CHAPTER I
CHAPTER 3
DESIGN AND METHODOLOGY

So far the movement has evolved without more than a general philosophy of life, a method of trading and a feeling of destiny. Now it is matured and permanent. We must analyse it, understand it, so that we can better use it.

LOUIS F. SMITH

1.0 INTRODUCTION

Economic development is the major goal of modern societies, industrialisation is considered to be inevitable in this direction. Societies no longer have a choice.¹ Commercial agriculture which makes efficient use of land and labour and is aimed at the creation of a marketable surplus is best suited to the development of the industry. The many linkages between agriculture and industry inevitably mean that only a harmonious and balanced development of both industry and agriculture can meet the needs of all-round modernisation.² If agriculture stagnates, it

---


will act as a brake on industrial expansion and halt the real growth. Experience everywhere indicates that agricultural development is far more difficult than industrialisation. The organization of an efficient capital and credit market is one of the basic preconditions for the promotion of productive agricultural enterprise.

In agricultural economies like India factor markets are characterised by imperfections. Under such circumstances access to factor inputs differ to a great extent for different social and economic groups. The richer a farmer is the better chances he has in getting cheaper credit and the poorer he is, the dearer are the loans he gets.

In India, organization of agricultural credit, especially institutional credit, possesses several

3 Samuelson P.A and Solow, R.M, Balanced growth under constant returns to scale, *Econometrica, X*<sup>1</sup>. PP. 412-424.


structural deficiencies which must be carefully tackled. Financial intermediaries like commercial banks are underdeveloped and mostly operate in urban areas. In India, until recently, cooperatives which are small and relatively weak organizations⁶ have been regarded as the most appropriate institutional agencies for the supply of agricultural credit. Of late, due to the shortcomings of the cooperatives, a multi-agency approach is adopted.⁷ Major commercial banks are brought into the field of public ownership through nationalization in 1969 and again in 1981, with a view to giving a new sense of direction to that credit operations to suit the needs of the hitherto neglected sector, namely agriculture and rural development. The main object of this work is to study cooperative credit system exclusively at the ground level.

---


and its role in farm finance. A review of literature on the subject is presented as a backdrop.

1.1 REVIEW OF LITERATURE

Jamane's\(^9\) survey (1973-74), conducted in Mauritius, principally covered a study of the structural base of the Primary Agricultural Cooperative Credit Societies, their mono or multifunctional character, their financial status and the level of secretarial arrangements. The main objectives of this study are:

1) to examine the structure of membership of Cooperative Credit Societies (CCS);

2) to analyse the capital structure of CCS;

3) to assess the pattern of credit facilities of CCS;

4) to examine the aspects of marketing of Cane through C.A.; and

5) to find out the secretarial arrangements at the level of C.A.

---


**TECHNOLOGY**

Data were collected both from primary and secondary sources with the aid of schedules and questionnaires, suitably designed for the purpose. Personal interview technique was also employed among the Secretaries, presidents and members of CCS. A few in-depth surveys and case studies were also conducted during the course of the survey spotlighting such aspects of working of CCS which deserved a special treatment. In addition, substantially valuable information was collected from original records of the Registrar of Cooperative Societies at the National Archives of Mauritius.

**Findings of the Survey**

The number of CCS went up by six times at the end of 1960 as compared to 1915. After 1961-62, however, the increase in the number of societies has been negligible. The survey dealt with the membership structure in which the borrowers accounted for 47 per cent and most of them had land holdings upto 3 acres only. It is interesting to find that the percentage of reserve fund went up from 84 to 97 and that of share capital gone down from 16 to 13 between 1960-69 to 1972-73. The deposits of sample societies have shown a progress but the rate of interest
on deposits has played a relatively insignificant role in attracting deposits.

The lending operations of CCS, however, have considerably expanded both in terms of advances made and loans outstanding against the members. There was a reduction in the dispersion of overdies among the different size groups of borrowers.

It was observed that an overall improvement in the tonnage of care sold, a trend of societies moving from lower tonnage groups to higher tonnage groups, was in vogue indicating improved performance of societies.

The secretarial arrangements at the level of CCS were somewhat satisfactory. The secretaries enjoyed more powers than managers of CCS.

J A Banks of London University and J N Ostergaard of the University of Birmingham made a small scientific investigation in 1954 of the working of Co-operative Democracy in practice. 10

This investigation involved a comparative survey of methods of democratic control in 40 societies mainly in the Midland area of England, and a case study of the electoral process in a large retail Midland society during a period of ten years (1945-54). As pointed out by the authors, this study was 'fragmentsary in character' and served as a pilot study for a national-level study made subsequently.

Findings of this study

Between 1933 and 1954, the average proportion of members attending business meetings and voting in elections to Board has declined. There is an inverse relationship between the size of a society and the proportion of members attending and voting: the larger the society, the smaller the proportion of members attending and voting.

The electoral chances of employees in Board elections were well above those of non-employees. The older-style pure cooperator is becoming rarer and his place is being taken by the cooperator who is also active in politics.
In India several studies, official as well as non-official, have been undertaken from time to time in the field of farm finance particularly cooperative credit at the national and the state level. The All India Rural Credit Survey (AIRCOS)\textsuperscript{11} was the first comprehensive and scientific study conducted by the Reserve Bank of India (RBI). The findings of the Survey Committee confirmed the dominant position occupied by the moneylender in the Rural Credit Market. It observed that agricultural credit fell short of the right quantity, was not of the right type, did not serve the right purpose and often failed to go to the right people. Rural artisans, agricultural labourers and other classes of the group of non-cultivators are not usually able to obtain accommodation from cooperatives. The committee also observed that although the performance of the cooperatives in the sphere of agricultural credit was deficient in several ways, the cooperative agency still remained by far the least unsatisfactory channel of credit and summed up its approach in the statement of 'Cooperation has failed but cooperation must succeed'.

\textsuperscript{11} RBI: All India Rural Credit Survey (Summary) Vol.11, Bombay, 1955, P.9.
The RBI constituted the All India Rural Credit Review Committee in 1968, with a view to reassessing the developments that had taken place in the field of rural credit since 1954. The Review Committee submitted its report in July 1969. The committee, inter-alia, recommended that besides strengthening the cooperative credit structure, commercial banks should embark on wide and intensive effort for provision of agricultural credit. 

The All India Debt and Investment Surveys have thrown up a mine of information relating to the structure of rural assets and rates of interest. Besides, the RBI has undertaken several empirical and evaluative studies in the sphere of rural credit in India.


13 a) Study Team on Agricultural Credit Institutions in Jammu & Kashmir/All-India Pradesh/Orissa and Karnataka.
   b) Working Group on Institutional Credit Arrangements for Jute growers.
   c) Standing Committee on Term Lending through cooperatives (COTELCOOP).
   d) Working groups to consider measures for increasing flow of credit to weaker sections of society.
   e) Study Group on Interest Rates in the Cooperative credit structure.
   f) Study Group to Review the working of the scheme of financing of PAGB by commercial banks.
RBI in its Report of the Committee to Review Arrangements for Institutional Credit for Agriculture and Rural Development (CRIFICAARD) examined the following:

b) OBJECTIVES:

1) To review the structure and operation of the Agricultural Refinance and Development Corporation (ARDC) in the light of growing need for term loans for agricultural and allied purposes and other services relevant to Integrated Rural Development (IRD).

2) To examine the need for and the feasibility of integrating short-term and medium-term credit structure with long-term.

3) To consider the relative merits of three-tier and two-tier structures for cooperative financing institutions, etc.

b) FIELD OF INQUIRY:

The committee visited 14 states for the field level discussions and issued a check list of points for discussions at the Block, District and State levels. This was
followed by separate questionnaires, one on the national level institutions and the second on the field level credit delivery system to scheduled commercial banks, State Cooperative Banks and State Cooperative Land Development Banks.

1) Over the period 1969-80, the outstanding institutional credit increased from Rs.1,075 Crores to Rs.6,325 Crores. Cooperatives accounted for 39.4 per cent, commercial banks 38.8 per cent and Regional Rural Banks 1.8 per cent.

2) Some of the major recommendations of the RBI's Study Team on overdue have not been given effect to by most of the state governments. On the other hand some of the state governments have issued from time to time blanket stay orders on or banned coercive action for recovery of cooperative dues.

3) The recovery performance of the banks in respect of their direct loans to agriculture has not shown any perceptible change over the past few years in that the recovery hovered at around half the demand.

4) The committee was of the firm view that wilful default in repayment of cooperative loans is not merely a
civile misconduct but a criminal offence. It should no longer go unpunished and must attract deterrent punishment under the criminal law of the country.

5) The pass books now being issued by some commercial banks to their clientele belonging to target groups must be improved to include all relevant data so as to serve as safeguards against malpractices.

15 Subrata Ghatak has made a pioneering study of the Indian Rural Credit Market. His study was directed to answer the following issues:

1) the nature, composition and working of organised and unorganised money markets in the Indian rural economy;

2) to examine the factors affecting the demand side of agricultural credit;

3) to analyse the nature and determinants of rural interest rates;

4) to discuss the working of the major organised agencies; and

5) to specify the existing links between the rural money markets and to derive any policy implications which may emerge from the study.

15 Ghatak, Subrata: Rural Credit Markets in India, New Delhi, Macmillan Co., 1978.
He has examined the following issues on the basis of available data (secondary data) using quantitative techniques and statistical tools. He considers the working of PACS on the supply side of institutional credit comes to the conclusion that they generally failed to satisfy the different criteria of financial viability so far as the composition of the financial structure and loan operations are concerned. Increasingly greater dependence on borrowing, failure to mobilise deposits appreciably as well as mounting overdues become their chief problems. There is a positive correlation between income and repayments and negative correlation between the rate of interest and income and repayment.

V.T. Naidu's study reviews the progress of the cooperative credit movement in India and is concerned with its financial soundness and business efficiency. He proposed to examine the following objectives:

1) to evaluate the cooperative credit movement in India;

2) to examine development of PACS during the period 1951-61;

3) to describe the social aspects of cooperation;
4) to assess the integrated credit scheme;
5) to analyse the role of cooperatives in helping the weaker sections; and
6) to examine the State's support in cooperative development.

Methodology

His study was based on the secondary data. He culled out secondary data from many national and international reports/bulletins. Besides some other publications like statistical statements relating to cooperative movement in India, Rural Credit Follow-up Surveys are also made use of.

The following are the major findings of Dr. V.P. Vaidy:

1) Cooperative credit movement has registered a significant progress during 1950-61, especially since the implementation of the Integrated Credit Scheme suggested by Rural Credit Survey.

2) A large number of PACS are weak and dormant.

3) Though the decade under review (1951-61) witnessed a significant rise in the volume of loans advanced by
PACS, the position in regard to their recoveries was not satisfactory.

6) The ways and means adopted in the west to strike a happy mean between the two equal important aspects of cooperation viz., the business and cooperative aspects were not present in India.

5) The credit supplied by cooperatives is biased in favour of the big and influential cultivators. The small cultivators get only 11 to 12 per cent of their total borrowings from the cooperatives.

6) The policy of the government in regard to State partnership and the size of the primary society was oscillating, creating in consequence uncertainty and indecision. This came in the way of reorganising the cooperative institutions at the base level.

Mohan Rao's study was to evaluate various aspects of the performance of PACS in the major states of the Indian Union. The specific objectives of the study are:

---

1) to identify different aspects of the performance of \( F.A.E. \) and to evolve appropriate procedures for evaluating the working of these institutions in the light of the objectives and goals set for them.

2) to examine the inter-relationship between various aspects of their working and statistical factors which focus the inter-state variations.

3) to ascertain the factors accounting for inter-state variations by relating various aspects of performance to institutional and agro-economic variables considered to be crucial.

Methodology:

This study was based on secondary data. The data pertaining to the \( F.A.E. \) and agro-economic variables were drawn from the statistical statements, statistical abstracts and reports. Measures like weighted index numbers, Spearman's Rank Correlation were employed at appropriate places.

Results of the Thesis:

Improvement in operational efficiency does not necessarily lead to greater equity. Paid management does not always result in better managerial efficiency.
cooperatives generally show poor performance in former
semi-arid areas with weak infrastructure and also in
tribal areas.

The interest to disparities in coverage are rather
low in 1970-71 compared to 1960-61. This is probably due
to the decline or stagnation in coverage in cooperatively
advanced states like Maharashtra, Jujarat and Tamilnadu.
An interesting result of the thesis is the emergence of
Punjab and Kerala with top ranks in 1970-71. This result
implies that successful development of cooperatives is
made possible under divergent situations. In Punjab, it
accelerated agricultural growth, in Kerala it was success-
ful in implementation of land reforms while it generated
conditions for emergence of leadership from the bottom
strata.

Promotion of viable units and fixing quotas to tar-
get groups in the services rendered by cooperatives will
yield only limited results unless the activities of the
primary units are properly monitored through sound methods
of evaluation and inter-state disparities are bridged
through greater government support to cooperatively less
developed areas.
Chowdhari and Sharma\textsuperscript{18} have made a pilot study on crop loan system in Andhra Pradesh and Punjab during 1968-69. They attempted to analyse the nature and working of crop loan system in two states.

The Sample and Data Base:

The areas in Andhra Pradesh and Ludhiana in Punjab were purposively chosen as areas of study. In each L.C.D. district, one central cooperative bank (CCB) was selected in which only effective PACs were selected at random. From all PACs, 40 member families were chosen.

In order to compare the functioning of the system in L.C.D. district with that in the non-L.C.D. district in each state, Guntur and Krishna in Andhra Pradesh and Jullunder and Ferozepur in the Punjab were selected. The same method was adopted in selecting the CCBs, PACs and member families in non-L.C.D. districts. The relevant data were collected through answering questionnaires among sample societies and member families.

Findings:

The major findings that emerged from the study were that, although crop loan has been designed as an innovation to do away with the lacuna in the traditional system of Cooperative Production Credit for farming the expected benefits were not very much in evidence. Due to obvious faults in the operational aspects of the system, as now in vogue, including among others denial of loan to owner-cultivators, faulty setting of credit limits and inadequately in terms of timelines, quantity of loans; farmers all over and particularly in Andhra Pradesh seem to depend much on private credit agencies. The removal of the shortcomings noticed and the need to forge much more effective links between credit and the production was emphasised.

Krishnaswamy\textsuperscript{19} in 1967 made a state-wide investigation of the working of cooperative democracy. The main objectives of this study are:

1) to study the structure of the government of agricultural cooperative short-term credit structure in the selected states;

2) to study the working of democratic control in practice in agricultural credit cooperatives;

3) to study the influence of socio-economic factors on democratic control in societies in order to identify the factors which promote or retard; and

4) to study the operation of democratic control at the central and apex level financing banks.

Methodology:

This study was based on the survey method. First hand data were collected from the field directly from records of the selected institutions and through personal interviews and mail questionnaires as also by observation. A multi-stage sampling design was planned for the study. The study of working of democratic control at the primary level was confined to one district. Three large sized societies and 15 small sized societies were selected on random method. Stratified sampling technique was applied to select the members in the managing committee, borrowers and non-borrowers of PACS. 16 DCCBs were taken on the basis of stratification. Census method was adopted in selecting the directors at DCCBs level. Stratified sampling method was employed in selecting the individual members of the apex bank, with regard to the delegates.
of UDs and directors of the Bank census method was employed.

**Findings:**

The findings lead to the inevitable conclusion that democracy in NGOs exists in a written constitution only, but not in actual practice. The ignorance of members, their socio-economic disparities, the societies' dependence on NGOs for funds, snatching off vital matters of decision from their hands, lack of cordial relations among members, the mechanical way of conducting meetings, all these lead to weakening democratic control at grass-roots level. As a result of this, more than 50 per cent of the high-caste families hold offices for more than 10 years.

The individual members in central banks do not generally possess cooperative knowledge to be a source of strength to the banks. The pattern of division of functions clearly involves placing managerial responsibilities primarily on the Board or the executive committee and the President. The Secretary, who is the Chief Executive, is not the effective administrative head and mainly the President performs this function. Each of the sample banks (CCBs) had conducted six meetings during four years.
At the apex level, the individual members' participation in the meetings was insignificant. Their attendance was low whereas the delegates of CCBs and the directors of the bank were high. Hence, there is a democratic control at the apex level.

Juryanarayana Raju's study proposed the main objective viz., the identifying different aspects of the performance of CCBs and PACs and to assess the nature of regional variations in the performance of credit cooperatives. The other objectives are the same as the objectives of the study.

Area of Study and Source of Data:

For the purpose of this study, CCBs in 297 districts covering all the major states in India were selected. To further examine the findings at a much more disaggregated level, 50 PACs were selected randomly from different taluks of Visakhapatnam district in Andhra Pradesh for the year 1975-76. The data relating to CCBs were drawn from statistical statements of RBI and PACS from District Cooperative Offices at Visakhapatnam, Anakapalle and Vijayanagaram. Information

20 Raju, K.S. : Inter-District and Intra-District variations in the performance of Agricultural Credit cooperatives in India. (Doctoral thesis) Waltair, Andhra University, 1977.
relating to the agro-economic variables was taken from the village records. Principal component analysis and multiple regression analyses were used.

Results of the Study:

The overall performance of JCCBs, as seen through the composite index, is the highest in Kerala followed by Punjab, Tamilnadu, Gujarat and Maharashtra. The weakest JCCBs are in the Eastern part of the country. The study reinforces the findings of Dr. Mohan Rao that cooperatives are handicapped in situations in which there is a continuing legacy of adverse tenures and low level of development of infrastructure. The findings that the performance of PACE especially in relation to advances is better in states with well developed agriculture is corroborated by a study of PACE in Visakhapatnam district. However, societies with better performance in relation to advances do not show equally good performance in recovery and there is no significant association between recovery rates and other aspects of efficiency.

The main objectives of Ramreddy's* study was to investigate the important characteristics of the defaulting

credit cooperatives, delinquent borrowers and non-borrowers (in non-members of PACO).

Following are the specific hypotheses tested:

1) In highly productive regions credit cooperatives have less of a problem of repaying loans to the central bank before the due dates than for those in poor areas.

2) Defaulting borrowers have larger debts. They divert their cooperative borrowings either for the repayment of other debts or for consumption or for other unproductive purposes.

3) Both the non-borrowing and the non-members are illiterate and belong to lower caste groups. They operate small farms and rely mostly on off-farm sources of employment.

Data and Method:

The data pertaining to PACO were obtained from the Central Cooperative Bank's Branches at Chodavaram and Visakhapatnam during 1969-70. The data were collected from the borrowing and non-borrowing (including non-members) households in the area served by select credit cooperatives in Chodavaram taluk.
Sample households were stratified into defaulting, non-defaulting and non-borrowing members. Of the 149 households interviewed, 61 are from non-members and non-borrowers. Among the borrowing households, 10 out of 39 in the productive region and 19 out of 51 in the less productive regions were delinquent borrowers. Discriminant analysis was used to test the hypothesized relationships.

The results of the thesis bring out sharply how the role of credit cooperatives differs between the well-developed and less developed regions. In the former, in which the returns to investment are reasonably adequate and fluctuate only within narrow margins, overdues are basically related to the leadership role in cooperatives. In the latter, with inadequate and widely fluctuating returns on investment, the agro-economic environment within which cooperatives operate needs to be improved. Overdues are mainly traceable to the fluctuating agricultural income.

The review made is only a sample of several empirical and evaluative studies on the growth and structure of the cooperative credit organizations. Most of the studies have tended to cover the nation-wide scene probably due to the ready availability of the published data at the national level. There have also been quite a good number of studies on inter-regional variations as also inter-district variations.
However, there are only a few studies at the grass-root level. In a country of great diversity and heterogeneity like India there is a felt need for undertaking more specific studies in all spheres of economic activity including credit cooperation. It is, therefore, an attempt in this direction. Since the study is confined to a specific area, it focusses attention on the multi-dimensional aspects of the structure, conduct and performance of primary agricultural credit societies.

1.2 OBJECTIVES

The specific objectives of the study are:

a) To describe the composition and direction of institutional (formal) credit in Indian agriculture especially since 1971;

---


b) To examine the structure of agricultural credit and to assess the role of FCS in Prakasam district;

c) To evaluate the conduct and performance of PACS on the basis of the established criteria; and

d) To measure the extent of regional variations in credit operations of PACS.

1.3 HYPOTHESES

Among others the following hypotheses are tested:

1) There is no significant variation in the major components of owned funds of sample societies in Prakasam district;

2) The growth rate in membership, owned funds and working capital of sample societies is not significantly different between regions in the district;

3) There is no significant variation in loaning operations and recovery performance of sample societies situated in the three regions; and

4) Financial performance of sample societies as measured by average profits and losses does not exhibit a significant variation between regions of the district.
1.4 SAMPLE DESIGN

Prakasam district is selected for our study because of familiarity with the economy of the district. For the purpose of the study the "venue divisions in the district viz., Ongole, Kanlukur and Markapur are taken as regions. To cover the wide range of population spread over the district, three stage sampling plan was considered to be more efficient and effective.

1) First Stage: Ten per cent of the first stage units (36 PACS) are selected randomly from 362 PACS situated in the three regions of the district. These details are set out in the following table.

<table>
<thead>
<tr>
<th>Region</th>
<th>% of Societies</th>
<th>Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ongole</td>
<td>122</td>
<td>12</td>
</tr>
<tr>
<td>Kanlukur</td>
<td>162</td>
<td>16</td>
</tr>
<tr>
<td>Markapur</td>
<td>70</td>
<td>8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>362</strong></td>
<td><strong>36</strong></td>
</tr>
</tbody>
</table>

*Source: Sample Data.*
ii) Second item: Of the 36 sample households, 2 from each were randomly selected for the purpose of identification of borrower (beneficiaries) and non-borrower (non-beneficiary) households.

iii) Twenty five percent (25.93) of the beneficiaries are selected from six sample PACs by using stratified random sampling. As the population is heterogeneous with respect to the variable or characteristic under study, the technique of stratified sampling is used to obtain more efficient results. 8 persons out of non-beneficiaries (members of PACs) were selected randomly from each category (i.e., small farmers, medium farmers and big farmers) from each society. These details are presented in the ensuing table.
<table>
<thead>
<tr>
<th>Size of Holding (Acres)</th>
<th>Beneficiary Households</th>
<th>Non-Beneficiary Households</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Sample</td>
</tr>
<tr>
<td>1</td>
<td>60</td>
<td>15</td>
</tr>
<tr>
<td>APAL (Below 2.5 Acres(Dry))</td>
<td>136</td>
<td>34</td>
</tr>
<tr>
<td>Small Farmers (2.5 to 5.0 (Dry))</td>
<td>104</td>
<td>25</td>
</tr>
<tr>
<td>Medium Farmers (5.0 to 10.0(Dry))</td>
<td>75</td>
<td>19</td>
</tr>
<tr>
<td>Big Farmers (Above 10.0(Dry))</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>372</td>
<td>93</td>
</tr>
</tbody>
</table>

UPCE: Sample Data.

Note: APAL = Marginal Farmers and Agricultural Labourers.

One acre of wet land is equal to 2.5 acres of dry land.
Both primary and secondary data form the basis of this study. The main sources of secondary data are the statistical statements relating to cooperative movement in India, report on commerce and finance published by RBI, reports of the Ministry of Agriculture and Rural Development, Government of India, Season and Crop Reports of the Bureau of Economics and Statistics, Government of A.P. as well as the department of agriculture, Prakasam district and the Action Programmes and Annual Audit Reports of Central Cooperative Bank, Ongole. Published sources like the statistical abstracts and the Book of Statistics of A.P. and official records at the Collectorate of Prakasam. The District Cooperative Oficce, Fella Parishad Office and District Statistical Office at Ongole have been consulted and made use of periodicals such as Agricultural Situation in India, Economic and Political Weekly, The Economic Times, Finance and Development, Cooperative Perspective, Indian Cooperative Review, Indian Journal of Agricultural Economics, Indian Economic Journal and RBI Bulletin have also made use of unpublished theses in the field have also been consulted.

Primary data are collected by personally canvassing two structured questionnaires; one for Primary Agricultural
Credit Societies (PALS) and the other for non-borrower households.

1.6 TOOLS OF DATA COLLECTION

A structured questionnaire (appendix I) was personally canvassed among the sample. Another structured questionnaire was personally canvassed among the sample households (appendix II). It is well known that the quality of the field data depends upon the rapport established and the duration of time spent in compilation and cross-checking of data. On an average 2 days of time was involved in establishing rapport and collection of data from each sample society.

The preparation of list of borrower (beneficiaries) and non-borrower households took a week's time for each of the six societies and a day's time for each of borrower and non-borrower households to gather the information. Thus I had to spend nearly a period of nine months during 1983-84 in the collection of field data.

1.7 TOOLS OF ANALYSIS

Primary as well as secondary data have been subjected to statistical treatment by using measures of central tendency, dispersion and inequality, analysis of time
series, coefficient of correlation, analysis of variance and t-tests. The level of significance chosen is 0.05. Maps, histograms and graphs are made use of wherever applicable to illuminate the facts and figures.

1.8 Concept

The concepts that are used in this study such as land-holding, borrower, defaulter etc., are used in conformity with their usage in the Farm Management and Cooperative Management.

1.9 Limitations

Six large size Cooperative Societies, one Mughalies Multipurpose Cooperative Society, three Farmers Service Societies and one Rayalaseema Grameena Bank, which covers 4 blocks (Markapur region) with 12 branches in the entire revenue district, are excluded because the main focus of the study is on PACS. Although Prakasam district was formed in 1970 and my intention was to cover the cooperative developments in the district at the primary level since that date, it was not possible due to non-availability of records in several sample societies. Hence, an assessment of cooperative performance is made for the period from 1977-78 to 1982-83 only. The inferences drawn and the conclusions arrived at are therefore subject to these limitations of time and space.
The present chapter deals with the introduction and methodological aspects. The second chapter critically analyses the Indian money market with reference to rural credit structure and its constituents on supply and demand side; the third chapter examines the progress of PACS at national level with emphasis on deployment of credit to agriculture. The agro-economic conditions and credit structure of agriculture in Prakasam district are discussed in fourth chapter. Structure, conduct and performance of sample PACS are dealt within Chapter five. In the sixth chapter inter-regional variations of PACS in Prakasam district are analysed. In the last chapter, the main strands are brought together into a convenient compass.