td>Actual Expenditures £N</td>
<td></td>
</tr>
<tr>
<td>----------</td>
<td>--------------------</td>
<td>------------------------</td>
<td>------------------</td>
<td>----------------------------</td>
<td>------------------------</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td>Sale on Application Forms</td>
<td>1,500</td>
<td>710</td>
<td>1,857</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td></td>
<td>Capital Income</td>
<td>Grant from Western State Gov't.</td>
<td>200,000</td>
<td>90,000</td>
<td>-</td>
</tr>
<tr>
<td>18</td>
<td></td>
<td></td>
<td>Loan from the Bank</td>
<td>170,000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>19</td>
<td></td>
<td></td>
<td>Old Agric. Loan Repayment</td>
<td>10,000</td>
<td>10,000</td>
<td>1,757</td>
</tr>
<tr>
<td>20</td>
<td></td>
<td></td>
<td>Repayment of Cooperative Society</td>
<td>Loan (PRINCIPAL)</td>
<td>2,000</td>
<td>5,000</td>
</tr>
<tr>
<td>21</td>
<td></td>
<td></td>
<td>Repayment of short and medium term loan (PRINCIPAL)</td>
<td>35,000</td>
<td>50,000</td>
<td>31,781</td>
</tr>
</tbody>
</table>

Source: Estimates of Income and Expenditure - Western State Agricultural and Industrial Investment Corporation, 1972/73.
default rate which indicated an unsatisfactory performance.

The role assigned to the internal audit department in the farm credit corporations consisted of checking vouchers, invoices and other papers on purchases, salary payments, loan releases and repayments—largely at the head office of the corporation. The department carried out very little activity at the field offices—credit circle and district offices. The only measures the department used in its limited operations were the annual estimates of income and expenditure. As a source of data on performance, therefore, it did no better than the budget which has been found lacking above.

The annual reports of the corporations and the external auditor's reports on the annual financial operations of the corporations are other possible sources of information. The annual reports provided figures on loans to small, medium and large-scale farmers as well as group loans, but revealed no predetermined performance standards. They show the grand total amounts repaid by farmers but did not show that the management board or any other unit of the corporation or individual officer ever decided upon what percentage of repayment should be aimed at.

In 1966/67 and 1967/68 the annual report indicated that "no loans were issued to small-scale farmers during the current
financial year. There are, however, no comments on this statement in both reports as to whether that was the performance measure set. The budgets for these years did not help either, for the estimates of income and expenditure for each year merely showed the single line item budgeted for loans to small, medium and large-scale farmers.

Paragraphs 29-33 of the Second Annual Report of the Western Nigeria Agricultural Credit Corporation, 1966/67, spoke to the issue of the cost of making and administering loans and concluded that the interest payments collected could not cover administrative costs and loan losses (uncollectible debts). In parts of paragraph 32 and paragraph 33, the report states:

29 The cost of making and administering loans--The results of this financial year's operations have shown that interests collected on loans have covered administrative costs, but have not been sufficient to cover loan losses as well. In fact, if the new supervised credit scheme were to be run separately from the old loan collection scheme, it would have taken a few years before interest collected on loans

---

can be expected to cover both administrative costs and loan losses, in view of the cost of processing and supervising the farm loans, the relative cost of the staff overheads in the early years, the cost of the training programs for a few years, the size of individual loans and total volume which will be comparatively small during the period of training the loan staff.

30. Although the corporation is lending out of its own resources at the present and therefore at no interest cost to the corporation and thereby reduces its operating deficits, its ability to break even early and to build up a reserve to meet loan losses, depends on the rate at which the volume of loans can be increased, which depends to a great extent on the rate at which personnel can be trained, and additional funds can be made available.

31. In practice the total cost of most current supervised agricultural credit programs is met by the government. When the total social and educational benefits of supervised credit to rural families are considered, the money cost is insignificant. The rise in the standard of living of successful families, the increase in their productive capacity, their greater contribution as taxpayers exceed in value the administrative cost.
33. The most significant accomplishment in the first year of supervised credit operations is the assistance already given to a number of borrowers to make planned adjustments and improvements in their farm and home operations and thus given the opportunity to increase their incomes.

These paragraphs quoted do not reveal that performance measures were ever set. Paragraph 23 of the Third Annual Report of the Western Nigeria Agricultural Credit Corporation 1967/68 reads:

23. The most significant accomplishment in the second year of Supervised Credit Corporation is the opportunity for review and evaluation of the credit scheme and the concrete proposals agreed upon to put the scheme on a better footing.

No records of the review and the evaluation referred to in the paragraph quoted above are available for analysis.

Process evaluation: farmer-loan-borrower's use of farm loans. -- The different manuals and instruction hand-outs2 by the Western Nigeria Agricultural Credit Corporation and the Western State Agricultural and Industrial Investment

Corporation did not propose any serious process evaluation with a view to identifying weaknesses and correcting the situation before it got out of hand. Responses to our questionnaire by farm district credit officers and the district extension officers indicate that these officers attempt to remedy this situation. The responses of farmers, however, show that only 40% of these officers try to do this.

Figure 16 shows the type of report that farm district credit officers are expected to compile during farm visits. While this report could be exploited for good process evaluation, the requirements are not rigorous or quantifiable in order to determine what real progress has been made by farmers. Suggestions for improving this situation would be dealt with in Chapter 9.

FIGURE 16
Farm Visit Report Form
Form E2

Loan No._________________________

Borrower________________ Village_________ Area_________________

Home Address__________________________________________________________

Visit__________________ Previous Visit________ Date ______

Check: Small Scale Medium Scale Large Scale

What Status of the Farm and Home Plan (Brief Comments)
A personnel department is normally expected to be able to provide data on the human factors in the operations of corporations.
The department's records could be made to yield information and data on increased efficiency of personnel, acquisition of skilled personnel, job structuring and restructuring, and workload factors. There are, however, no data available on these factors, and the information recorded in confidential files do not constitute scientific evaluation but are largely impressionistic as felt by superior officers. If information on the human element in credit administration had been available, it would have been possible and useful to measure the following variables which can throw light on the contribution of the human factor to the effectiveness of the farm corporations:

1. Extent to which managers display managerial leadership in relation to support, goal emphasis, help with work and team building.

2. Extent of group process.

3. Extent of peer leadership in relation to support, goal emphasis, help with work, and team building.

4. Satisfaction with promotion prospect.

5. Organizational climate in terms of communication flow, decision-making practices, and concern for persons. Influence on departmental work.

6. Technological adequacy.

7. Motivation.

In addition to the evaluation of the production process of
farmers, there is also needed a summative evaluation of each borrower preferably at the end of harvest and the sale of crops. In addition a progress chart on the various social and economic indicators proposed in Chapter 5 representing the performance objectives of the farm credit corporations could be built up periodically.

There is required process and summative evaluations of the performance of the farm credit corporation at each level of its structure and operation. As mentioned earlier, since no performance measures were established for each activity like loan making, loan disbursement, repayment collection, etc., and there is no record of such exercises kept by the corporations, the conclusion would appear to be that the corporation did not direct its attention to this most important issue.

In addition to such measurement of the internal performance of the farm credit corporations, there is also the need for the measurement of external economic and social environments of the corporations in so far as these affect their performance. Again, there is no evidence that this matter was seriously considered.

No program is perfect, and the farm credit corporations examined in this dissertation were far from being perfect. One reason for equipping an organization with a feedback mechanism is to be able to spotlight imperfections. This is achieved through monitoring which provides information which could be
used in reviewing programs mid-stream. Monitoring depends upon data and these, as we have seen, were either not available or reliable. Feedback of information on completed projects, say farm loan to a farmer or a target group in a district, is important in order to establish whether the projected benefits are achieved and to be able to identify why the benefits could not be achieved in cases where there is failure to match predetermined standard of performance. This type of feedback comes, in the main, largely from survey research which we noted earlier, was not carried out in respect of the farm credit corporations in Western Nigeria.

The Western State Agricultural and Industrial Investment Corporation in paragraphs 112 and 114 of the memorandum it submitted to the Economist Intelligence Unit (mandated to appraise some government statutory corporations by the State Military government) spoke of an improved tax base and a general improvement in the standard of living of farmers as some of its objectives. But these were not quantified. The Economist Intelligence unit, in its report to the military governor in 1973, in apparent reference to this situation, referred to the need for the manager of the Agricultural Credit Department to assist the General Manager of the corporation "in the determination of credit policy, prepare annual plans and budgets for the fund capital required and operating expense
levels necessary for the accomplishment of specific predetermined targets of development."^3

Perhaps the most important evaluation report on farm credit operations in Western Nigeria is contained in the CSNRD - 3^4 of June 1966, pages 313 to 359. This report speaks of the social, psychological and economic factors affecting the performance of the various farm credit corporations established in the state from 1949 to 1966. According to this report the performance of farm credit program was constrained by socio-economic structure, lack of training for the lower-level staff (the upper-level staff consisted of knowledgeable people, according to the report), and poor office management practices. The report concludes "In summation, the supporting infrastructure is a dichotomy, extremely well developed, even sophisticated at the top levels, having excellent facilities; below the top, very little effective support. The production sector is not adequately or effectively served with technical assistance."^5

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^3The Economist Intelligence Unit Report prepared for His Excellency, the Military Governor of the Western State of Nigeria - Agricultural and Industrial Investment Corporation, 1973. Underlining is by us.


^5Ibid., p. 359.
It is stated in Chapter I that the farm credit programs in Western Nigeria reached only about 8% of the farming population during a period of 23 years. Implicit in this statement is the view that the program should have reached more farming population. None of the farm credit corporations ever stated explicitly their target population and how many they would reach in a year or any specified period. This means that the general statement of goals in the enabling legislations were not restated in operational terms by the management of these corporations.

Poor performance by any of the farm credit corporations might not be wholly of their own making. Inadequate funding, lack of adequate cooperating inputs and economic infrastructure were partly responsible. Whatever the situation was, a good evaluation would probably have revealed what the problems were. Undoubtedly the corporations achieved something. They helped some farmers. The performance of such farmers undoubtedly had impact on other groups in the community with considerable multiplier effect. Again an evaluation exercise would shed light on these goal-unrelated achievements.
A plan for the future, either for the Western Nigeria Agricultural Credit Corporation, the Western State Agricultural and Industrial Investment Corporation or for a farm firm must be developed in order for its operations to be successful. The first step in planning, as shown in Chapter 5, is to analyze the past. The past of these organizations is contained in records and data which they kept. Furthermore, the officials of any one of the three organizations need to know how each organization gets to where it is. This knowledge is obtainable through an analysis of the implementation of its programs. What have been the problems in the past and what has been done to correct them could be brought to light through the evaluation of these programs. The information system is expected to provide the data needed to carry out these activities and answer the questions posed.

A management information system generally implies that the system is computer-based, that it is so adaptable, that it can
respond to changes, and that it delivers final information to management in a form conducive to decision making. A system or any of its sub-system, even if it is not computer-based, can, however, still be regarded as a management information system or sub-system of a management information system if the last two pre-conditions are satisfied. The design of many management information systems is based in the main on the accounts. However, the books of accounts alone cannot supply the full range of information required by the management of an enterprise for decision making. Generally, in a farm credit corporation, other disciplines or activities complement accounting to supply data for the management information system.

As explained in Chapter 3 and the analysis of Figure 10, a good information system for a farm credit corporation would need to obtain data from the district credit officers, the district extension officers, the input suppliers, the evaluation and research units of the corporation, the management board of the corporation, the accounts, and from other sources in the economy. These data will need be analyzed, stored, retrieved and disseminated either on a daily, weekly, monthly, semi-annually or annual basis primarily to the management board, the circle and district credit offices and the farmers for planning purposes and decision making.

The organization structures of the Western Nigeria
Agricultural Credit Corporation and the Western State Agricultural and Industrial Investment Corporation as well as the analysis of the activities and operations of both as shown in Chapters 5, 6 and 7 reveal that no conscious effort was made to plan and utilize an information system. The sources of information on the operations of the farm credit corporations available to the writer are the budgets, the books of accounts, and the internal audit files.

The Accounting System as a Source of Information

A good accounting system must meet the following objectives:

1. a full disclosure of the financial results of the operations of the farm credit corporations by means of an orderly system for controlling and recording financial transactions.

2. effective control over all funds, property, other assets, obligations, liabilities, expenditures, costs and revenues;

3. preparation of informative and timely financial reports so as to be useful for internal management, to support the program structure, for use in preparing the corporation's budgets and for controlling the administration of the budget;
4. full, effective integration and coordination of accounting information with the planning, programming and budgeting activities and statistical reporting, in order that management may be able to ensure that funds are efficiently used, that obligations are not greater than the amounts authorized;

5. the development of the costs of running the farm credit corporation and farm loans which could be used in measuring the results of the corporations' operations and the performance of a farmer who borrows production credit;

6. it should be both a reliable and valid instrument of data collection in a research sense;

7. it should be designed as a socio-technical system (i.e., be appropriately coordinated with the psychological and social characteristics of those who are to use it).

The seven objectives above indicate that the fundamental roles of accounts in an organization like the farm credit corporations in Western Nigeria should be internal control, fund control, financial planning, and reconciliation of accounting, budgeting and planning activities. In other words, the accounting system should be designed in such a way as to facilitate timely preparation of financial reports. These reports should be planned to disclose significant facts about
the operations and activities of the corporations, be of maximum use for internal management and external reporting. The cost information, in respect of the operations and activities of the credit districts and credit circles, should be disclosed so as to relate the cost of performance to accomplishments.

When the principles and standards discussed above were applied to the Western Nigeria Agricultural Credit Corporation and the Western Nigeria Agricultural and Industrial Investment Corporation, it was found that:

1) the books were well kept, but in terms of basic financial information for decision making, there was room for considerable improvement, despite the detailed work schedules shown in Table 24.

2) No list of financial and statistical statements referred to in line 18 of Table 24 was available to show the sources of the data and to whom they were disseminated.

3) The higher executive officer (agricultural) was required to receive

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1 The organization structure of the Accounts Department in both corporations are practically the same. Before 1971, when the Western State Agricultural and Industrial Investment Corporation was set up as a merger of the Western Nigeria Agricultural Credit Corporation and Western Nigeria Finance Corporation, the accountant of the former was responsible to the chief accountant of the latter. Since the merger, the chief accountant of the latter has become the chief accountant of the new corporation and the organizational structure and functions have remained unchanged.
financial data from the circle offices and in this situation link the circle office and the higher executive officer (headquarters). There was, however, no provision for this link-up in the operations of the two officers as shown in the schedules of duties in Table 24.

In practical terms the financial information links between the accounts department and the circle offices were most tenuous. There were considerable delays in the exchange of loan information between the accounts department and the field offices (circle and district credit offices) of the corporation. While the inadequacy of communication facilities was partly responsible for this situation, the lack of openness in organizational climate reported in chapter 6 significantly contributed to it. The accounting records, therefore, did not adequately satisfy the seven objectives discussed above.

TABLE 24
Schedules of Duties for Senior Officers of the Accounts Department

1. Chief Accountant
(He is responsible to the General Manager for the efficient and satisfactory conduct of all accounting functions and execution of the financial policy of the corporation.)

Details of responsibilities include the following:

1. Institution of the accounting system.
<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2.</td>
<td>General administration of accounts department.</td>
</tr>
<tr>
<td>4.</td>
<td>Compilation of final accounts.</td>
</tr>
<tr>
<td>5.</td>
<td>Submission of periodical financial statements and reports thereon.</td>
</tr>
<tr>
<td>6.</td>
<td>Preparation of funds flow.</td>
</tr>
<tr>
<td>7.</td>
<td>Preparation of management accounting and assisting in its implementation.</td>
</tr>
<tr>
<td>8.</td>
<td>Preparation of corporation's annual budget.</td>
</tr>
<tr>
<td>9.</td>
<td>Execution of the financial policies of the corporation.</td>
</tr>
<tr>
<td>10.</td>
<td>Control of departmental expenditure within the approved budget.</td>
</tr>
<tr>
<td>11.</td>
<td>Liaison with other departments as required for accounting functions.</td>
</tr>
<tr>
<td>12.</td>
<td>Recommendations on accounting personnel, evaluation, promotion and discipline.</td>
</tr>
<tr>
<td>13.</td>
<td>Available for consultation and professional advice on all matters concerning financial analysis, financial reports, etc.</td>
</tr>
<tr>
<td>15.</td>
<td>Cooperation with external auditors.</td>
</tr>
</tbody>
</table>
TABLE 24 (continued)

17. Rendering of accountancy-consultancy services to the Statutory Corporations Service Commission or any other external body.

18. Preparation of financial and statistical statements and reports as required by the corporation and the government.

19. Periodic financial investigations into the affairs of the following subsidiary companies:
   - Epe Boatyard Company
   - G. L. Gaiser
   - National Motors (Nigeria) Limited
   - Great Nigeria Insurance Company
   - Lagos Airport Hotel
   - Waterside Rubber Estate

2. Accountant Grade I

   1. Direct supervision and coordination of the operations of (i) the agricultural, (ii) industrial, and (iii) headquarters divisions.

   2. To authorize payment vouchers, journal vouchers, and other documents relating to receipts and payments of the three divisions.

   3. Prepare and interpret all corporation's financial statements.
TABLE 24 (continued)

4. Preparation of the consolidated accounts.

5. To assist in the formulation and control of the budget of the corporation.

6. To supervise and comment on the accounts of the corporation's investments.

3. H.E.O. Accounts (Agricultural)

1. General supervision of staff in the agricultural sector including field staff.

2. To coordinate returns from circle offices.

3. To give statistical information as may be required on agricultural loans and investments.

4. To keep constant check on the issue and disbursement of loan imprest.

5. To ensure that all loan disbursements are duly receipted.

6. To visit circle offices to check on the accounting operations.

7. To check journal vouchers put up in respect of agricultural loans.

8. To produce monthly trial balance.

9. To assist in the preparation of annual accounts and estimates.

10. To assist the accountant grade I as and when necessary.
TABLE 24 (continued)

4. **H. E. O. (Head Office)**
   
   1. To supervise the staff of his section.
   2. To authorize petty cash vouchers.
   3. To supervise the control of cash imprest.
   4. To prepare monthly trial balance and progress charts on money collected.
   5. To be responsible for and give statistical information as may be required.
   6. The preparation of annual accounts and estimates as affecting his section.
   7. Checking allocations on all vouchers.
   8. To ensure daily banking of cash takings.
   9. Checking the monthly analysis sheets.
   10. To check all sides of the cash books.
   11. To ensure the preparation of monthly salaries and wages.
   12. To ensure the prompt rendering of returns to PAYE to appropriate authorities.
   13. To check monthly budget reports.
   14. To assist the accountant as occasions demand.

*Source: Schedules of Duties for the Accounts Department of the Western State Agricultural and Investment Corporation.*
Table 25 shows the returns which the Accounts Department prepared. While these reports were necessary, more important, however, there should have been reports of performance at each farm credit district. This was not prepared. The monthly repayment schedules did not show separately the principal and interest paid and owed by each borrower, and whatever information was prepared was not made available to the appropriate officer, that is, the district credit officer who was responsible for collection and advising farmers.

While the schedules of duties were comprehensive enough, the accounts department was not able to provide accurate and relevant data and information essential for management decision making and control for the following reasons:

1. collection of data from field offices was not well planned and vigorously pursued;

2. the accounts department did not analyze data needs for decision making and plan its bookkeeping to provide such data.
**TABLE 25**

List of Returns Prepared by Accounts Department Staff

(Head Office)

<table>
<thead>
<tr>
<th>Prepared by</th>
<th>For Submission to</th>
<th>Not Later Than</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trial Balance</td>
<td>Machine operator checked by the E. O. (Accts.) Agric. Sector</td>
<td>H. E. O. (Accts.)</td>
</tr>
<tr>
<td>Journal Voucher attachment for un-issued Loan Journal Voucher attachment for issued Loan</td>
<td>Acct. Clerk Checked by E. O. (Accts.)</td>
<td>Ultimately to be retained in the Accounts Dept.</td>
</tr>
<tr>
<td>Monthly Safe Reconciliation</td>
<td>E. O. (Agric.)</td>
<td>H. E. O. (Accts.)</td>
</tr>
<tr>
<td>Cash Imprest Journals</td>
<td>E. O. (Agric.)</td>
<td>H. E. O. (Accts.)</td>
</tr>
<tr>
<td>Writing of D. V. Book for all Expenses</td>
<td>Accounts Clerk (Headquarters)</td>
<td>H. E. O. (Accts.)</td>
</tr>
<tr>
<td>Schedule of Field Staff claims</td>
<td>Accts. Clerk (Headquarters)</td>
<td>H. E. O. (Accts.)</td>
</tr>
<tr>
<td></td>
<td>Prepared by</td>
<td>For Submission to</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>Writing Debit and Credit side of the Cash Book</td>
<td>Accts. Clerk</td>
<td>H.E.O. (Accts.)</td>
</tr>
<tr>
<td>Monthly Budget</td>
<td>E.O. (Accts.)</td>
<td>H.E.O. (Accts.)</td>
</tr>
</tbody>
</table>

Source: Schedule of Duties for the Accounts Department of the Western State Agricultural and Industrial Investment Corporation.

Although trial balances were produced monthly and full accounts were made up annually, no quarterly accounts were produced unless requested by the government or the management of the corporation. Such requests were, however, rare. It has been reported in Chapter 6 that accounts were not kept so as to indicate a breakdown of loan repayments into principals and interests or to be able to trace through the loan histories of individual farmer borrowers. Furthermore, the accounts department did not produce data on the aging of loans, a most important concept in the management of accounts receivable. Figure 17 shows the type of information required when receivable accounts are aged.
### FIGURE 17

Aging Schedule for Accounts Receivable

<table>
<thead>
<tr>
<th>Period Outstanding</th>
<th>Accounts Receivable Outstanding</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 30 days</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30 to 60 days</td>
<td></td>
<td></td>
</tr>
<tr>
<td>60 to 90 days</td>
<td></td>
<td></td>
</tr>
<tr>
<td>over 90 days</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTALS</td>
<td></td>
<td>100.0</td>
</tr>
</tbody>
</table>

A careful analysis of the books of the Western State Agricultural and Industrial Investment Corporation showed that some of the most effective planning tools were not employed in the Accounts Department. An example is financial or cash forecasting or other financial projections. The most important causal variable in determining requirement for funds by a farm credit corporation is the projected naira (Nigerian currency) volume of loans it could prudently give to farmers. This requirement demands that a good forecast of loans that would be taken by farmers be made. Two of the most common methods for doing this are (1) percent of loans method and (2) scatter diagram or linear regression method. The former is based on past relationship between asset and liability items and loans, and it assumes that this relationship
will continue. New loan forecast is then applied to obtain an estimate of financial requirement in the coming period. While this method is useful for relatively short-run forecasting, the scatter diagram or linear regression method (which uses the relation between loans and relevant balance sheet item at two points in time) is good for long-term forecasting. A line connecting these two points would describe the relationship between loans and the balance sheet item. These two methods depend upon accurate data generated by the accounting system. We saw earlier, however, that the books of the corporations could not produce reliable data either because such data did not flow from the field offices or the data available were entered (principal was lumped with interest) in such a way that the result was not usable for financial projections.

In summary, what has been said in the preceding paragraph is that the books of the Western State farm credit corporations should be kept in such a way to show a clear separation between funds for loans and funds for operating expenditure; that interest earned be separated in the books from capital loaned, capital repaid, capital outstanding, interests paid and interests outstanding. It should be possible not only to make loan forecast with such data using either of the two forecasting methods discussed above, but the loan offices could be provided with reliable and regular reports on balances outstanding.
The Budget as a Source of Data

Although budgets are produced annually, the estimated loanable funds of the Western State farm credit corporations could not be used for effective budgetary control because the estimates were calculated in figures for total year needs and not adequately broken into separate budgets for large, medium and small farmer loans. The budget for operating the corporations were too highly aggregated so that no management actions on overruns were called for until the total budget for the year was about to be exceeded. Table 21, although not a full budget, is a good representation of this type of aggregation.

As shown in the table just referred to, the estimates were based on incremental principles. Such a budget could not necessarily reflect changed conditions, e.g. reduction in the volume of loans taken by farmers. It would be more useful and informative if the farm credit corporations had adopted a program budgeting approach. Such an approach is simple and consists of the five steps below. It is also diagrammatically represented in Figure 18.

1. Identification of the goals of the farm credit corporation;
2. A definition of the total farm credit system in terms of the various programs for large, medium and small farm loans; the activities required to make the loans given productive; the environment and the resources available,
the management and the measures of performance;

3. Planning and analysis, a continuous iterative process concerned with developing and analyzing objective-oriented programs;

4. Programming and budgeting involving the translation of planned programs with the required resources and expected results into detailed program budgets;

5. Reporting control, feedback and correction.

![Program Budgeting System](FIGURE 18)

The accounting classifications used by the two Western Nigeria credit corporations being analyzed synchronized with the budgeting classifications. To this extent, the accounting system did provide means for accumulating data on the performance costs that could enable one to compile and report such data in a comparative manner with the planned costs indicated in the budget. This exercise could not, however, facilitate financial control as indicated
earlier, because neither the budget nor the accounting system was broken down into the organizational units (circle and district offices) of the corporations, nor was the operational costs clearly segregated from the loans. In other words, it would have been more informative if the accounts were set up to accumulate costs for each cost centers (circles and districts could be classified as loan centers) and service centers (mainly headquarters). Direct loan costs could then be traced to the circle or district office where the loan was given, and service costs could be prorated or assigned between loan centers and the headquarters either by absorption or averaging or any other method.

The Internal Audit Department

The Internal Audit Department is another unit of the Western Nigeria farm credit corporations which should form part of the Management Information System for the corporations. Figure 19 shows the management structure of the department both for the Western Nigeria Agricultural Credit Corporation and the Agricultural Section of the Western State Agricultural and Industrial Investment Corporation. In fact, the personnel for the department remains the same for both corporations.
The three executive officers shown in Figure 19 were supposed to spend a good part of their time in field work while the higher executive officer, head office, with the three clerks were required to deal with internal auditing at the head office. With proper work arrangement, it would appear that staffing was adequate so that one would expect the Internal Audit Department to make substantial contribution to the Management Information System. Because of lack of unified line of command due to the fact that the General Manager gave instructions direct to the staff of the department above the head of the internal auditor who also gave direction.
to the junior staff of the department over the head of the higher executive officer (Audit), the staff members were sometimes uncertain of what to do and this affected the flow of information.

The following were the functions assigned to the department:

1. auditing of the books of account at the head office;
2. checking the returns from circle and district credit offices;
3. auditing of the records of borrowers as well as cash receipts and payments at the circle and district credit offices;
4. recommendation of expenditure;
5. authorization of payments;
6. collection of debts;

Assignments 4, 5 and 6 obviously did not belong to the Internal Audit Department. But these took much of the time of the staff so that there was not sufficient time left for duties which properly belonged to the department, i.e., items 1, 2 and 3 above. Besides, the three executive officers who were supposed to be concerned with items 2 and 3 spent less than 50% of their time on these field assignments, being unnecessarily involved in audit work at the head office most of the time.

Apart from item 3, the three executive officers mentioned above should make spot checks on samples of the pre-numbered
receipts released to district credit officers to be issued to borrowers when repayments were made by the latter. Each loan office could be audited periodically. The main reason that the internal audit department was not effective as a sub-system of the management information system, however, was that the internal auditor did not draw up standard audit procedures to guide the staff of the department. For the department to contribute significantly to the flow of information to the appropriate levels in the corporation for the purposes of control and decision making, a systematic audit program would need to be organized and aligned with the accounting and lending procedures.

The analysis of the performance of the Internal Audit Department shows that while quarterly reports were prepared for the management of the Western Nigeria Agricultural Credit Corporation, no such report was submitted by the department to the management of the Western State Agricultural and Industrial Investment Corporation since it succeeded the former in 1971. This was the result of an absence of clear audit program and the presence of confused line of command as well as the involvement of the staff in duties which did not properly belong to the department.

**Farm Production and Management Practices**

The farmer borrower needed the following inputs in order
to use the loan obtained from the Western Nigeria farm credit corporations for production purposes:

1. agricultural education,
2. fertilizer,
3. water,
4. improved seeds, and
5. agricultural engineering services.

We showed in Chapter 6 that items 1, 4 and 5 were obtainable directly from the Extension Division of the Western Nigeria Ministry of Agriculture. Item 3 did not constitute, for the present, serious problem because the land is well watered during crop-planting and cultivation months of the year. The provision of item 2 was supervised by the Extension Division. Items 2 and 4 formed the heart of the farm production practices, the adoption of which was a condition for the grant of a loan to a farmer. Therefore, there was need for records of the timely availability of these inputs at the right places and for the right prices.

Profit, increased production and a better living standard were the main objectives of a farmer who obtained a loan for developing his farm firm. These objectives could be attained by achieving unit efficiency with adequate volume. The volume that was profitable and the efficiency in the production of this volume could be determined largely from the individual farm business
analysis. Volume might be too low because there was inadequate resources of capital and labor, or it might be the result of inefficient use of resources or it could be both. Inefficiency might be the result of poor production management, i.e., wrong combination of crops or wrong application of fertilizer, resulting in low per-acre yield. Inefficiency might be the result of high cost rather than low yield. The farmer might not even keep records. To be able to determine why costs were high or production volume was low, it is necessary to examine capital efficiency, labor efficiency and crop production technology of the farmer. Unless sufficiently detailed records were kept either by the farmer, his sons, relations or employees or by the district credit officers, many of the questions raised above could not be answered. When detailed information is obtained from several farm firms over a period of time, a comparative farm business analysis is possible which could be shown to a farmer to explain what similar farmers are doing and how they are doing it. He would thereby be helped to find out his strong and weak points.

As mentioned in Chapter 7, neither the Western Nigeria Agricultural Credit Corporation nor the Western State Agricultural and Industrial Investment Corporation initiated any programs of data collection by or for the farmer on the production and business practices which a borrower was required to adopt with the use of
farm loans. A farmer borrower was also not helped or encouraged to set a performance standard for himself. He, therefore, was not in a position to find out objectively how well he was doing, neither could the farm credit corporation evaluate its performance in order to be able to help the farmer borrowers reach any predetermined standard of performance in measures of volume or productivity and efficiency. The use of farm credit and farm inputs could provide learning experience for farmer borrowers but no learning curve could be produced without data on performance. It could be argued that because the majority of the farmer borrowers in Western Nigeria were not literate, they couldn't have kept records of fertilizer use and improved seeds, etc. But some of these farmers were literate and almost every one would have literate children who were living with him. Besides, the district credit officers and the district extension officers could help record data even for some selected farmers as an example of what could be done.

Data from Sources External to the Farm Credit Corporations and the Farmer Borrowers

The environment of a system embraces all the factors outside the system, and it determines in part its performance. In the case of the Western Nigeria farm credit corporations, the most important of these factors were: the economy and its conditions, including the pace of development progress; prices of inputs; prices of farm
outputs, both within and outside the economy; research into farming technology; the demographic, social and psychological characteristics of the different farmer target groups being affected through the activities of the corporations; sources of capital including budgets; and the political climate of the country. Because these factors constrained the performance of the farm credit corporations, efforts ought to have been made to analyze them. This analysis could have been done only if data were collected regularly on these factors. The farm credit corporations being analyzed, however, had no machinery for collecting these data. As discussed in Chapter 7, it had no unit for research, neither was any outside body commissioned by any of the farm credit corporations that were set up in the Western State to collect such data or carry out any study related to their social and economic environment.

It was necessary to keep track of the prices of farm inputs as well as other issues related to input markets. The product market was also important, for farmers would not come forward to take credit unless there was a market offering reasonable prices for their products. The speed of development progress could have impact on the acceptance of change which farm credit implied. The spread of education has an effect on the adoption of innovation and it could affect the delivery system of the farm credit corporation, for example, the disbursement of loans by checks and the repayment
procedures. Improvement in communication infrastructure like telephones, good roads and postal services could lead to changes in the structure of a farm credit corporation. These are a few of the environmental factors which if analyzed from time to time could profoundly affect the performance of the farm credit corporations as well as the farmer borrowers.

Direction of Information Flows

From the analysis above it becomes apparent that the Western Nigeria Agricultural Credit Corporation and the Western State Agricultural and Industrial Investment Corporation kept only the following records:

1. the annual budget prepared by the management;
2. the books of account kept by the Accounts Department;
3. quarterly and annual statements of accounts prepared by the Accounts Department for the management;
4. monthly budget report;
5. monthly repayment schedule of major agricultural loan borrowers.

We have shown above that these records were not only hopelessly inadequate, but that, in the form they were kept, they could not assist in meaningful decision making that could lead to the achievement of the goal of increased volume and productivity and
efficiency on the part of farmers and viability on the part of the co-
operations.

The flows of the few records and data available were also
not directed to many of the centers of responsibility and activities
where they could be used. As shown above, the few records were
meant for the management board only, whereas the centers of res-
ponsibility and activities also included the circle and district credit
offices, the district extension offices of the Western Nigeria Min-
istry of Agricultural and Natural Resources, the input suppliers
and farm firms. All these centers required data for planning,
implementation of programs and evaluation of performance. Fur-
thermore, it was necessary for data to flow from all sections of the
corporation, from all supportive agencies and from the environment
to the management information system for processing before being
transmitted to the centers of responsibility and activities discussed
above. We have seen from the analysis above that these flows did
not take place. The result of that was that the most potent aid in
getting the farm credit corporations to tick with life was not
organized.
CHAPTER IX

SUMMARY, CONCLUSIONS, RECOMMENDATIONS AND
SUGGESTIONS FOR FURTHER RESEARCH

Summary and Conclusions

Almost all economists who are interested in farm credit have concentrated their efforts upon consideration of the role of interest rate, profitable technology, incentive, price structure of inputs and commodity markets. Most have written on economic efficiency, some on equity considerations. A few scholars in the social and behavioral science disciplines have considered the farmer-credit institution relationships, the diffusion of innovation, the delivery system for farm credit and land tenure system as they affect credit.

We have in this research analyzed the performance of the farm credit corporations in Western Nigeria. The objective was to study the design and the internal operations of the farm credit corporations in order to find out the relationships between the system and its parts on the one hand and to determine if these internal operations contribute to the effective and efficient performance of
these corporations on the other. We have designed in Chapter 3, a management system comprising planning, implementation and evaluation processes and an information system. With this model, we have analyzed the administrative operations of the farm credit corporations in Western Nigeria, their records and records external but related to their performance obtained from agencies which provided supportive services for these corporations.

The Planning Process

Summary of Findings

When the model planning process was compared with the operations of the Western Nigeria Agricultural Credit Corporation and the Western State Agricultural and Industrial Investment Corporation, the following findings were noted:

(1) Systematic planning was almost entirely absent.

(2) Neither corporation carried out or caused to be carried out studies of the demographic, social and psychological characteristics of the farming population of the state with a view to segmenting this population into target groups.

(3) the corporations did not study the rural capital market structure of Western Nigeria with a view to finding out the farm credit needs of the farming
population.

(4) Because an analysis of needs was not carried out, no clear measurable goals and objectives were formulated and no measures of economic and social performance were designed.

(5) The enabling legislations for the two corporations did not make a distinction between large, medium and small farmers, but aggregated all elements uniformly and expected the corporations to handle loan making for these three groups in the same way and from the same funds. Lacking such criteria, the result was a poor allocation of resources, goal conflict, and a concentration of loan efforts on the large and medium-size farmers to the neglect of small farmers.

(6) The management boards of the corporations did not establish operational long and short-term objectives because the loans department, which was the line department of the corporations, was not represented. Appointment to the boards was not based on functional qualifications and experience, but the board comprised of civil servants, chosen on non-rational grounds. There was no representation from the financial, business, academic and farming
(7) No evaluation of performance was designed and no information system developed to improve decision making.

(8) The inter-relationships between the farm credit corporations, the Extension Division of the Ministry of Agriculture and Natural Resources and the input suppliers were not planned nor carefully worked out. Consequently, there was no articulate plan for the provision of supportive services which could make the use of farm credit productive.

(9) There was no extensive and intensive training and selection programs planned for the staff and management of the corporations.

Conclusion

The failures\(^1\) in the implementation of the farm credit programs which were reflected in (a) the low number the farmers reached by the farm loans, (b) the high default rate, and (c) the continued reliance on yearly appropriations from the Western State

\(^1\)These failures will be highlighted in the summary of findings in the implementation processes of the two corporations in the next section of this chapter.
government were the result of lack of planning as a management strategy and other administrative innovations.

The Implementation Process

Summary of Findings

When the model of implementation processes were compared with the operations of the two farm credit corporations, the following situations were revealed:

1. The failure to accord line status to the Loans Department which has been referred to above led to interaction-influence effect which was much below the optimum considered desirable in our model. The chief loans officer was not afforded the opportunity of giving leadership in loan policy matters and this situation adversely affected the coordination of operations. Poor communication and psychological distance rather than closeness resulted at the head office level between the loans department and other departments which were in reality supportive units for the achievement of corporations' goals and objectives.

2. Not much responsibility was assigned to circle and district credit offices for loan approval. The circle offices which were in reality required to act as rural banks were inhibited from developing loan portfolios
since approval for all loans over $150 lay with the management board.

3. The management board probably had to deal with over 200 loan applications per hour during the few meetings it had during the three months in the year when loans were made. This was a well-nigh impossible task. The result was that loans were approved too late for productive uses by borrowers. This in turn led to the conversion of productive loans to consumption uses by borrowers.

4. Relationships between senior and junior officers were far from the participative, responsive system regarded as optimal in the model. They were reflected in downward communications through the hierarchy and psychological distance in contrast to the closeness envisaged in the model.

5. The character of interaction-influence between the head office staff and field staff did not permit the former to understand the problems of the latter because the head office staff rarely visited and held staff meetings with the field staff.

6. Coordination of implementation programs between the field staff of the farm credit corporations and the agencies providing supportive services was not properly
planned for as revealed in the analysis of the planning process of the corporations; thus the field officers of these organizations did not plan joint itineraries or meet to evaluate their performance. This situation was confirmed in the responses to questionnaire by the district assistant credit officers, the district extension officials and the cooperative assistants.

7. Approved agricultural production and management practices. -- While there were a few print-outs on these practices dating back to 1966, they were not brought up to date and compiled into a manual explaining procedures, fiscal affairs, loan policies, provision of supportive services, long and short-range plans and forecasts, performance standards, etc. Because this did not happen, there were no program administration guides for training or refresher courses and orientation programs for management personnel, staff, farmers and the personnel of supportive service agencies.

8. Promotion drive for farm credit. -- No significant budget was set aside for farm credit promotion, no staff with marketing qualifications and experience was on the payroll of the corporations, and neither were the services of other agencies utilized for this purpose. Superior
officials believed that a promotional program was unnecessary because the demand for credit was greater than the supply. Tables 15 and 16, however, show that the demand came, in the main, perhaps from large literate farmers with economic and social connections along with, maybe, a few medium-scale farmers. The small farmers who were required specifically to be affected by the credit program by the enabling legislations received relatively small loan amounts. Furthermore, most of the large farmers repeated loan applications with the result that only very few new farmers were brought into the program from 1966. Channels of communication generally have effects on innovation decision process of knowledge, persuasion to use farm credit, the choice to ask for farm credit or not, and farmer's confirmation to assure himself that his decision is right. The farm credit corporations did not use to any great extent the media and the state government information system, but, relied heavily on personal contacts by the district assistant credit officers. Friends and neighbors show up very well as a channel of information according to the questionnaire responses by farmers analyzed in Chapter 6. These friends and relations could
be early adopters or innovators. The farm credit corporations did not build any significant promotional campaigns on this channel.

9. Coordination of farm credit operation with farming cycle. -- Because of non-delegation of responsibility for loan approval to the circle, the credit district and the local loans committee, loan approval and disbursement were not timely as pointed out in 3 above. Farmers complained about this. Untimely approval and release of loan proceeds led to unproductive uses of loans and poor repayment performance.

10. Analysis of economic and financial capacity of loan applicants. -- This was based on farm and home plan. While this was simple and so was easily handled by the field staff, the addition of simplified cash flow projections and family living budgets would more truly reveal net profit or loss which a borrower was likely to face as a result of the use of additional capital.

**Conclusion**

While the farm credit corporations in Western Nigeria did reach some people—about 8% of the farmers in the state over a period of 23 years, and while those so reached most probably
improved their standard of living through the use of farm credit, the great majority of the farmers in the state were not touched by the operations of these corporations. This was especially true of the small farmers. The catalogue of findings above indicates inefficiency in the allocation of loans and untimeliness in the releases of loan proceeds resulting in poor repayment performance. Human elements in loan making were not fully recognized. This became evident from the types of interaction-influence prevalent at different levels of the corporations and between the staff of the corporation and those of agencies required to provide supportive services. Personnel selection, placement and training programs were not well developed. Equally undeveloped was the need to inform the various farmer target groups through credit promotional drives.

The Evaluation Process

Summary of Findings

As revealed by the analysis of the planning processes of the two farm credit corporations in Western Nigeria, no evaluation of performance was planned and no performance standards were set. Neither did the corporations commission any agency to carry out an evaluation of their performance. We were, therefore, left with the alternative approach of analyzing some documents of the corporations that we believed could shed light
on their performance and standards. The main documents examined were the budgets, the books of accounts, the internal audit system, the external auditors' reports, the manuals and other handouts by the corporations, and some studies for the Federal and state governments. The following situations were revealed from these analyses:

1. The budgets did not provide any performance standard. There was no breakdown of the votes into credits for large, medium and small farmer groups. The votes were also not broken into circles and districts, neither was there any data on expected productivity.

2. The annual and the auditors' reports. These reports did not show any breakdown in performance into the responsibility centers of credit circle and districts. The reports, however, provided figures on loans to large, medium and small-scale farmers, but, no pre-determined standards.

3. The books of accounts and the internal audit system. The books of account, although well organized for an accounting firm, were not kept to reveal measures of performance because they, like the budget, were so aggregated that they did not reveal performance at the centers of responsibility, i.e., at the credit circle and
district levels. Furthermore, the books did not provide a breakdown that could reveal principal loans repaid and interest payments. Loan accounts and operational accounts were not separated. The internal audit system was limited largely to the auditing of vouchers, invoices, loan payments, and salary payments at the head office. There was only limited auditing at the field offices. The system, therefore, did not help much in our effort to evaluate the performance of the farm credit corporations.

4. Manuals and instruction hand-outs by corporations did not throw light on performance and standards. Reports required to be compiled by district credit officials, e.g. Farm Visit Reports, were not quantitative but provided opinions of program operators.

The sum total of the summaries 1 to 4 is that the documents of the corporations which we examined did not educate us on the performance of the corporations. Since there was no process of summative evaluations by the corporations, the performance standards suggested by our evaluation model in Chapter 4 became unobtainable and so the effects of the operations on farmers, the communities, the different farmer target groups, the economy, quality of life, tax base, etc., could not be known.
An evaluation report by the Consortium for the Study of Nigerian Rural Development and the Economist Intelligence Unit Report to the Military Governor of the state, indicated that some social, psychological and economic factors had affected the performance of the corporations; that political interference in the grant of loans and the collection of repayments had contributed to the high default rate; that the lower-level staff of the corporation had been less effective than the upper strata who were favorably reported upon; that lack of training for the lower-level officers and poor office management constituted a considerable impediment to efficiency in the corporations. These pieces of information are very useful as eye openers but they are highly qualitative.

Conclusion

Evaluation of a program helps to identify its strengths and weaknesses. It helps to correct faults before they impede efficiency. It could point up direction of progress and thus reinforce decision to continue or drop programs. Since our analysis has not succeeded in bringing to light such an evaluation, recommendations on how to set up an operational evaluation unit for a farm credit corporation in the Western State will feature prominently in the next section of this chapter.
Management Information System

Summary of Findings

Management information system is the life line of an organization. The system collects data from the environment and from the internal operations of the organization and analyzes, stores, retrieves and packages the information which is then made available to the decision-making centers for planning, operations and evaluation purposes. In the case of the farm credit corporations of Western Nigeria, there was no information system planned as such. This researcher, therefore, had to analyze some departments of the corporations in order to find out what information was generated internally, what was gathered by the corporation from the economy at large, how these data were analyzed, stored, retrieved and disseminated and to what use they were put. The units of the corporations analyzed are the accounts department, the internal audit system, the budgetary process, the lending department in respect of farm production and management practices and farm business data. Our findings are summarized hereunder:

The Accounts Department

1. The books of accounts had been fairly well kept. But for internal control purposes, the accounts could not obtain adequate data from the field offices of the lending
department. While this might reflect the inadequacy of communication facilities in the state, the organization climate within the corporation had played some part. It was not made mandatory for the field offices to make available all the information vitally needed for internal control purposes. A list of reports which could serve these purposes would be recommended in the next section, together with a time table for their preparation and the direction of their flows.

2. The handling of accounts receivable was not adequate in that aging schedules were not prepared. This is necessary for policy decisions on the treatment of delinquency cases and actions on uncollectible debts. A format and procedure for aging schedules will be suggested in the next section of this chapter.

3. The accounts department was not engaged in forecasting as a tool for planning. This was partly a result of lack of data from the field (district and circle) offices.

4. The books of accounts did not provide some vital information on principal and interest payments, neither were operational accounts separated from loan accounts.

5. The budgets were not sufficiently disaggregated. There were no separate line items in the budgets for large, medium and small farmer loans.
6. The budget format helped to cover up overruns of budgets on vital operations because the estimates were calculated in total year needs. In this way, budgetary control became minimal.

7. The corporations adopted the incremental budgeting system of the state government which did not always reflect changed conditions which could call for increase or decrease in votes for specific operations. We would discuss the planning, programming, budgeting approach that we suggest be adopted by a farm credit corporation in the Western State of Nigeria in the next section of this chapter.

8. Cost accounting, investment accounting, and accounting for property were not emphasized. Neither did the accounting system adopt the center of responsibility concept which would help in cost accumulation for each center in order that indivisible costs could be prorated. Since the accounting procedures had been closely aligned with the budgeting system, the two would need to change together.

The Internal Audit

9. The staffing of the internal audit department appeared adequate but they performed many duties which did not belong in this department.

10. There was no unified line of command because this concept
was regularly violated by the General Manager who issued instructions to the staff of the department over the head of the Internal Auditor. The latter also acted in a similar way by by-passing his immediate subordinates. The result was that the staff was confused and this affected the flow of information.

11. Little auditing activities took place at the circle and field offices. Consequently, it could be said that the department did not perform the duty of evaluation of performance at these levels.

12. No standard audit procedures were drawn to guide the staff in the performance of their duties. Such procedures would have indicated what was required of the staff and the type of data they should generate and make available to decision-making centers of the corporations. Since 1971, no internal audit reports had been prepared for the management of the Western State Agricultural and Industrial Investment Corporation.

The Lending Department

13. The circle and district credit offices did not generate data on production costs. Neither was a program of data collection by or for the farmers in respect of their use of farm loans initiated.
Data from external sources

14. The corporations did not organize or cause to be organized by outside agencies, the collection of data on the economy, prices of inputs and outputs and economic infrastructure which could affect the performance of farmers as well as the operations of the corporations.

Direction of Information Flows

15. Because there was no information system planned or operated by the corporations, it does not follow that the flows of information from all the four units of the corporations discussed above could not have been organized. If this organization had taken place it would have mitigated the consequences of the non-existence of formal information system. Since the direction of flows of information is most important, we shall propose a flow chart to take care of this matter in the next section of the chapter.

Conclusion

The non-existence of a management information system, the failure to generate essential data in the different departments of the corporations, and the lack of reliable, established direction of flow of the few data which could have been gleaned from these departments reduced the efficiency of the already-inadequate
planning and implementation processes of the corporations.

**General Conclusions**

The concerns of economists and scholars from other social and behavioral science disciplines mentioned in paragraph one of this chapter are most important in assessing the effectiveness of farm credit programs. It would appear, however, that even if all these concerns are correct, unless credit plan formulation and implementation, the evaluation, control and adaptation of farm credit plans, and implementation of changes are systematically and efficiently carried out, a farm credit organization and the farm firms it serves are not likely to be viable or efficient. Organization design and management are perhaps more crucial and limiting factors to the efficiency and viability of a credit program than are economic and financial factors.

**Recommendations**

1. On the basis of the findings of this study, an all-embracing recommendation would be that the model management system explained in Chapter 3 and used for analyzing the performance of the farm credit corporations in Western Nigeria in Chapters 5, 6, 7 and 8 be adopted by the current and subsequent farm credit corporations in Western Nigeria. In order to avoid duplication we shall not repeat the details of
the various steps in the four sub-systems of the model, i.e., planning, implementation, evaluation and management information system. We shall amplify them and explain the processes of setting up any step where such processes have not been fully covered in previous chapters. The important thing to bear in mind is that an issue may run through the four sub-systems.

2. Adopt a systematic approach to the planning and implementation of a farm credit corporation.

3. Operationalize the goals of a farm credit corporation set out in its enabling legislations in terms of quantifiable objectives. Quantified objectives become the measures of performance for assessing the effectiveness and efficiency of a farm credit program or any of its major activities.

4. The planning process should also set out the policies for the implementation, the evaluation and the information system of a program.

5. Information system provides data for monitoring a program and supports an evaluation program. The data generated by the information system and the evaluation program should be continually fed back to the planning process not only for the modification of a farm credit plan but for new plans. This is what makes planning a continuous process.
6. The structure of an organization should reflect its goals and objectives. In the case of a farm credit corporation in Western Nigeria, the structure which we believe reflects the goals and objectives is shown in Figure 20. The features of this proposed structure are:

(i) "A council of directors under a chairman. - This body will deal only with policy matters. Membership should be comprised partly of appointees for a limited time from the list of names recommended from each regional farm credit boards, and partly of direct appointees of the state government to ensure that the board is composed of persons interested in the problems of farmers, and the cooperatives, and others knowledgeable in financial and academic matters related to the objectives and operations of the organization.

(ii) At the head office of the organization, there should be a general manager to whom will be responsible a deputy general manager and heads of central services departments. The central services departments will be in staff positions and relate to the deputy general manager in a horizontal communication system, while they at the same time report to the general manager. The general manager and his deputy will be members of the council.
Proposed Structure of Farm

- **Central Services Divisions**
  - Accounting and Budget
  - Internal Audit
  - Information System

- **Field Operations**
  - **Regional Farm Credit Office**
    - Manager and Credit Officers
  - **District Farm Credit Office**
    - Asst. Credit Officers
  - **District Loans Advisory Committees**

- **Head Office Operations**
  - Public Relations

- **Four Regions**
  - Regional Manager and Credit Officers
  - District Manager and Credit Officers
  - Asst. Credit Officers
  - District Loans Advisory Committees

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*Note: The diagram shows the proposed structure of farm operations with various departments and levels of management.*
FIGURE 20

Structure of Farm Credit Organization in Western Nigeria
Organization in Western Nigeria
of directors, while heads of the central services departments and managers of regional offices could be in attendance at council meetings when required. The general manager will have attached to his office, two units--public relations and a secretariat, for preparing council minutes and other related matters.

(iii) The field operations of the organization will be performed by the following: regional boards, regional credit offices, and district credit offices. Each regional board should be comprised of persons appointed from lists prepared after consultation with farming groups, cooperatives and individuals in a region. (A credit region should cover the same geographic area as what is now called a credit circle which is co-terminous with an extension circle of the State Ministry of Agriculture and Natural Resources.) In addition, the senior officers of the State Ministry of Agriculture in charge of extension services, water resources, farm engineering in the region, as well as those of the cooperatives, and the regional development office should also be members.

(iv) A board's duties should, in the main, be those of overseeing credit operations in the region, preparing regional credit plans including budget proposals, and
(v) Actual approval of loans should be delegated to credit officers (for loans not exceeding $1,500 (N-1000) and to the regional managers (for loans above $1,500 (N-1000). Formal ratification by a regional board would provide signal for a regional office to enter into necessary contracts which would eventually lead to loan releases by the head office using banking facilities in each region as much as possible.

(vi) Table 26 shows the availability of banking facilities in state. In addition, the authorities of the Post Office Savings Banks, which are widespread in the state, should be contacted to liberalize their operations so that these banks could be used along with those shown in Table 26, not only for loan releases but for loan repayments and mobilization of rural savings. The latter is a subject matter not covered by this study.

(vii) In order to be able to operate the loan releases and repayment proposals above safely, it is necessary to provide each borrower with an identification card, an example of which is shown in Figure 21. This card could also be utilized as a bank passbook by providing
## TABLE 26

Locations of Banking Facilities in The Western State of Nigeria

<table>
<thead>
<tr>
<th>Farm Credit Abeokuta Region</th>
<th>National Bank</th>
<th>Cooperative Bank</th>
<th>Standard Bank</th>
<th>Barclays Bank</th>
<th>Could be Paid at:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abeokuta</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>Abeokuta</td>
</tr>
<tr>
<td>Aiyetoro</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Abeokuta</td>
</tr>
<tr>
<td>Egba Ifo</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Ilaro</td>
</tr>
<tr>
<td>Eruwa</td>
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<td></td>
<td>X</td>
<td></td>
<td>Eruwa</td>
</tr>
<tr>
<td>Ilaro</td>
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<td></td>
<td></td>
<td>Ilaro</td>
</tr>
<tr>
<td>Ijebu-Ode</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td>Ijebu-Ode</td>
</tr>
<tr>
<td>Shagamu</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td>Shagamu</td>
</tr>
<tr>
<td>Ibadan Farm Credit Region</td>
<td></td>
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Source: D. Goodman, unpublished memorandum to the Western State Agricultural and Industrial Investment Corporation for the disbursement of loan funds to farmers, 1971.
FIGURE 21

Sample of Borrower's Identification Card and Pass Book
sheets in it for bank lodgements and withdrawals.

The organization structure described above and the loan making, disbursement and repayment procedures explained are meant to highlight the importance of creating centers of responsibility in the regional and district credit offices through the decentralization of loan operations and the delegation of increased loan approval authority to the field offices. Improved disbursement of loans is essential to the utilization of farm loans for productive purposes.

7. Farmers' education in the use of inputs, in order to adopt innovations like improved seeds and fertilizer, should continue to be provided by other agencies. But the farm credit organization should ensure not only that the organizations concerned collaborate in planning the provision, but also that the actual provision by various agencies is coordinated. The farm credit organization should make periodic checks and report the situation to its board.

Adequate and timely provision of these inputs at the right cost is fundamental to the success of a farm credit organization and such provision should not be taken on trust. The suggestions above imply the provision of these services by separate agencies in contrast to a direct provision by the farm credit organization. Separate but coordinated
approach would enable the organizations concerned to specialize. It helps to locate responsibility within a systems approach to the implementation of a farm credit program.

8. A farm credit program should be based on a solid research base, adequate diagnosis of farm productivity problems, and sound knowledge of the target groups to be served. In order to achieve this objective, there has to be created an evaluation and research department of the farm credit organization, and a management information system. The evaluation and research department will first carry out pre-planning studies to determine the demographic, social and economic characteristics of farmers and segment the farmers into target groups. The department will also need to find out factors needed for increased farm productivity, the need for farm credit, and how far the need has been met. It will have to monitor the performance of the farm credit program in all its phases with a view to finding out its strength and weaknesses so as to design corrective measures. It has to measure the performance of the organization against predetermined standards of performance set through the planning process.

The following issues must guide policy on designing and implementing an evaluation system for a farm credit
organization:

(i) The problems of defining a public agency program objectives and the problems of multiple objectives. -- These objectives have to be defined, quantified, and used as performance measures. To achieve this, the staff of research and evaluation department have to work closely with the staff of operations departments to define objectives. Evaluation and research departments must be placed on an organization structure and control near the chairman in order for him to lend the weight of his authority for the definition of goals and objectives and to secure the cooperation of operating departments.

(ii) Problem of low utilization of evaluations. -- These are due to organizational inertia since organizations tend to resist change which evaluation implies. Correction of this depends on the support of the chairman and the climate of trust in which research and evaluation department operates.

(iii) Design relevance. -- This emphasizes the need to make evaluation study relevant to critical program and policy issues in order for it to command respect. It must focus on the achievement of agreed objectives.
(iv) Dissemination of evaluation reports. -- This implies that it must be made a policy to brief relevant decision makers on the results of studies. The direction of the flows of evaluation reports should be indicated on time intervals of quarterly, semi-annual and annual bases. Lastly, a farm credit program should be divided into discrete segments to facilitate reporting.

(v) Staffing of an evaluation unit. -- The staff must be adequate and qualified for the task because a badly-executed evaluation does more harm than good since it produces a result which, if implemented, could distort or damage the organization. Good staff depends partly on adequate budget, which in turn hinges on political support.

(vi) Development of evaluation work plans. -- An evaluation plan should be worked out at the beginning of every year as a condition for authority to spend evaluation funds. This annual plan should be operated within a two or three-year plan and should cover the significant questions to be answered and estimated dates against which answers are required for budgetary and policy reviews. The plan should involve as many departments as are necessary.

(vii) Measurement could distort performance. --
Over-measurement could distort the objectives of an organization and become counter-productive. Evaluation should, therefore, be really needed and not just mounted in order to postpone decisions or to cover up inadequacy.

9. In designing and implementing a management information system for a farm credit program in Western Nigeria, the following policy issues should be analyzed:

(i) The decision system of the farm credit organization must first be analyzed in order to identify the types of managerial, financial, personnel, loan, etc., decisions required. The hierarchy of decisions must then be flow-charted in order to be sure of their relationships. The decisions made in a farm credit organization relate to its goals and top management must be involved in the analysis.

(ii) An analysis of information requirements comes next. This relates to the availability or otherwise of appropriate information, especially information on how resources are being used towards optimum productivity and operational flexibility.

(iii) A master systems plan is desirable because a management information system is best developed as an
extension of what is currently going on in an organization. By building upon the accounting system, the internal audit system, the budget, personnel information, farm productivity data and inter-agency operational data, a workable information system could be designed. A master systems plan tells the systems manager the segment of the systems he should work on next, and it describes the inter-relationship of the segments currently operational, those which have been implemented or have been planned. Since the system to be operated in the farm credit organization of Western Nigeria is best left as manual for the time being (as explained in Chapters 3 and 8), a master plan would indicate what to do to make it semi-manual or fully automated. After a negotiation with the Computing Center of the University of Ibadan, it should be possible to make the system semi-manual, put some of the data on card, and in fact store data on disk and run programs. When other agencies like the Cooperative Bank, the Marketing Board and the Finance Corporation, which are close to one another, decide to run a computer jointly, the management information system could become fully automated.

(iv) Support for the design effort. -- A management
information system is a centralized arrangement whether it is manual, semi-manual or automated. The human factor of the organization must, therefore, be well considered. It needs the support of all departments generating and supplying data and those using these data. In this regard, the systems designer must review the formal structure of the organization, carry top management with him on all steps, orient all requirements to the users and to what the providers of data can reasonably generate. The different sub-systems have to be carefully worked into the overall system.

(v) Procedures for collecting, storing, retrieving and treating information should be carefully worked out, popularized and adhered to until there is evident need for a change.

(vi) Standardization. -- All data must be classified and identified so that the same meaning is conveyed to all providers and users and to all levels of the farm credit organization. Yet, it should be simple so they could be easily used. These requirements are achievable by a coding system to indicate sources and types of data.

(vii) Of particular importance is the classification of reports. This could be combined with coding and direction of
flows of data and information, and a register could be prepared and followed as hereunder:

<table>
<thead>
<tr>
<th>Frequency of Reporting</th>
<th>Coding Series</th>
<th>Direction of Flows</th>
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<tbody>
<tr>
<td>Daily reports</td>
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<tr>
<td>Weekly reports</td>
<td>200</td>
<td></td>
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<tr>
<td>Bi-weekly reports</td>
<td>300</td>
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<tr>
<td>Semi-monthly reports</td>
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<td>Monthly reports</td>
<td>500</td>
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<tr>
<td>Quarterly reports</td>
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<tr>
<td>Semi-annual reports</td>
<td>700</td>
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<tr>
<td>Annual reports</td>
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</table>

Classification also helps in the control of reports if report manuals are maintained for all recurring reports to include, in particular, pertinent instructions and correspondence relative to the preparation of such reports. A schedule of reports due out in each month, a listing of reports due within each week, and lists of delinquent reports could help make a management information system efficient.

In summary, a Western Nigeria farm credit organization's management information system would involve three groups of people: (1) The top management would have to
present a sound statement of goals and resources availability, design a master systems plan, and support the design effort. (2) The systems designer should review organizational structure adequately, review information requirement, prepare a dynamic adaptable system that can be updated and maintained. (3) The user departments of the farm credit organization should be closely involved in designing the system.

(ix) The need to maintain secrecy of data and organization. --

A policy of respect for confidentiality must be developed by the farm credit organization and popularized especially in relation to productivity and performance data obtained from farmers. A bureau may fail to gather data on program effects or performance, if staff members of the bureau feel that the program is not achieving its objectives. While this is slightly different from confidentiality, the same concern for the human factor is required in both. Policy measures must be designed to ensure compliance with request for data by all bureaus or departments.

Sub-systems of the Management Information System

(x) The budget. -- In order for the budget to perform the
function of control and allocation of resources, it must be broken down into the major centers of responsibility, i.e. the regional and district credit offices. Performance standards must also be attached. Furthermore, loan budget must be separated from operational budget, and a definite budget must be approved for each farmer target group to be addressed in a year.

(xi) Accounting. -- Recommendations in respect of information, data and report generation in accounts department relate to loan disbursement, clear separation of operating accounts from loan accounts, separation of principal paid from interest payments, keeping of accounts and timely presentation of reports on overdue debts, and receipts. Figures 22, 23, 24 and 25 illustrate the steps required in order that the department may make satisfactory contribution to the management information system's financial reporting and control, and sound decision making by the farm credit organization.

Internal Audit

(xii) For an internal audit of a farm credit organization in Western Nigeria to contribute satisfactorily to a management information system, it must, in its duties,
Figure 22.0

CASH DISBURSEMENTS SYSTEM

- Loan Docket Approved
- Approved names added to payment voucher. 5 copies of latter.
  - 1 copy to G.M. Chairman
- Loan Docket Summary Sheet Prepared
  - 1 copy to Accounts Department
  - 1 copy kept
  - 1 copy filed in Pocket
  - 2 copies

- Loan Office Clerk checks Docket Summary Sheet against payment vouchers. Assigns loan numbers to vouchers.
  - Copy of completed payment vouchers to Loan Dept.
  - File payment vouchers by Loan Office
  - Examine for disbursements due
  - Disbursements due? Yes

- 1 copy of
  - Summary Sheet
Money received, additional receipt filled out at loan office

Original receipt to borrower

One copy remains in receipt book

Teller filled out money deposited

Information added to bimonthly return

Payment entered on loan office record card

One teller receipt copy

One receipt copy

2 copies of bimonthly return forms transmitted to Circle Office on 15th and end of month along with teller's receipt copies

Cashier checks, calculates and enters principal and cash breakdowns, signs both copies of bimonthly returns forms. Sends copies to cashier.

Checked at Circle Office, both copies plus tellers and receipts sent to cashier.

Copy to Loans Department
Copy to Ledger Section

Search for Ledger Cards

No
Notify Auditor

Fund?

Yes

Make repayment entries referencing receipt no.

Refile ledger cards

Send bimonthly returns copy back to cashier

Cashier files bimonthly returns copy with tellers and receipts

Sent to Circle Office

checked by Circle Office

Sent to Originating Loan Office

Principal and interest entered on loan office record card

FIGURE 23

Cash Receipts System
Borrower: ___________________________  Loan Number: ____________  Purchaser: ___________________________
Address: ___________________________  Special Remarks: ___________________________  Checker: ___________________________

Disbursement Guide

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Repayment Schedule

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<th>Amount</th>
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<th>Interest</th>
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**FIGURE 24**

Individual Borrower - Card Format
Figure 25

OVERVIEW OF SUGGESTED ACCOUNTING SYSTEMS

INPUT

- Documentation for non-government receipts
- Data from management information system
- Other input delivery agents
  - Farm loans
  - Adm. grants
  - Govt. grants
  - Bank loans
  - State government appropriations

ACCOUNTING SYSTEM

- Income ledger cash on hand
- Non-govt. receipts register
- Regional reports
  - District reports
    - Summary periodic progress report
    - Expenditure register
    - Obligation control report
- Wage and fringes
- Allowances
- Invoices and purchases orders
- Facilities
- Consulting agreements
- Contracts
- Loans
- Agreement loans
- Summary period progress report
- Expenditure registers
- Obligation control reports
Figure 25
OVERVIEW OF SUGGESTED ACCOUNTING PROCESSES

SYSTEM

SUGGESTED INTERNAL REPORTS AND RECORDS

Non-govt. receipts register
Regional reports
District reports
Summary periodic progress report
Expenditure register
Obligation control report

RECORDING AND REPORTING PROCESS

Record cash on hand
Report generation
Report generation
Record unobligated balance

EXTERNAL AND SUGGESTED OUTPUT REPORTS

Report of cash transactions
Monitoring reports
Management reports
Quarterly progress report
Monitoring reports
Quarterly progress report

Non-governmental receipts
Purchases
Expenditures
Purchases
Expenditures
go beyond ascertaining compliance with budget provisions. It must not only appraise for accounting and financial reviews and other operations, it must be concerned with measuring and evaluating effectiveness of operations, analyze organization structure, internal systems, work flow and be a managerial control device. Therefore, the audit department must find its major operations in the field offices through sampling of payment and receipt records of farmers.

(xiii) The audit department must collect analytical evidence for a diagnostic analysis of the operations of the farm credit organization, to evaluate its internal control and to provide ratio and trend analysis. In order to achieve this assignment, which is much bigger than anything ever conceived for the audit departments of previous farm credit organizations in Western Nigeria, the chief internal auditor has to prepare an audit program including the procedures to be followed by his staff.

(xiv) During field office auditing, it should be a policy and practice not merely to check that accounts in subsidiary ledgers represent amounts receivable, the internal auditor must talk with borrowers in order to determine the genuineness of the individual borrower's ledgers,
and the timing of such operations should be known to the internal auditor alone. The same farmer should not be audited regularly, but an element of surprise should be introduced into the selection of farmers and the timing of the operations. Such an audit program should be prepared monthly and the staff should be made to follow agreed procedures, be advised on what to look for, and be well informed on the human factors in auditing, either of the staff of the organization or borrowers.

(xv) The crucial aspect of internal auditing is the provision of timely reports which provide data on actual transactions, internal control of payments and receipts, tests of cash balances and allocation of resources. These reports will not only inform management, they indicate performance standards, help detect fraudulent practices, put the staff on the alert, reassure clients, monitor eligibility of borrowers, security for loans and collection efforts of field staff. All these will form the data and information which go to the management information system.

(xvi) Farm Firm Record keeping. -- This ties in with the development of key production and business practices. The most important key production practices for maize,
rice, cocoa, cattle, poultry and other crops and animals being developed by borrowers should be got up in cooperation with the Extension Division of the State Ministry of Agriculture. In the same way the key business practices in relation to the keeping of simple farm accounts, records of farm purchases and sales, inputs used, time for planting, harvesting, etc., should be developed.

As commercial farming is first and foremost a business, a farm credit organization should insist on borrowers following key business practices as parallel to key farming practices. A key business practices program would be consistent with the Edict, Section 22 (1) (b) (iii), (iv), (v) and (vi).² Like key farming practices, the key business practices would be adapted to fit the borrower. Agreement to the effect that prescribed business practices have been understood and will be followed by a borrower could be incorporated as a loan covenant in the loan agreement.

Several key business practices that all borrowers should be informed of and agree to are as follows:

² Edict establishing the Western State Agricultural and Industrial Investment Corporation, Government Press, Ibadan, 1971.
(a) besides the processing fee, payments of interest and principal and future application fees, the borrower will not pay anything to corporation personnel. If approached in any way to make unauthorized payments, the borrower must agree to notify the regional credit officer or a member of his Local Advisory Committee. Although this is no guarantee against fraud at the loan office-borrower interface, it could go as far as currently possible to protect the corporation as well as the borrower from fraud attempts;

(b) no cash payments to the corporation or its authorized representatives should be made unless an official receipt for the amount paid is issued at the time of payment;

(c) official receipts from the corporation and receipts for purchases made under the farm and home plan must be maintained by the borrower in a safe place;

(d) records of the crop yields from the farming enterprise including the yields used for home consumption must be kept;

(e) records of the amount of revenue realized from the crops must be kept.

The above five points would seem to be about all one
could expect from an illiterate borrower. For a literate borrower, the corporation could require in addition to the above that:

(f) a checking account for loan funds be maintained and the payee's name and the amount of each check written be recorded;

(g) revenues received from the farming enterprise in excess of the borrower's immediate cash needs be deposited in a bank;

(h) all loan repayments to the corporation be made by bank draft, certified check, postal money order or by a check drawn on his personal account;

(i) for group loans, the corporation should insist that a capable individual be designated as the bookkeeper and that he maintains complete records of cash receipts and disbursements;

(xvii) That the key business practices being followed should be monitored by field staff personnel as well as by the internal auditors. Should a borrower fail to follow the key business practices, he should be accorded the same treatment as one who fails to adhere to key farming practices.

(xviii) Farmers need to be trained on these practices and
efforts must be made to get literate farmers to keep records; the illiterate borrowers could use their sons and neighbors; credit and extension officials should help with these records, and these officials should ensure that these records are reported to the management information system. From these data the system will be in a position to compute business factors analysis, trend analysis, contribution of leverage to the growth of farm firms, and prepare comparative analyses not only for a farm firm but for groups of farm firms.

10. **Training Programs**

(i) **Development of manuals, regulations and instructions.**

The 1966 manuals and instructions should be brought up to date. They should deal not only with the key practices discussed under "Management Information System" above, but include, among others, the objectives of the organization, loan and collection policies, the performance standards set from time to time and field operations. They should also include samples of all forms which are required to be completed by the staff, like loan record cards, applications for loans, farm and home plans, family living budgets and receipts for
payments. All these should form an important part of the training program discussed hereafter.

(ii) In considering the contents of a training manual, the important questions to answer are:

- the objectives of the training program for which the manual will be used;
- the conditions under which the manual will be used;
- the kinds of instructions which will most effectively accomplish the objectives under the conditions;
- whether instructions will be carried on in groups or individually;
- whether the manual and the training are parts of a series being continually revised.

(iii) In designing the full package of a training program for a farm credit organization in Western Nigeria, attention should be given to training for the management, the staff, the farmer borrowers, the staff of organizations providing services like the extension education and inputs, and the local loans advisory committees.

(iv) We spoke in Chapter 3 of indoctrination, operations and professional improvement training for the management and the staff of farm credit organizations. These types of training are better made on the job, as an orientation
training and refresher courses. The importance is that the training be planned and programmatic. These trainings will supplement academic training received at the Schools of Agriculture in Akure and Ibadan and the Universities. We noted, however, in Chapters 5 and 6 that these schools of agriculture do not offer substantial training in farm credit. We are also aware that Agricultural Credit is not yet offered as a course of study in Nigerian universities. We would recommend the following topics set out in Figure 26 and which are based on Tisdale's suggestions. These topics should be programmed so that within a reasonable time, management and staff are exposed to them.

(v) In addition to the topics listed above, in-service training should be organized to train field personnel in the application of new techniques involved in group farm loans and supervision and to familiarize personnel with organization's policies and procedures, improve operational efficiency by giving employees a clear

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understanding of job responsibilities and authorities.

(vi) Borrower education to farmers should concentrate upon key production and management practices, simplified versions of the policies and procedures of the farm credit organization, record keeping and reporting. It is realized that credit officers must be well grounded in these issues before they can train farmers and that such training should be a joint effort between the farm credit organization and the agencies which provide education and inputs.

FIGURE 26
Suggested Topics for Training Programs in Farm Credit for Western Nigeria

1. Business and Finance

a. Agriculture credit in Nigeria
   1. Past credit schemes, programs and reasons for the successes and failures in each
   2. Present credit schemes (public and private, cooperative and credit unions)

b. Methods of funding credit programs (private, public discounting)

c. Nigerian laws applicable to agricultural credit (i.e., ownership of land, chattels, crops, leases, inheritances and
loans security)

d. Calculation of interest and amortization

e. Types of security for agricultural loans

f. Borrower benefits and responsibilities in obtaining credit

II. Farm and Home Financing and Management

a. Planning farm operations

b. Types of farm loans

1. Long term for non-consumables

   land purchase

   farm structures

2. Medium-term loans for

   machinery

   foundation livestock

   permanent crops

3. Short-term loans for

   farm operating expenses (feed, seed, fertilizer,
   chemicals, labor)

   family expenses (food, clothing, medical, schooling)

III. Making, Servicing and Collecting Loans

a. Evaluation of applicants (credit-worthiness and credit needs

b. Supervision of borrowers
1. Disbursement of loan funds
2. Proper use of technical inputs
3. Marketing and use of income
4. Care of loan security
c. Use of credit in kind
d. Collecting loan accounts
   1. Produce marketing in Nigeria
   2. Assignments of sale proceeds
   3. Legal actions.

(vii) Training program for local loans advisory committees should consist of simplified methods of evaluating production and financial performance, group dynamics, cooperative structures, the policies and programs of the farm credit organization and the role of credit in agricultural and economic development.

(viii) Training in inter-personal relations within a farm credit organizational setting. -- This type of training relates to the need for management, staff and field officers to operate in a climate conducive to sharing ideas, risk taking, and to resolve inter-personal conflicts. These ideas have been covered in our model
discussed in Chapter 3 and its application to the analysis of the farm credit corporations in Western Nigeria in Chapter 6. A training program should be got up emphasizing the role of communication—top down, bottom-up and horizontal; participative management, i.e., the factors that should be considered in selecting the goal-setting style of management, and performance appraisal, and human relations in organizations; motivation, emphasizing Maslows' and Herzberg's factors, and management by objectives; the principles of delegation, group decision making and problem solving; and leadership styles. The thread that should run through all these topics should be management of change so as to produce in the farm credit organization participative group rather than benevolent authoritative or exploitive authoritative groups.

11. Promotional drives for farm credit programs. -- In order to create an awareness in the farmers for the advantages of financial leverage, and for alternative sources of credit, in particular to get farmers to realize that the farm credit organization program is not merely for the provision of credit, but that it is comprehensive, that it embraces the
cooperation of other agencies which they could more easily obtain if they come into the farm credit program, a credit promotional program should be continuously mounted. Various media in addition to the well-tried personal contacts by credit assistants should be employed.

12. Coordination of farm credit program activities with farming activities. -- This is most desirable as explained in Chapter 6 in order to ensure that loan approval and disbursement synchronize with the timing of the need for credit by farmers. We saw that failure to do this led to lateness in loan disbursement, unproductive use of loans and repayment default. Because the months of March and April happen to be the end of the financial year for public agencies in Nigeria, while at the same time they are the months for loan disbursement by the farm credit corporations in Western Nigeria, the government of the state should be approached to take up the issue of changing the financial year for farm credit organizations. If the financial year ends on January 31, i.e., the year runs from February 1 to January 31, it would not only be possible to report full-year operations in the form of loan disbursement and repayment collections, it would ensure that the staff of farm credit organizations are not bogged
down with end-of-year office activities in March and April when they should be actively engaged in new loan disbursements.

Further Research

Agricultural credit is more or less a virgin field for research in Nigeria and the link between economic development and farm credit has not been adequately emphasized, especially in a development effort geared towards a marriage of traditional practices and modernity. It would appear that major contribution towards research in farm credit could come, in the main, from the six disciplines of Social Anthropology, Social Psychology, Political Science, Economics, Development Administration and Management Science. Perhaps an inter-disciplinary approach would produce the best result because practical problems show no respect for academic or divisional boundaries. Applied research draws on many disciplines as has been done in this dissertation and are likely to lead to results which are more productive than those based on one discipline. This is especially so when a research is aimed at understanding the human factor in agriculture and the management of farm firms. Man has to

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be understood in his total environment and this requires the insights of psychologists, anthropologists, sociologists, economists, and administrators. 5, 6, 7

The following topics are closely related to the design and management of farm credit and should shed more light on the issue of viability, efficiency and effectiveness of a farm credit organization.

1. The use of farm credit. -- Sadaka, Loomis and Taylor, 8 to refer to only few of many scholars who have written on this subject, indicate that farmers use little institutional credit. More research is needed in Nigeria on why the farmers use little credit and the extent to which the little use


depends upon credit suppliers and/or credit users.

2. Problems of the organization and the administration of training, research and services to agriculture. This would involve a continued study and analysis of the effectiveness of existing institutions and experimentation in pilot projects of new ideas.

3. There should be further explored the following issues: what can be done at the local government level to ensure greater participation of villagers in agricultural planning; at the state government level, what should be done to cut down red tape, improve coordination among organizations whose activities touch on agricultural development; what can be done to improve the attitude of state and local government workers to peasants; why there is reluctance to delegate authority and the need to get top administrators to concentrate on policy matters, leaving administrative details to lower-level officers.

4. In order to improve farm planning and business management, more studies are needed at the level of the farm family; the basis for decision making; the attitude of farmers towards debt, risk and change; communication channels most often used by farmers; the innovators among rural families in Western Nigeria; why some innovations which extension
agents consider vital to the success of rural farmers have not been enthusiastically adopted; the attitudes, values and orientation of farmers; farmer-bureaucrat communication problems; local-level leadership, and community organization required to motivate change and development.

In addition, the following topics should be researched.

Where research is going on on any of these, it should be intensified:

1. The consistency between overall economic development program and agricultural development programs in Western Nigeria.

2. The consistency between overall strategy for agricultural development and credit programs in Western Nigeria.

3. The consistency between credit programs in Western Nigeria and farm savings mobilization programs.

4. The consistency of farm credit institutional structures with development objectives.

5. The role of price incentive in the utilization of farm credit.

6. Financial liquidity as a limiting factor in the increased use of modern farm inputs and techniques.

7. The flows of resources between rural and urban centers and the factors that determine the flows.

8. The role of interest rate in the acceptance of farm production credits by farmers.
9. Case studies of alternative methods or channels for delivering farm credit to farmers.

10. The total cost of credit to farmers in the condition of credit rationing by other-than-economic factors.

11. Analysis of farm income to reflect the true situation of typical and potential borrowers broken down by size and type of farm, main agricultural resource situations and land-tenure conditions.

12. The effects of inalienability of farm lands in Western Nigeria on security for farm loans and adoption of innovative farm practices and credit.

13. The links between farm credit, marketing and repayment performance of farm borrowers.

14. Problems connected with the issue by farm credit organizations of bonds for raising capital.

15. Study of the rural capital market.

16. Alternative ways of providing technical assistance to farmers: integrated approach versus complementary approach by various agencies.

17. The importance of loan policies and loan criteria as determinants of the degree of autonomy of a farm credit organization.

18. Problems of multi-purpose cooperatives as a vehicle for
farm credit delivery at the local level.

19. The role of credit in an integrated rural development scheme.

20. Social and psychological constraints on the use of farm credit.

21. Capital and technology changes already achieved and those urgently required at the farm level in Western Nigeria.
Appendix A

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<table>
<thead>
<tr>
<th>Organizational variable</th>
<th>System 1</th>
<th>System 2</th>
<th>System 3</th>
<th>System 4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Exploitive</td>
<td>Benevolent</td>
<td>Authoritative</td>
<td>Authoritative</td>
</tr>
</tbody>
</table>

1. Leadership processes used

- **Extent to which superiors have confidence and trust in subordinates**
  - System 1: Have no confidence in subordinates
  - System 2: Have condescending confidence and trust, such as master has to servant
  - System 3: Substantial but not complete confidence and trust; still wishes to keep control of decisions
  - System 4: Complete confidence and trust in all matters

- **Extent to which superiors behave so that subordinates feel free to discuss important things about their jobs with their immediate superior**
  - System 1: Subordinates do not feel at all free to discuss things about the job with their superior
  - System 2: Subordinates do not feel very free to discuss things about the job with their superior
  - System 3: Subordinates feel rather free to discuss things about the job with their superior
  - System 4: Subordinates feel completely free to discuss things about the job with their superior
<table>
<thead>
<tr>
<th>Extent to which immediate superior in solving job problems tries to get subordinates' ideas and opinions and make constructive use of them</th>
<th>Seldom gets ideas and opinions of subordinates in solving job problems</th>
<th>Sometimes gets ideas and opinions of subordinates in solving job problems</th>
<th>Usually gets ideas and opinions and usually tries to make constructive use of them</th>
<th>Always gets ideas and always tries to make constructive use of them</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Character of motivational forces</td>
<td>Manner in which motives are used</td>
<td>Fear, threats, punishment, and occasional rewards</td>
<td>Rewards and some actual or potential punishment</td>
<td>Rewards, occasional punishment, and some involvement</td>
</tr>
<tr>
<td>Amount of responsibility felt by each member of organization for achieving organization's goals</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High levels of management feel responsibility; lower levels feel less; rank and file feel little and often welcome opportunity to behave in ways to defeat organization's goals</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Managerial personnel usually feel responsibility; rank and file usually feel relatively little responsibility for achieving organization's goals</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Substantial proportion of personnel, especially at high levels, feel responsibility and generally behave in ways to achieve the organization's goals</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personnel at all levels feel real responsibility for organization's goals and behave in ways to implement them</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. Character of communication process

<table>
<thead>
<tr>
<th>Amount of interaction and communication aimed at achieving organization's objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very little</td>
</tr>
<tr>
<td>Little</td>
</tr>
<tr>
<td>Quite a bit</td>
</tr>
<tr>
<td>Much with both individuals and groups</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Direction of Information flow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Downward</td>
</tr>
<tr>
<td>Mostly downward</td>
</tr>
<tr>
<td>Down and up</td>
</tr>
<tr>
<td>Down, up, and with peers</td>
</tr>
<tr>
<td>Extent to which downward communications are accepted by subordinates</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>Accuracy of upward communication via line</td>
</tr>
<tr>
<td>Psychological closeness of superiors to subordinates (i.e., how well does superior know and understand problems faced by subordinates?)</td>
</tr>
</tbody>
</table>
### 4. Character of interaction-influence process

<table>
<thead>
<tr>
<th>Amount and character of interaction</th>
<th>Little interaction and always with fear and distrust</th>
<th>Little interaction and usually with some condescension by superiors; fear and caution by subordinates</th>
<th>Moderate interaction, often with fair amount of confidence and trust</th>
<th>Extensive, friendly interaction with high degree of confidence and trust</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount of cooperative teamwork present</td>
<td>None</td>
<td>Relatively little</td>
<td>A moderate amount</td>
<td>Very substantial amount throughout the organization</td>
</tr>
</tbody>
</table>

### 5. Character of decision-making process

<table>
<thead>
<tr>
<th>At what level in organization are decisions formally made?</th>
<th>Bulk of decisions at top of organization</th>
<th>Policy at top, many decisions within prescribed framework made at lower levels</th>
<th>Broad policy and general decisions at top, more specific decisions at lower levels</th>
<th>Decision making widely done throughout organization, although well integrated through linking process provided by overlapping groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>Question</td>
<td>Often are unaware or only partially aware</td>
<td>Aware of some, unaware of others</td>
<td>Moderately aware of problems</td>
<td>Generally quite well aware of problems</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>------------------------------------------</td>
<td>----------------------------------</td>
<td>-----------------------------</td>
<td>----------------------------------------</td>
</tr>
<tr>
<td>To what extent are decision makers aware of problems, particularly those at lower levels in the organization?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extent to which technical and professional knowledge is used in decision making</td>
<td>Used only if possessed at higher levels</td>
<td>Much of what is available in higher and middle levels is used</td>
<td>Much of what is available in higher, middle, and lower levels is used</td>
<td>Most of what is available anywhere within the organization is used</td>
</tr>
<tr>
<td>To what extent are subordinates involved in decisions related to their work?</td>
<td>Not at all</td>
<td>Never involved in decisions; occasionally consulted</td>
<td>Usually are consulted but ordinarily not involved in the decision making</td>
<td>Are involved fully in all decisions related to their work</td>
</tr>
</tbody>
</table>
Are decisions made at the best level in the organization so far as the motivational consequences (i.e., does the decision-making process help to create the necessary motivations in those persons who have to carry out the decisions?)

| Decision making contributes little or nothing to the motivation to implement the decision, usually yields adverse motivation | Decision making contributes relatively little motivation | Some contribution by decision making to motivation to implement | Substantial contribution by decision-making processes to motivation to implement |

6. Character of goal setting or ordering

| Manner in which usually done | Orders issued | Orders issued, opportunity to comment may or may not exist | Goals are set or orders issued after discussion with subordinate(s) of problems and planned action | Except in emergencies, goals are usually established by means of group participation |
Are there forces to accept, resist, or reject goals?

Goals are overtly accepted but often covertly resisted to at least a moderate degree

Goals are overtly accepted but covertly resisted strongly

Goals are overtly accepted but at times with some covert resistance

Goals are fully accepted both overtly and covertly

7. Character of control processes

Extent to which the review and control functions are concentrated

Highly concentrated in top management

Relatively highly concentrated, with some delegated control to middle and lower levels

Moderate downward delegation of review and control processes; lower as well as higher levels feel responsible

Quite widespread responsibility for review and control, with lower units at times imposing more rigorous reviews and tighter controls than top management
<table>
<thead>
<tr>
<th>Extent to which there is an informal organization present and supporting or opposing goals of formal organization</th>
<th>Informal organization usually resisting goals</th>
<th>Informal organization may be present and may either support or partially resist goals of formal organization</th>
<th>Informal and formal organization are one and the same; hence all social forces support efforts to achieve organization's goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extent to which control data (e.g., accounting, productivity, cost, etc.) are used for self-guidance or group problem solving by managers and non-supervisory employees; or used by superiors in a punitive, policing manner</td>
<td>Used for policing and in punitive manner</td>
<td>Largely used for policing with emphasis usually on reward but with some punishment; used for guidance in accord with orders; some use also for self-guidance</td>
<td>Used for self-guidance and for coordinated problem solving and guidance; not used punitively</td>
</tr>
</tbody>
</table>

Informal and formal organization are one and the same; hence all social forces support efforts to achieve organization's goals.
<table>
<thead>
<tr>
<th>Statement</th>
<th>AGREE</th>
<th>DISAGREE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Unless you know a person very well, it is best not to take any chances</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>by giving them too much freedom and responsibility in your mutual work</td>
<td>[] [] [] [] []</td>
<td>[] [] [] [] []</td>
</tr>
<tr>
<td>with them.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Even if you don't know too much about a person, I still think it's</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>worthwhile to gamble on another person's ability to handle a job.</td>
<td>[] [] [] [] []</td>
<td>[] [] [] [] []</td>
</tr>
<tr>
<td>3. Most people can't be trusted with too much influence and</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>responsibility because you can never be sure about the way they will</td>
<td>[] [] [] [] []</td>
<td>[] [] [] [] []</td>
</tr>
<tr>
<td>use them when you are not around to keep an eye on things.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. As a rule, good supervision requires that people be carefully</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>watched and controlled to avoid mistakes and laziess.</td>
<td>[] [] [] [] []</td>
<td>[] [] [] [] []</td>
</tr>
</tbody>
</table>
5. Of course, it usually depends on the person as an individual, but most people will come through for you if you give them a chance on their own.

6. I don't know about you, but I'm careful never to stick my neck out in delegating authority to others. I've been burned too many times.

7. Unless you know a person very well and can trust them completely it's best to keep a careful, close, check on their every move.

8. I've run the risk of giving people a lot of influence and responsibility on the job, and would do it again even though some have failed to measure up.

9. People have many good untapped resources, and to reach the resources you have to give them lots of room and influence to express their talents

10. Unless you keep a close eye on employees unwarranted liberties will invariably be taken by them.
11. It is best to delegate authority and influence freely because you can never tell when you will discover someone with exceptional skills.

12. A manager, supervisor, or boss obviously is naive and foolish if he or she thinks an employee can accept authority without close supervision.

13. There is no such thing as a good bet. You have to watch people carefully and take pains not to give them too much authority and freedom.

14. Our most important resource is people, and like everything else in life you have to take some long shots on them very frequently.

15. Some of our very best people were long shots.

16. I strongly feel that if it were not for a gambling and a faith in the future even though unknown, a lot of qualified people would not have been discovered.
17. Don't take too many unnecessary chances with new employees or staff. Supervise them closely, and don't give them too much authority because if you do they may just disappoint you.

18. My idea of a good administrator is someone who would take a risk on any promising new employee that seemed to fit a role.

19. If people know you are taking a chance on them they will work harder and better for you.

20. Every person has a different approach to a job and you have to have faith in their native individual common sense and ability to come up with the right solutions to problems.

21. There are really only two ways of doing a job, the right way and the wrong way. It would be foolish and risky not to watch a person closely to make sure they do the job right.

22. Most employees today are really the same as before; give them an inch and they take a mile.
23. You can only trust your own associates with whom you have worked for many years, and even then it is best to be careful.

24. People have to be reminded of their responsibilities by constant and close supervision, especially about important details.

25. Gambling on people is a risky business.

26. Gambling is, after all, a natural part of everyday life.

27. Life is a gamble, and it is best to take risks.

28. A good executive takes risks, especially on people.
29. Risk taking is basic in management and administration.

30. The social influence and power in an organization, which one needs to do a good job of administration and supervision, tends to be a fixed quantity; if you give away some of it to others just that much more control over them is lost.
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