# INSTITUTIONAL CREDIT FOR AGRICULTURE IN KERALA

## A DISAGGREGATED ANALYSIS

A dissertation submitted in partial fulfilment of the requirements for the award of the degree of Master of Philosophy in Applied Economics of the Jawaharlal Nehru University, New Delhi

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I hereby affirm that the research for this dissertation titled "Institutional Credit for Agriculture in Kerala: A Disaggregated Analysis" being submitted to the Jawaharlal Nehru University for the award of the Degree of Master of Philosophy in Applied Economics, was carried out entirely by me at the Centre for Development Studies, Trivandrum.

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Certified that this dissertation is the bonafide work of Sunanda.S. and has not been considered for the award of any other degree by any other university.

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# Chapter 1

## Introduction

Agriculture plays an important role in the economy of India. It contributes nearly 40 percent to the national income. Besides being a major source of livelihood and employment for the majority of our rural people, it provides raw materials to our industries. It is also an important source of foreign exchange earnings for India. Therefore, for the rapid growth of the Indian economy, development of agriculture is essential.

Agriculture in India has always largely been a way of life rather than a business. However, inadequate investment and low productivity caused poor performance of the agricultural sector. Low investment was caused by low farm income which follows in turn from low resource productivity completing the vicious circle. The crucial problem, therefore, was to break-through this vicious circle. The only way to bring about an effective break-through from such a state of affairs towards better performance of agricultural sector is to find ways of increasing capital investment. What is really needed is an initial push, which has been characterised as `big push' by Rosenstein-Rodan, `critical minimum effort' by Leibenstein, `bottle-neck breaking' by Ragnar Nurkse, and `linkage effects' by Hirschman. All these concepts convey in one way or the other the need for giving greater attention to capital investment in agriculture to break the vicious circle (Singh 1986:1).

The introduction of Green Revolution in the mid-sixties opened up new possibilities for the speedy development of agriculture in India. Since then there has been a growing tendency among the farmers to replace the traditional farming practices with scientific and modern techniques, which include the use of improved seeds and intensive use of agricultural inputs as well as improved irrigation facilities. These inputs naturally involve heavy financial investments which the majority of farmers cannot afford from their own savings. This compels farmers to depend to a large extent on borrowed funds. In the absence of formal institutions the farmers depended on village money lenders and traders; but later this has increasingly been replaced by formal institutional credit. The focus of this study is the evolution, structure and factors influencing agricultural credit in the context of Kerala. Before elaborating the objectives and methodology of this study, given in section III of this chapter, we attempt an understanding of the issues in agricultural credit in section I, followed by a brief review of the literature, in section II.

## Section I

## Agricultural Credit in India-Its Origin, Evolution and Growth

Credit has played a prime role in the development of Indian agriculture from the early days. The farmers for their short-term, medium-term and long-term agricultural needs depend on borrowing from both institutional and non-institutional agencies. The main institutional agencies who provide the credit are Government, Co-operatives and Commercial banks and those from the non-institutional agencies comprise of large agriculturists,

professional money lenders, traders, relatives and other individual lenders.

In the past, non-institutional agents especially money lenders were the main source for the supply of rural credit. But because of their unfair practices like charging very high rate of interest, failing to give receipts etc., the cost of credit was too heavy for the poor and marginal farmers. The high cost of credit in turn hampered the agricultural production. When the Government and other institutions recognised that the total economic development of a country depends to a large extent on a well developed agricultural sector, steps were taken to find solution to problems that impede development of agriculture. Following that attempts were made to restrain the unfair practices and operations of non-institutional agents by passing various laws and regulations. But such steps had only a limited impact as alternative agencies to replace them were too few in number.

The regulation of agricultural credit to prevent the exploitation of the small and marginal farmers date back to the 19th century. After the Deccan Riots of 1875, to protect the poor farmers from the `debt burdens' of the non-institutional agencies, two Acts were passed based on the recommendations of the Famine Commission of 1880. They were the `Land Improvement Act' of 1883 and the `Agricultural Loans Act' of 1884. To reduce the dependence of the farmers on the non-institutional sources the government legally started increased lending to agriculturists in the form of taccavi loans (which had been

originated from 1793 onwards). The taccavi loans were to be granted either in the period of famine or distress or for development purposes to the needy. Obviously these loans were inadequate to meet the current cost of cultivation and consumption expenditure.

The real beginning of institutional credit for agriculture was the passing of the Co-operative Societies Act of 1904, which paved the way for the introduction of the Co-operative Credit System in India. The co-operative movement attempted to free the farmers from the clutches of the landlords and the money lenders. The co-operative credit system, which evolved in India was elaborate. The Government of India set up a three-tier structure for the co-operative credit movement in 1915 on the basis of the recommendations of the Maclagen Committee. They are the Primary Agricultural Credit Societies (PACSs) at the village or base level, the Central banks at the district level and the provincial banks at the apex or provincial level. The introduction of the Primary Agricultural Development Banks (PADBs) for meeting long-term credit needs of the farmers against the mortgage of their lands was also another institutional development. Finally at the top of these layers was the Reserve Bank of India (RBI).

The growth of the co-operative credit movement in India was deep rooted and over time the performance of the credit co-operatives improved. The suggestions made by the Agricultural Finance Sub-Committee and the Co-operative Planning Committee (appointed by the Government of India (GoI) of 1945) and the

financial and administrative support given by the Central and State governments as well as the RBI enabled them to register such improvement. With a view to further institutionalise credit and make it available at a reasonable rate of interest, both the Rural Banking Enquiry Committee (RBEC) (appointed by the GoI in November 1949) and the All-India Rural Credit Survey Committee (AIRCSC) (appointed by the RBI in 1954) suggested for the re-organisation of co-operative agencies. Based on the AIRCSC recommendations, the State Bank of India (SBI) was established by an act of the Parliament in 1955. The RBI Act was amended again in 1955 to provide for the establishment of two funds, namely the National Agricultural (long-term operations) Fund and the National Agricultural Credit (Stabilization) Fund. Another important landmark in the institutionalisation of agricultural credit was the establishment of the Agricultural Refinance Corporation, later called the Agricultural Refinance and Development Corporation (ARDC) in July 1963. The ARDC acted as a refinancing agency providing medium-term and long-term finance to State Co-operative Banks, Central Land Development Banks and Scheduled Commercial Banks for financing the activities like the reclamation and preparation of land, soil conservation, mechanised farming and development of animal husbandry, dairy farming, pisciculture, poultry farming, etc. Following the recommendations of the Committee on Taccavi Loans and Co-operative Credit, appointed by GoI in July 1961, a policy decision was taken in June 1964 to discontinue the issue of taccavi direct to individuals by the State Governments and to accept the co-operatives as the normal agency for provision of such credit.

But it was soon realised that the co-operative structure alone cannot fulfill all the credit requirements, even though the percentage of co-operative credit in the total increased from mere 15.5 per cent in 1961 to nearly 34 per cent in 1968. This resulted in the enactment of the State Agricultural Credit Corporation Act of 1968 to facilitate the revitalisation of the co-operative credit structure from the primary level onwards. The Act was based on the recommendation of the Informal Group on Institutional Arrangements for Agricultural Credit (appointed by the RBI in may 1964). Also the Conference of the State ministers for co-operatives held in Bombay in November 1965, recommended the introduction of Crop Loan System throughout the country with effect from kharif season of 1966.

Further, in order to review the supply of rural credit in the context of the Fourth Five Year Plan in general and the intensive agricultural programmes in particular, the Governor of the RBI appointed the "All-India Rural Credit Review Committee " headed by Shri.B. Venkatappiah, Member, Planning Commission in July 1966. The committee submitted its report in July 1969. They pointed out that the co-operatives would perform better and the farmer would be better served, if other institutions co-exist with the co-operative organisation in healthy competition. Further, the `Report of the Study Group of the National Credit Council' set up by the Government of India in 1968 suggested that the commercial banks should also participate in financing the agricultural sector. Thus one can see that all these reports suggested a multi-agency approach to agricultural credit.

One of the crucial steps taken by the Government of India following the recommendations of the Rural Credit Review Committee (1969) was the nationalisation of 14 major Commercial Banks, having more than Rs. 50 crores as deposits, in July 1969. One of the main objectives of the nationalisation was to channelise the flow of credit to hitherto neglected sectors of the economy. The Commercial banks started `financing agriculture' in its real sense with the introduction of Social Control in 1967 and its subsequent nationalisation. In fact these banks changed their operational emphasis from `security' to `purpose'.

The other new agencies established at that time in the field of agricultural credit apart from the commercial banks were the Small Farmers Development Agency (SFDA) in 45 selected districts in the country to assist small holders with holdings of two hectares or less, the Marginal Farmers Agricultural Loans (MFAL) and the Rural Electrification Corporation (REC). During the Fifth Plan, SFDA and MFAL were combined for providing agricultural credit and subsidies in their respective areas.

Agricultural Finance Board, which was established along with the above other agencies, provided more vigorous leadership in the field of agricultural credit. Another institutional set-up is the Large-Size Agricultural Multi-purpose Credit Societies (LAMPS), specially meant for tribals in order to meet their diversified credit needs. This institution was set up in pursuance of the recommendations of the Bawa Committee of 1971.

The multi-agency approach created problems because of the non co-ordination of the different agencies in the field of

agricultural credit. There were many instances of co-operative defaulters being financed by the commercial banks or a single cultivator receiving credit from more than one agency.

The Study Group of the National Credit Council, known as the Gadgil Group, had dealt with this problem and recommended in its report the need for the `District Credit Plan' to be jointly prepared by the credit agencies in the district. The Group was of the view that because of the diversity of conditions all over the country, an area approach was essential for appropriate credit arrangements on the basis of local conditions. Accordingly, the group suggested major scheduled commercial banks to act as Lead Banks. The committee of bankers set up by the RBI in 1969 under the chairmanship of Shri F.K.F. Nariman, also recommended for setting up `Lead Banks' for each of the under banked districts. The Lead banks are supposed to play the lead role in the expansion of banking facilities and to act as consortium leaders for co-ordinating the activities of co-operative, commercial banks and the other financial institutions in their respective districts. Taking into account the recommendation of both the study groups the RBI issued a circular to the commercial banks spelling out guidelines for the financing of agriculture in December 1970. The banks were advised to adopt an area approach for lending for agriculture without any overlapping of efforts and resources by two or more banks. It also suggested that short-term loans for crop-raising should be based on rational scales of financing taking into account input requirements and off-farm income and resources available to the cultivator. For medium-term loans, the norms should relate to the income generating potential of the proposed investment rather

than to the size of the holding. The scheme was initially introduced in 49 districts of 5 States. It was extended to 71 districts of 8 States by June 1974 (Dandekar 1989:186).

Later, the National Commission on Agriculture (NCA) in its interim report (1971) recommended the Farmer's Service Societies (FSS). Government accepted the recommendation of the NCA and agreed to set up about 40-50 such societies in major states on a pilot basis. An `Implementation Committee' was constituted in the Department of Agriculture, to co-ordinate, review and guide the pilot scheme. In order to have a base level organisation which can provide all the requirements of the cultivators at a single contact point, the Banking Commission (1972) recommended the establishment of `Rural Banks'. With some change in the basic concept of the `Rural Banks' the Working Group on Rural Banks (1975) recommended the establishment of `Regional Rural Banks'(RRBs), which are state sponsored, regionally-based rural oriented commercial banks. These were set up in 1975 by the joint efforts of the Central and State Governments and commercial banks. These banks are expected to concentrate their activities in one or two districts and are specially meant for the upliftment of small farmers and other weaker sections of the society. In April 1980, six more commercial banks were also nationalised.

In March 1979, the RBI appointed a committee for reviewing arrangements for financing institutional credit for agriculture and rural development (CRAFICARD). The Committee in its report pointed out that the problems of agricultural credit had not only grown in complexity and size but had also merged

with the larger tasks of rural development and recommended the setting up of a new apex bank - the National Bank for Agriculture and Rural Development (NABARD).

Following the recommendation of CRAFICARD, NABARD was established jointly by the Government of India and the Reserve Bank of India in July 1982 for providing credit for the promotion of credit to priority sectors, with a view to promoting integrated rural development and securing prosperity of rural areas. NABARD took over the functions of the then prevailing Agricultural Credit Department (ACD) and Rural Planning and Credit Cell (RPCC) of the RBI and the Agricultural Refinance and Development Corporation (ARDC). It presently acts as the apex refinancing agency to State Land Development Banks (SLDBs), State Co-operative Banks (SCBs), Scheduled Commercial Banks (CBs) and Regional Rural Banks (RRBs).

The Agricultural Credit Review Committee (1989) appointed by the RBI in 1986, and headed by A.M. Kushro strongly advocated greater autonomy to credit institutions and recommended the merger of the regional rural banks with their sponsor banks and the creation of a National Apex Co-operative Bank.

The end result of the measures listed above and the increasing emphasis on the provision of institutional finance reduced the influence of professional money lenders in the villages and the role of informal credit diminished considerably. In fact, between 1962 and 1982, the share of informal credit agencies registered a sharp decline, to less than two fifths of the aggregate cash loans outstanding as of 1982 (Panikar et.al.

1988). A close look of Rural Credit Reports reveal that the share of the non-institutional credit to the outstanding debt of cultivator households declined from 87.7 per cent in 1951-52 to 36.7 per cent in 1981.

Table 1.1

Share of Institutional Credit Supply to Outstanding Debt in India

| Year | (percent) Institutional agencies | Non-institutional agencies |
|---|---|---|
| 1951-52 | 12.3 | 87.7 |
| 1961 | 18.4 | 81.6 |
| 1971 | 31.7 | 68.3 |
| 1981 | 63.3 | 36.7 |

Source: Desai (1988:327, Table 1).

And among the states Kerala ranks the third position from the top in the share of institutional credit agencies in the aggregate cash debt outstanding.(ie. 78.6 per cent in 1982) (Appendix 1.1).

In India, with the reduction in the share of non-institutional credit agencies in the aggregate cash debt outstanding, the direct institutional finance for agriculture increased tremendously. As we can see from the Table 1.2, the total direct agricultural finance of institutional agencies in India increased manifold from Rs.1391 crores in 1974-75 to Rs.7159 crores in 1985-86. The Table also shows that as a result of the development of banking facilities in the country, especially in the rural areas, there has occurred a discernible rise in the share of commercial bank (43.74) in the total direct agricultural credit.

Table 1.2

Direct Institutional Finance for Agriculture in India
(Issued during the Individual Years) (Rs. in crores)

| Institutions | 1974-75 Rs | % age share to total | 1985-86 Rs | % age share to total |
|---|---|---|---|---|
| 1. Co-operatives | 1039 | 74.69 | 3674 | 51.32 |
| 2. State Governments | 78 | 5.61 | 354 | 4.94 |
| 3. Sched. Commercial Banks | 274 | 19.70 | 2729 | 38.12 |
| 4. Regional rural banks | --- | --- | 402 | 5.62 |
| 5. Total direct finance | 1391 | 100.00 | 7159 | 100.00 |

Source: Shetty (1990:396, Table 8).
Note: `---' Not available.

Institutional credit to agriculture has made phenomenal progress during the last 20 years especially with the involvement of commercial banks. In December 1969 the number of commercial banks in the country was 8,832 and by March 1989 it rose to over 56,960. The average population per bank office declined from 69,000 in 1969 to 13,800 in 1989 (Canara Bank 1989). During the period the share of rural offices also grew from 17.63 percent to about 56 percent (IBA 1989). During the same period bank deposits as a percentage of GNP rose from 13 percent to 45 percent. The share of the priority sector in total credit of commercial banks also had gone up from about 12 percent in 1969 to 47.5 percent in 1988 against a target of 40 percent (GoK 1989:1). Commercial banks were required to reach by December 1987 a target of 45 percent of total advances to priority sectors which include agriculture and a target of 16 percent of direct finance to agriculture. By December 1987 the actual levels reached were 45.4 percent and 16.8 percent respectively (GoK 1989:2). The structure of the Indian Financial Institutions and Commercial Banking system is given in Appendix 1.2 and 1.3 respectively.

Thus the above review reveals that in India, institutional agencies have been able to mobilise substantial resources by way of deposits and provide reasonable credit (including agricultural credit), especially after the nationalisation of commercial banks in 1969.

Table 1.3

Loans Outstanding Per Hectare of Gross Cropped Area in India (30.6.86)

| State | Commercial Banks Rs | RRBs Rs | Co-operative (PACSs & PADBs) Rs |
|---|---|---|---|
| Haryana | 606.30 | 50.70 | 694.60 |
| Himachal Pradesh | 344.30 | 53.30 | 341.30 |
| Punjab | 912.40 | 8.30 | 631.90 |
| Rajasthan | 214.90 | 40.50 | 200.90 |
| Assam | 186.20 | 35.30 | 47.00 |
| Manipur | 162.50 | 10.80 | 201.60 |
| Tripura | 315.10 | 261.70 | 159.60 |
| Bihar | 319.80 | 97.90 | 168.50 |
| Orissa | 217.00 | 78.00 | 249.30 |
| West Bengal | 446.80 | 54.80 | 223.80 |
| Madhya Pradesh | 195.60 | 32.60 | 217.00 |
| Uttar Pradesh | 357.70 | 65.40 | 302.80 |
| Gujarat | 541.20 | 13.60 | 463.30 |
| Maharashtra | 385.60 | 15.40 | 485.70 |
| Andra Pradesh | 785.10 | 113.70 | 480.50 |
| Karnataka | 638.20 | 118.10 | 404.90 |
| Kerala | 1290.30 | 182.10 | 2391.50 |
| Tamil Nadu | 1273.00 | 19.00 | 799.40 |
| Jammu Kashmir | 191.80 | 73.90 | 108.30 |
| Meghalaya | 338.40 | 55.90 | 111.7 * |
| Nagaland | 448.20 | 7.60 | 60.5 * |
| Sikkim | 128.10 | NA | 22.5 * |

Source: RBI (1989, chapter XI, Table 2:444).
Note: '*' - pertains to PACSs only, NA - Not Available.

But the Table 1.3, which shows the per hectare agricultural credit disbursed by the various institutional agencies across the states, brings out that regional imbalance is still existing. Another important point that we can infer from the Table is, among the states, Kerala has the highest per hectare credit availability of all the institutional agencies (Rs.3864).

Kerala has always been a relatively better banked state in the country. Even in 1969 the per branch population in Kerala was 41,000 as compared to the corresponding all India figure of 69,000. By 1989 the per branch population in the state declined to 9,000 as against 13,800 for all India. The number of branches of scheduled commercial banks increased from 516 in December 1969 to 2,801 in March 1989. In the case of deposits Kerala have grown from Rs.153 crores in 1969 to Rs. 5,667 crores in 1989. Bank credit (outstanding) in Kerala increased from Rs.105 crores in 1969 to Rs. 3701 crores in 1989. Both in terms of per capita deposit (Rs.2,222) and per capita credit (Rs. 1,451) Kerala is better placed compared to the all India figures of Rs.1,830 and Rs.1,213 respectively in 1989 (Canara Bank 1989).

Scheduled commercial banks outstanding advances to agriculture and allied activities in Kerala went up from Rs 819.1 lakh in 1969 (RBI, Statistical Tables Relating to Banks 1970) to Rs. 58,930 lakh in March 1988 (IBA 1988:68). Primary agriculture credit societies outstanding advances to agriculture and allied activities rose from Rs. 706.14 lakh in 1961-62 (GoK, The Registrar of Co-operative Societies 1961-62) to Rs. 72,089.24 lakh in 1987-88 (GoK, The Registrar of Co-operative Societies 1987-88). Similarly primary agricultural development banks outstanding advances also showed a substantial growth from a meager level of Rs. 67.79 lakh in 1961-62 (GoK, The Registrar of Co-operative Societies 1961-62) to Rs. 21,721.99 lakh in 1987-88 (GoK, The Registrar of Co-operative Societies 1987-88).

Despite the increasing trend in credit support for the various agriculture and allied activities, the result in terms of

production and productivity is not commensurate with the investment except in the case of rubber. During the period 1980-81 to 1986-87 the

Table 1.4
Details of Plan and Non Plan Expenditure in Kerala
1980-81 to 1986-87 (Rs in lakhs)

| year | Agriculture and Allied | | | All Sectors | | |
|---|---|---|---|---|---|---|
| | Plan | NonPlan | Total | Plan | NonPlan | Total |
| 1980-81 | 5830 | 4264 | 10094 | 27095 | 58448 | 85543 |
| 1981-82 | 6882 | 4038 | 10920 | 29360 | 79202 | 108562 |
| 1982-83 | 6193 | 3900 | 10093 | 26929 | 72700 | 99629 |
| 1983-84 | 10815 | 4911 | 15726 | 43378 | 88805 | 132183 |
| 1984-85 | 22551 | 5209 | 27760 | 44160 | 113017 | 157177 |
| 1985-86 | 6399 | 4401 | 10800 | 45991 | 150871 | 196862 |
| 1986-87 | 6944 | 6242 | 13186 | 53442 | 162731 | 216173 |
| Total | 65614 | 32965 | 98579 | 270355 | 725775 | 996129 |

Source: GoK (1989:73, Appendix Table III).

investment in agriculture and allied activities was Rs 98,579 lakhs (Table 1.4) but the performance in production has not been up to the expected levels (GoK 1987:4).

Table 1.5
Growth Rates of Sectoral and Aggregate Income of Kerala, 1961-62 to 1985-86 (at 1970-71 Prices)

| Sector | Period I | Period II | Period III |
|---|---|---|---|
| Aggregate | 3.21 | 1.76 | 2.40 |
| a) Primary | 2.23 | -0.70 | 1.05 |
| b) Secondary | 4.71 | 2.15 | 3.68 |
| c) Tertiary | 4.24 | 5.32 | 4.67 |

Source: Kannan (1990:1952, Table 1).
Note: Aggregate growth rate is the weighted average of sectoral growth rate; the weights being the base year shares of sectoral incomes.

From the Table 1.5 also it is clear that the performance of the primary sector (consisting of agriculture, livestock, fisheries, forestry and mining and quarrying) is disappointing because during the second period the growth rate is negative leading to a decline in the sectoral income (Kannan 1990:1952).

Thus Kerala attracts particular attention from its explicit mismatch between agriculture credit and agriculture performance. This is clear from the upward strides in the disbursement of agriculture credit compared to a slow growth in the agriculture performance, in the state especially after 1974-75. This demands a detailed enquiry into the structure, pattern and factors influencing agriculture credit in Kerala. This will help to understand clearly the total picture of the state - in the field of institutional credit as an impetus for agriculture and allied activities. This study in its regional frame work will be helpful for economic planners and policy makers in the aspects of agriculture credit disbursement.

## Section II

## Review of Literature

The review focusses on the following areas which have a bearing on our study.

a) The relation between the new strategy of agricultural development and the demand for credit;
b) Supply of institutional credit;
c) Recent trends in institutional agricultural credit;
d) Inter-regional and Inter-class variations in supply;
e) Recovery performance; and
f) Institutional credit and agricultural development.

### a) The Relation Between the New Strategy of Agricultural Development and the Demand for Credit

The studies relating to the new strategy of agricultural development and the demand for credit revealed that credit needs are more on the irrigated farms than on the unirrigated farms. Introduction of improved technology without

any credit facilities would not have significant impact on income of the farmers (Sharma and Prasad 1971). Credit is a must for farming and the total requirement of credit increases with an increase in the size of farms. But the percentage of credit to total spending is largest among the small group (Ramamoorty et.al. 1972). The provision of credit for the small farmers in most cases results in the introduction of high yielding varieties of paddy into optimum crop plants. This is subject to the agro-climatic regions and other inputs like irrigation (Subramanyan 1975). Saha and Dutta (1971) and Rai and Singh (1971) studies also had almost similar findings.

However Desai and Desai's (1970) study done in Gujarat, indicated that the existing availability of working capital, including credit, with the sample farmers is not inadequate to meet the requirements of technology changes in agriculture. They argue that there does, however, exist significant scope for the reallocation of existing credit facilities. Their suggestion of withdrawal of institutional credit from farmers who have adequate owned resources and its provision to the 'needy' farmers would greatly increase efficiency of credit use, can be well taken as a policy. Also with proper understanding of the development role and efficient credit allocation, much could be achieved even with the existing resources of institutional credit.

b) Supply of Institutional Credit

The major studies in this field has been done by various research groups, commissions and committees appointed by the Reserve Bank of India and the State and Central Governments.

All-India Debt and Investment Survey (1961-62) observed that over the period 1951-52 to 1961-62, in India the share of borrowing from the co-operatives had increased from 3.1 to 15.5 per cent but that private money lenders still predominate.

All-India Rural Credit Review Committee (1969) reported that in India during the period 1968-69, the credit requirements met by the money lenders were reduced from 69.7 percent to 49.2 percent. The contribution of the Government agency decreased from 3.3 percent to 2.6 percent.

Ramamoorty et.al. (1972) study done in 1971 revealed that credit from government institutions was conspicuous by its absence, co-operatives helped only large farmers (82.04 percent) but accounted for 61.73 percent of the total credit supply. Commercial banks, which have taken up farm financing only very recently have a share of about 13 percent in the total supply of credit. The money lenders and other private agencies supplied the balance.

Committee for Reviewing Arrangements for Financing Institutional Credit for Agriculture and Rural Development (CRAFICARD), (1981) reported that in India out of the total agricultural credit outstanding at the end of June 1980, co-operatives accounted for 59.4 percent, commercial Banks for 38.8 percent and regional rural banks 1.8 percent.

According to the Agricultural Credit Review Committee (RBI 1989), (chaired by A.M.Khusro), as on June 1986, in India,

agriculture accounted for 41.5 per cent in terms of amount and 65.3 per cent in terms of number of accounts in the priority sector for the country as a whole. Advances to agriculture stood at Rs.9,483 crores, of which direct advances were Rs.8,117 crores or 85.6 per cent of the total agricultural credit spread over 16 million accounts. The total loans issued by Primary Agricultural Credit Societies (PACS) in India increases from Rs. 1,023 crores in 1975-76 to Rs.3,140 crores in 1985-86 of which Rs 2,747 crores were for short-term purposes and Rs.394 crores were for medium-term purposes. The fresh advances of primary land development banks (PLDBs) in India during 1975-76 which was Rs.136 crores, increased to Rs.390 crores by 1985-86, showing an annual growth rate of 11.1 per cent. The loans outstanding had increased from Rs 577 crores during 1975-76 to Rs.1,326 crores in 1985-86 which showed an annual growth rate of 11.1 per cent.

c) Recent Trends in Institutional Agricultural Credit

Gadgil (1986) has examined the flow and stock of production and investment credit from all credit institutions taken together in nominal and real terms over the period 1973-74 to 1982-83. In the case of production credit, as against the 15 percent annual growth in nominal terms, the growth in real terms works out to only 4 percent at the All-India level. Similarly, for Kerala the growth rate for the same period was 21.50 and 10.05 percent respectively. In the case of investment credit, as against the 20.32 percent annual growth in nominal terms of outstanding credit, the growth in real terms works out to only 11.16 percent at the All-India level. In Kerala the growth rate for the same period was 31.71 percent (nominal) and 21.69 percent

(real). Thus compared to All-India level, Kerala has widened its agricultural credit disbursal.

Rath Nilakantha (1989 a) points out that, crop loans have come to occupy an increasing proportion of all loans in rural areas of India. As against 6 percent in 1950-51, crop loans have increased to 20 percent of all loans in 1971. Indeed, while in 1950-51 crop loans were equal to only one-fourth of term loans, by the middle of the eighties the total crop loans in a year were twice as high as the total term loans disbursed during a year by all financial institutions. Rath observes that the share of total crop loans as a percentage of the total value of five inputs in agriculture-namely chemical fertilisers, insecticides, electricity, diesel oil and irrigation charges, all of which are purchased by the farmer and which have become increasingly important over the years, (the share of the five inputs in all farm inputs increased from 15 percent in 1973-74 to 43 percent in 1984-85)- declined from 80 percent of the total value of these inputs in the first three years of the seventies to about 45 percent by 1975-76, following a sharp rise in prices of fertilizers, insecticides and diesel oil. In the sixth plan period, crop loans covered only about 35 percent of the actual value of these five inputs. Indeed, since 1975-76, the total crop loan has been less than the total value of chemical fertilizers alone. It appears that despite the increase in the total cost of these, the crop loans have not increased proportionately, but have stayed at a given level of all material input costs (farm supplied and purchased).

The Agricultural Credit Review Committee report shows that the compound rate of growth of direct agricultural credit by institutional agencies in India as 20.41 per cent for the period 1974-75 to 1984-85.

d) Inter-Regional Variations in Supply

All regional studies reveals that there is wide regional variations in credit supply. Tara Shukla (1971), the Review Committee on Regional Rural Banks (1978), CRAFICARD (1981), Raj Kishore Pany (1985), Bhalerao et.al (1988), Haque and Sunita Verma (1988), Dadibhavi (1988), Agricultural Credit Review Committee (1989), etc. pointed out that among the states the per hectare supply of institutional credit for agriculture is highest in Kerala.



Basu's (1979) study revealed that the financing of agriculture by commercial banks has not been regionally equitable, to say the least. For 283 districts the coefficient of variation of agricultural credit per hectare of Net Sown Area (NSA) is 2.32 as against only 1.39, 1.26 and 0.73 as the same coefficient for per capita outstanding credit, per capita deposits, and number of bank offices per lakh of population respectively. The inter-district range of agricultural credit per hectare of net sown area is as wide as 12 paise to Rs. 1120.18. In other words, while commercial banks have successfully increased the share of agriculture in their total outstanding credit several-fold, it has failed to maintain a minimum degree of uniformity in its regional distribution.

According to Rath (1989 a) there is wide regional disparity in short-term and term loan disbursement to agriculture, compared to the share of different regions in the total Gross Cropped Area (GCA) of the country. In 1982-83 the four States of Eastern India - Assam, West Bengal, Orissa, Bihar and the two Central Indian States of Madhya Pradesh and Rajasthan, accounted for more than 40 percent of the total cropped area. But they received only about 16 percent of the total short-term credit. As against this, six other states- Punjab and Haryana in the north and the four southern states of Kerala, TamilNadu, Andra Pradesh and Karnataka with only about 25 percent of the gross cropped area received 56 to 60 percent of the total crop loans. The disparity persists even if the comparison is made on the basis of the Gross Irrigated Area (GIA).

Agricultural Credit Review Committee report (1989) revealed that Kerala, Tamil Nadu, Punjab, Haryana, Andra Pradesh, Karnataka and Gujarat are the group of states where per hectare advances not only of co-operatives (i.e., short-term and long-term) but also those of commercial banks were the highest. The credit has tended to concentrate in certain States irrespective of whether the institutional agency was the co-operatives or the commercial banks. On the other hand, Assam, Bihar, Manipur, Jammu and Kashmir, Tripura, Maghalaya and Sikkim comprised another group of states where the per hectare advances were low. Thus the overall picture of supply of credit, as it emerges from the foregoing study, shows considerable imbalance in the supply of credit, the states in southern, northern and western regions having considerable better credit supply while on the other hand

most of the States/Union territories in the North-Eastern region receiving lowest share of institutional credit.

e) Inter-Class Variation

Gadgil (1986), Dadibhavi (1988), Rath (1989) and Agricultural Review Committee (1989) in their analysis of the distribution of credit according to the size of holdings of the borrowers revealed that small and marginal farmers, with land holdings of less than 2 hectares have greater access to total institutional agricultural credit especially short-term loans. This, in all probability is due to specific policies and concessionary condition of credit offered by the banks and the government. Dadibhavi and Rath pointed out that the commercial banks appear to have served the small farmers to a comparatively greater extent than the co-operatives in the case of short-term loans or crop loans. But Rath found that the total number of borrowers of crop loans during a year from the commercial banks constitute just about one eighth of the borrowers from the co-operatives. Therefore, the commercial banks are also not able to help the smallest farmers or even the others in a very significant way in regard to crop loans. In contrast to this, a study conducted by Singh (1986) in Cuttack district during the period 1974-77 reveals, there was a concentration of credit in favour of large farmers when farm population was used as a measure of credit allocation. But when other measures of credit allocation such as land owned, farm assets, farm expenses, gross farm output, etc. were used it was found that credit was almost evenly distributed amongst different categories of farmers.

f) Recovery Performance

Study done by Raj Kishore Pany (1985) in Orissa revealed that the proportion of overdues to demand were 51 percent in case of primary co-operative societies and 45 percent in case of primary land development banks during 1978-79. Commercial banks too are not found to be free from such malady of overdues. Rather, their poor performance is revealed from the higher proportion of such overdues to demand, i.e. 55 percent in 1979.

Beohar and Khare (1988) examined the repayment of loan by borrowers of the District Central Co-operative Bank branch Umaripan in Jabalpur district of Madhya Pradesh, their overdues and repayment capacity, based on data collected from 45 farmer respondents from nine villages served by three societies relating to the period 1982-87. They found that the farmers who obtained credit for the purchase of pumpsets repaid the loan in the beginning but those who received loan for the purchase of fertilisers and digging of wells did not repay the loan in proper time. A large proportion of loans advanced for the purchase of bullocks and for land improvement remained overdue as compared to other purposes. The farmers who adopted a large number of package of production practices, irrespective of the purpose of credit, had higher repaying capacity per farm as compared to others. The farmers who obtained loan for pumpsets had the maximum repaying capacity as compared to other purposes.

Singh et.al. (1988) assessed the extent of `current' and `old' overdues among defaulters in different farm size-

groups, and estimated the extent of wilful defaulters in different farm size-group and also ascertained the factors responsible for overdues. Based on the analysis he argue that the large farmers were responsible for a large proportion of overdues. Of the total overdues, about 56 percent were 'old' overdues extending over three years and 44 percent were 'current' overdues for less than three years. Of the total defaulters, about 53 percent were cases of wilful defaulters and 47 percent were non-wilful defaulters. The small and medium farmers had a low repayment capacity as against the total repayable loan. At the same time large farmers do not repay the bank loans in spite of having repayment capacity in excess of the loan repayable.

The Agricultural Credit Review Committee (RBI 1989) in its report indicated that for the institutional credit structure as a whole in India as at the end of June 1986, overdues from agricultural lending worked out to a total of Rs. 4,262 crores of which Rs.1,744 crores related to commercial banks, Rs.413 crores related to RRBs and Rs.2,105 crores to PACSs and LDBs.

Overdues under agricultural loaning carried by various credit agencies over the last decade i.e., 1975-76 to 1985-86 can be seen from Table 1.6. As the statement brings out, overdues seem to be an all pervasive phenomenon and are neutral to the type of credit institution. Despite the efforts of the different credit institutions to improve recoveries, overdues have been increasing over the years with only some exceptions (these presumably in view of better monsoons and good crop conditions in those years).

Table 1.6
Overdues of the Various Credit Institutions in India
(Rs in crores)

| Agency | 1975-76 | 1980-81 | 1981-82 | 1982-83 | 1983-84 | 1984-85 | 1985-86 |
|---|---|---|---|---|---|---|---|
| Commercial Banks (CBs) | 200 (48) | 727 (47) | 893 (43) | 1069 (47) | 1351 (48) | 1568 (46) | 1744 (43) |
| RRBs | NA | 54 (48) | 89 (50) | 158 (48) | 242 (50) | 322 (52) | 413 (51) |
| Co-operatives | | | | | | | |
| 1. PACSs | 561 (34) | 1376 (43) | 1205 (50) | 1308 (40) | 1577 (43) | 1630 (42) | 1807 (41) |
| 2. LDBs | 92 (34) | 291 (46) | 252 (40) | 269 (44) | 267 (36) | 285 (40) | 298 (39) |

Source: RBI (1989:538, Chapter XV, Table 1).
Note: Figures in brackets indicate percentage of overdues to demand.

The State-wise recovery position of all scheduled commercial banks indicated that Kerala with 73.1 per cent recovery topped the list as at the end of June 1987, followed by Punjab with 69.8 per cent recovery. In five States i.e., Punjab, Kerala, Goa, Andra Pradesh and Tamil Nadu the recovery was above 60 per cent of demand as on June 1987. The recovery was less than 40 per cent of demand in Assam (39.4 per cent), Manipur (21.9 per cent) and Meghalaya (30.3 per cent).

g) Institutional Credit and Agricultural Development

Gadgil (1986) has examined relationship between food grains yield per hectare and institutional credit per hectare during 1982-83. For this study he took only 11 states in which such crops account for at least 75 percent of the total cropped area. And so Kerala is not included. He found out that the States with the highest yield (Punjab and Haryana) happen to be the states with the largest availability of formal credit and conversely those with the lowest yields (Madhya Pradesh and Rajasthan) happen to have low credit availability. His other findings shows, investment credit flow financed 29 per cent of

the private capital formation of India in 1973-74 and 43 per cent in 1982-83. He argues that the sum of production and investment credit as a proportion of the value added in agriculture has improved over the period 1973-74 to 1982-83 in all the States except Gujarat and Maharashtra, the most significant increase having occurred in Kerala.

Mehrotra's (1987) study done in Rajasthan reveals that the rates of growth of institutional credit, agriculture and food grain output have been high in the green revolution period as compared to the pre-green revolution period. It has also been found that the per hectare institutional credit availability and per agricultural worker foodgrain output have also increased in the State during the Green Revolution period, indicating a close correspondence between the two. But the inter-district analysis showed that there has been an unequal distribution of gains of growth in the recent past. The inter-district analysis has also revealed that the role of institutional credit in the agricultural growth of the State has really been positive in the green revolution period. The significant correlation between agricultural credit disbursed by the institution on the one hand and other indices of agricultural growth on the other, are suggestive of the fact that institutional credit via. the inputs like fertiliser, irrigation and other improved mechanical devices has positively affected the agricultural growth process in the State.

Since the steep increase in institutional credit had not resulted in a corresponding increase in agricultural

production and productivity in India, the RBI advised the chief executives of public sector banks to personally undertake an indepth study of their rural loaning in Nov/Dec 1987. Their studies confirmed that for various reasons bank credit could not achieve optimum results in increasing production as also productivity because a) schematic and intensive area approach was gradually being replaced by scattered lending, and b) the banks competed with each other for business in areas with good potential, often neglecting areas with inadequate business potential. To overcome these drawbacks RBI recommended Service Area Approach, where a specific area is to allocated to each bank branch. This would enable the branches to have development orientation and tone up the quality of lending in rural branches. (Agricultural Credit Review Committee 1989)

Rath Nilakantha (1989 b) says an important source of gross capital formation in the private sector in agriculture is loans from financial institutions, co-operatives and commercial banks. The term loans made to cultivators by these financial institutions are essentially for creation of durable capital assets. Therefore, it is proper to compare actual term loans advances to agriculture in a year to the gross fixed capital formation in agriculture in the private sector in that year. At the beginning of the seventies institutional loans accounted for about 25 percent of the gross fixed capital in agriculture in the private sector. But soon, with the nationalised commercial banks entering the field in a big way, the share of institutional finance increased to more than 30 percent in the remainder of the seventies and to more than 45 percent in the sixth plan period,

reaching 54 percent by 1984-85. The role of loan finance has thus become progressively important in fixed capital formation in the private sector in agriculture.

Shetty (1990), mentions that the behaviour of private sector investment in the 1980's does not square with the more rapid growth of institutional credit for medium and long-term purposes. Medium and long-term loans issued essentially for agriculture grew at a compound rate of about 15 per cent per annum during the period 1980-81 to 1986-87 as against the growth of 9.1 pr cent per annum in gross capital formation in the sector (both in nominal terms). Such term loans have thus tended to constitute a growing proportion of private capital formation in agriculture; the proportion was generally below 33 per cent during the 1970's; but thereafter it began to rise and reached 63 per cent in 1986-87.

Studies related to Kerala

Radhakrishnan and Mukundan (1988) studied the supply and utilisation of short-term co-operative agricultural finance in Palghat district of Kerala based on data collected from a sample of 15 borrower farmers and an equal number of non-borrowers during 1984-85. It was found that around 50 percent of the holdings of borrowers as well as non-borrowers belonged to the size-group of one hectare or less. An examination of crop-wise distribution of loan amounts received by the sample borrowers revealed that as much as 80.57 percent of the amount was for paddy cultivation, followed by tapioca (13.67 percent), banana (5.25 percent) and groundnut (0.51 percent). An inverse

relationship was found between the amount of loan per hectare, on the one hand and the size of holdings on the other. Smaller holdings obtained relatively more amount of credit than larger holdings.

An attempt has been made by Prabhakaran and Umadevi (1988) to examine the nature and extent of regional imbalance in the flow of agricultural credit through primary agricultural credit societies in Kerala during 1976-77 to 1985-86. The study showed that there was a gradual decline in the regional concentration of refinance distribution in recent years. But the credit flow has definitely shown a positive bias towards developed districts like Kottayam and Ernakulam. The northern districts of Kerala have been badly affected by the present distribution of credit. The levels of fertiliser consumption, acreage under perennial crops and the use of farm machinery are the major factors contributing to the regional imbalance.

Nair, Narayana and Sivanandan (1984) have done an ex-post evaluation study of a scheme refinanced by the NABARD for cardamom plantation in the high ranges of Kerala (i.e. Wynad and Idikki districts). The main findings of the study which are relevant here are: a) the scheme has not succeeded in improving the cultivation of cardamom above what has generally been prevailing in project areas mainly because the scheme is largely confined to localities which are not very conductive to cardamom cultivation, b) the pattern of disbursement of credit from the Primary Land Mortgage Banks is not tuned to meet the timely cultivation needs of farmers, c) the effective flow of credit is lower for the smaller size group of planters because of their

higher cost of credit, d) the amount of credit is far below the actual investment cost in cardamom cultivation.

Paranjothi (1987) analysed the operation of the major short-term and long-term institutional credit agencies in Trichur district of Kerala and examined the utilisation of long-term credit mainly through a village level survey of the beneficiary households served by these institutions. When he analysed the scale and nature of lending activities of the two institutional credit agencies in his study area, he found that the number of borrowing members has not increased steadily and the average amount of long-term credit per borrower remained stagnant even in nominal terms. Minor-irrigation, being the major purpose for which most of the loans were given, declined not only in terms of percentages but also in absolute terms. The amount of overdues was well within the limit of 25 percent. The bank has been able to cover the small farmers without any significant increase but at the same time the percentage of small farmers seems to have been over-estimated since medium and large farmers got recorded as small farmers. In the study area the credit absorption has not been increasing and there seems to be a stagnant demand for credit from institutional agencies. The main source of finance in the sample area for the two size classes up to 2.5 acres (0-1.5 acres & 1.5-2.5 acres) were the land mortgage banks while for the size-classes above 2.5 acres, it is commercial banks and owned funds mainly because of the simple procedure followed by commercial bank when compared with the land mortgage banks.

Kerala State Planning Board (1980) evaluated the Lead Bank Scheme in Malappuram district during the period 1976-79. As

regards the performance of the different institutions, they found that while the commercial banks shared about 58 percent of the credit disbursed, against their anticipated share of 42 percent, the share of co-operative institutions was about 40 percent which is 8 percent less than what was anticipated. While the performance was fairly good in respect of crop loan and dairy in the agrarian sector, considerable short-fall occurred under other important schemes falling in such sectors as minor irrigation, farm mechanisation, coconut rejuvenation, etc. About 30 percent of the sample beneficiaries of crop loans were found to have misused the loan amount received. About 25 percent of the beneficiaries under the Land Development Scheme were found to have misutilised the loan. Similarly, in almost all the schemes there were signs of misutilisation. Untimely disbursement of credit and lack of monitoring are the main reasons for misuse.

An ex-post evaluation study done during 1985-86 by NABARD (1988) on Betelvine Gardens in Trivandrum District of Kerala state revealed that the repayment performance was satisfactory with regard to this scheme. The two Primary Land Mortgage Banks have reported an overall overdue of Rs. 0.46 lakh forming 27 percent of the total demand of Rs.1.78 lakh under the scheme.

Kerala State Planning Board (1989) conducted another study on impact of lending programmes on the primary sector undertaken by various credit institutions in Kerala during 1987. And also examined whether the loans given to the beneficiaries for different activities under primary sector have been fully utilised for the purpose for which it was intended. The main

findings of the study are: in the survey there are ample instances of crop loan disbursed by co-operative sector to those who have no land, while availing loans. Out of 497 sample beneficiaries , 187 (38 percent) sought crop loan and under this scheme the overall increase registered in the value of output is found to be 44 percent. The increase was spectacularly high in the case of beneficiaries who had above 5 acres of land. Most of the loanees under dairy schemes had misutilised the loan amount and they did neither have dairy units nor any intention to install it. Repeated loans were seen taken in succeeding years mainly under this scheme. The incremental income through dairy schemes was far from being satisfactory. In the case of poultry (boiler production) there had been more than a three-fold increase in the total value of output in 1987. In respect of tractors supplied under the loan scheme, the study has revealed that the average monthly net return is only Rs.1200.00 per tractor as against an investment of Rs.1.32 lakhs. This, the owners of tractors felt to be very unremunerative.

Since the present study is related to agricultural credit in Kerala, a brief review of relevant studies on Kerala's Agricultural Performance has also been made.

Kannan and Pushpangadan (1988) have analysed the agricultural performance in Kerala for the period 1962-63 to 1985-86. They observed that the performance of Kerala's agriculture during the last quarter of a century has not been an impressive one, to say the least. The period under study, 1962-63 to 1985-86, seems to show that there have been two distinct phases in terms of agricultural growth. During the sixties and

upto the mid-seventies, i.e. 1962-63 to 1974-75, there has been an overall increase in the rate of growth of area, production and yield for all the crops while in the following period 1975-76 to 1985-86 there has been a near stagnation in the growth rate of aggregate area, production and productivity. On the basis of empirical analysis they point out that this phenomenon of stagnation in the agricultural sector could be explained as due to the decline in profitability. The analysis was carried out in terms of two groups of crops, one food grains meaning only paddy and the other, non-food grain crops under which eleven crops were combined comprising the two annual crops of coconut, rubber, cashew, pepper, coffee, cardamom, arecanut, tea and seasum. It has been seen that declining output growth for all crops was due to the declining growth in area and there was no trend in the rate of growth in yield. This was mainly because of the sharp decline in output growth of paddy contributed by a much bigger decline in area despite a positive growth rate in yield. For all other crops taken together, there was no trend in growth rates in either area or yield.

In Kannan and Pushpangadan's subsequent (1990) study on agricultural performance in Kerala, the analysis has been extended to individual crops for the state as a whole as well as across regions to capture the spatial and crop dimensions of the phenomenon of stagnation. In terms of growth performance only two crops, rubber and coffee, have consistently done well in both the periods. All other crops have registered either stagnation or decline in output growth during the period. The rate of decline of paddy has been highest during the summer season (-4.5) followed by autumn (-2.6) and winter (-2.1). The negative growth

rate during the second period is much higher in non-traditional areas while traditional paddy-growing regions registering only a marginal decline.

Sivanandan's (1985) study points out that the dynamism of the crop production sector seems to have suffered generally from mid-seventies, except for the plantation crops. Inefficient use of irrigation, insufficiency of inputs like fertiliser and credit and lack of long term investment in improving the productivity of land are some of the main reasons for the decelerating trend in productivity during recent times. These reasons are particularly applicable to the two major crops, rice and coconut. He also points out that effective and full utilisation of the irrigation potential and improving upon scientific management with increased inputs may help these crops to recover from the decelerating trend (Appendix 1.4).

Similarly, Pillai (1982) study on agricultural growth in Kerala revealed that the period from 1960-61 to 1970-71 could be identified as a period of accelerated growth in Kerala's agriculture and the period from 1974-75 as a period of decline (the declining phase in Kerala's agriculture). He is of the opinion that the generally reckoned period of post-green revolution in Indian agriculture starting from either 1964-65 or 1968-69 has no relevance in the context of analysing agricultural growth in Kerala (Appendix 1.5).

George and Mukherjee (1986) have done a disaggregated analysis of the growth performance of rice in Kerala. According to them the growth rates of area, yield and production indicated

considerable variations across the districts, over seasons and overtime (Appendix 1.6).

Narayana and Nair (1989), analysed the changes in area, production and productivity of coconut at the all-India level clearly placing Kerala in the larger context and also examined the factors governing the changes in the productivity (yield per hectare) of the crop. They found that the trends in area under and productivity of coconuts in the major coconut producing states like Kerala, Karnataka and Tamil Nadu have been desperate over the period of analysis (Appendix 1.7).

These studies suggest that Kerala's agricultural economy is different from that of other states. Cash crops, mostly perenials dominate the scene occupying about 60 percent of the cropped area. Important cash crops produced in the state are rubber, pepper, cardamom, etc. Limited scope for expansion of the area under cultivation, declining trend of the area under food crops, stagnation in production and productivity of major crops like coconut, paddy, tapioca etc, fragmentation of land holdings and non-adoption of the package of practices are the other major characteristics of the state's agriculture.

## Section III

### The Problem

The above review indicates that compared to few regional studies on agricultural finance, a detailed research on the agricultural credit performance of the state as a whole is clearly lacking. This permits us to examine the structure and growth of institutional credit for agriculture and allied

activities in Kerala for the period 1961-62 to 1985-86. In recent times, the growing importance of the role of agriculture credit as a stimulant for agricultural production is widely disseminated. This necessitates us to explore issues like 1) factors influencing agriculture credit, 2) the regional and size-class disparity in the disbursement of institutional credit for agriculture in Kerala, and the possible reasons behind these disparities, and 3) differences in the type and pattern of credit disbursement among different agriculture credit agencies.

## Objectives of the Study

The main objectives of the study are:

1) to document the evolution and growth of the two major formal institutional agencies namely, commercial banks and co-operatives in Kerala;
2) to analyse the structure and growth of institutional credit for agriculture in the state as a whole and district-wise, for the period 1961-62 to 1985-86;
3) to examine the level and trends in overdues (i.e., the extent of recovery) of agricultural loans across the districts;
4) to examine whether there is inter-class variation in the extent of agricultural loans obtained by different categories of farmers;
5) to study the inter-district disparity in the disbursement of agricultural credit and the plausible reasons for it in Kerala; and
6) to investigate the factors influencing institutional credit disbursement for agriculture in Kerala.

For the study we have taken only scheduled commercial banks (Appendix 1.8) and co-operatives, because the share of Government in the total credit supplied is insignificant (ie only 2.6 percent in 1961-62). Agriculture credit means credit extended for agriculture and also its allied activities.

Methodology

There is no specific methodology for these kind of studies. Many studies use trend analysis, growth rates, regression, co-efficient of variation, etc., to arrive at specific conclusions. In this study also we have used some of the above mentioned tools of analysis. In addition, for calculating growth rates we used exponential function and in the case of period-wise analysis we have used the kinked exponential model as suggested by Boyce (1986) for removing the inconsistency due to discontinuity in the growth rates.

For finding out the factors influencing institutional credit, we have used the rank correlation analysis along with Principal Component Analysis (PCA) instead of regression model. The PCA helps to avoid the multicollinearity problem prevalent among the selected variables. We would discuss in detail the methodology used in the beginning of each analysis where the relevant methodology used has been explained in depth.

Chapter Scheme

The study consists of six chapters. The first chapter deals with the rationale of the study, gives a broad outline of the objectives of the study along with the review and the methodology adopted for the study. The second chapter reviews the

socio-economic background for the origin and growth of banks in Kerala and also reviews the performance of co-operative and commercial banks in Kerala. The third chapter is a disaggregated analysis of the structure, growth and recovery position of institutional credit for agriculture, across the districts.
The first part of the fourth chapter is concerned with the inter-class variation in the disbursement of direct agricultural credit and the second part of the fourth chapter presents the inter-district disparity in the supply of institutional credit for agriculture. The fifth chapter discusses the reasons for inter-district variations in agricultural credit, why the two institutional agencies-commercial banks and co-operatives in the State are performing in two different ways and what are the factors influencing institutional credit for agriculture. And finally the sixth chapter contains the summary and conclusions.

Sources of Data

The main sources are the published and un-published secondary data. The published data are: a) the RBI's various publications like the Statistical Tables Relating to Banks in India, Basic Statistical Returns, Report on Currency and Finance, Trend and Progress of Banking in India, and R.B.I Bulletin,
b) Hand Book on Co-operative Movement in Kerala issued by The Registrar of Co-operative Societies, Kerala,
c) Economic Review, Statistical Abstract from the planning Board.
d) Department of Economics and Statistics publications like Statistics for planning, Agriculture Census and Live Stock Census.

# Chapter 2

## Socio-Economic Background of Growth of Banking in Kerala

In the previous chapter we have seen that Kerala ranks first both in the per hectare availability and recovery of agricultural credit of institutional agencies like co-operative and commercial banks. At this juncture we examine the socio-economic background of the development of banking in Kerala to see whether the credit performance had its moorings in the economy from the early period. Also we attempt to review the performance of commercial banks and co-operatives in the post nationalisation period.

Beginning from the second half of the nineteenth century, a swift change in the traditional agricultural pattern of Kerala occurred with the investment of capital both by the Britishers and the indigenous entrepreneurs of Kerala, which gave way to commercialisation of agriculture. More and more lands were cleared and marshy lands were reclaimed for cultivation of food crops together with the intensified cultivation of plantation crops like pepper, coffee, tea, rubber, cardamom, etc. in the hilly areas. The emerging crop-mix was linked to the export oriented plantation industry and agro-processing activities.

The development of transportation facilities and the rising prices of agricultural products in Kerala boosted the trade activities and paved the way for increasing monetisation of the economy. This resulted in the emergence of indigenous credit

institutions in Kerala. The need for these credit institutions was also felt in the land reclamation process. Large scale monetary transactions were made for different operations like bunding, dewatering etc. Knowing the gravity of the situation for the development of agriculture, the Government enacted an Agricultural Loans Act in 1891.

Another reason for the increase in the demand for credit in Kerala was the rapid fragmentation of land due to the changes in the inheritance, property right regulations and most importantly the land reforms introduced in the state. Thus more and more people became individual owners of land who need money for carrying on agricultural operations. Obviously majority of them belong to low income groups who finally depend on outside agencies for credit facilities.

The Report of the Travancore-Cochin Banking Inquiry Commission documents the emergence of the credit/banking institutions in the region. It observes that since the cash expenses on the farming business of an agriculturist in such an economy constituted a major portion of the total expenditure incurred by him on cultivation and development of land, and, consequently cash proceeds resulting from the marketing of crops accounted for a larger proportion of the gross value of the produce, the scope for money and credit to function on a wide scale became enlarged. This naturally gave a powerful impetus to the banking activity in the state.

The roots of modern banking in this region can be traced back to the earlier crude form of banking institutions like `Kuries or Chitties'. Initially, the Kuries were started on

a small scale and as such could not provide large sums to finance productive activity. Apart from this, the operations of Kuries were oriented more towards consumption purposes such as performing social ceremonies etc. Since the demand from the productive sector for money and credit was larger than what could be met from the kuries and chitties, other forms of banking activities were started. As a result, working on the experience of Chitties, certain "Ela Nidhis" were organised in the southern part of the state after the Companies Regulation of 1888 came into force. However these incipient-banking institutions were engaged in all manner of fanciful enterprises and did not really serve any useful purpose. Inevitably, barring a few, they gradually died out although some of them assumed the form of banking companies after the passing of the Companies Regulation in 1917 by the erstwhile Travancore state (GoI 1956:18).

Since the region was exposed to other external markets both inside and outside the country through trade of the commercial crops, in the initial period lending money on the basis of simple promissory notes was very common in Travancore and Cochin. But as trade got increasingly organised on a joint-stock basis and the need for cheques and transfers arose, banks also came to be organised as modern joint-stock firms. The 1930 Travancore Banking Enquiry Committee, mentions the metamorphosis of the banking institutions, from the old `grain banks', run by indigenous bankers of central Travancore, to modern joint-stock banks thus: "Ordinarily the surpluses of a money lender are in grain, stored up in his granaries which can carry no interest whatever. But the surplus in money is seldom kept idle. The

desire for formation of joint-stock banks is truly a result of the realization of the profitable use of surplus funds, and in every part of Travancore, even agriculturists who have surpluses have with a certain degree of avidity started joint-stock banks which, however small and feeble they may be, are to a very large extent the media for a free flow of the surplus funds between the rural and urban centers" (Oomen 1976:41).

As soon as the profitability of the Kayal reclamation's of `Kuttanad' (a region in central Travancore) was demonstrated beyond doubt the Brahmin money lenders of Monkompu saw in it the prospect of a flourishing business and came forward to finance it (Pillai and Panikar 1965:93). For a long time in Kerala, Tamil Brahmins who were the first to introduce indigenous banking, had banking business in the important centers like Travancore, Cochin and Malabar and within a few years it spread over the entire state.

Even when the foreigners had supremacy in the business and financial matters in India, T.M.Appu introduced the first modern bank in 1898-99 named `Nedungadi Bank' in Kozhikode district in the Malabar region of Kerala state. It was the second modern bank in south India. The Thiruvalla bank[1] which was established in 1900 was the first joint-stock bank in Travancore-Cochin area and the second in Kerala. Another bank which was opened in the early years of the century was `Thayyil Bank'[2]. These two banks were wound up with the passing away of its founders, after making some rapid progress initially. In 1913 the Nedungadi Bank was registered as a joint stock company, and

raised its share capital from Rs.19,000 to Rs 5 lakhs, and became a scheduled commercial bank with the establishment of Reserve Bank of India in 1935. In 1917 there were five joint-stock banks working in Travancore. They were the Travancore Permanent Fund (1899), Malabar Family Assistance Company (1907), Changanacherry Banking Company (1908), Ambalapuzha Christian Bank (1909), and Travancore National Bank (1912).

The national movement which gathered momentum in India after the First World War influenced the banking sector also. Along with the origination of several national banks in many parts of India, Kerala also had its experience. Prominent among them were the Alleppey Bank (1919) in Alleppey, Bank of Deccan (1919) at Kottayam, Orient Bank of Thodupuzha (1920) at Ernakulam and Cochin National Bank (1921).

In the Cochin state, even though the first joint stock commercial bank was started only in 1914, it had five joint stock commercial banks by 1917 in par with Travancore. Among them the Chaldean Syrian Bank (1918) was the most prominent one. The pioneers of joint-stock banks in Travancore-Cochin were members of Christian families. Catholic Syrian Bank (1920), Catholic Orient Bank (1922), Marthoma Syrian Bank (1927), South Indian Bank (1929), Indian Insurance Banking Corporation (1933), Mar Aprem Bank (1934) and Assyrian Bank (1934) are some of the other important banks started by the Christian families.

The successful functioning of many banks started by Christian families inspired others also to venture into this

field. And thus in the Cochin-State, the Dhanalakshmi bank (1927), Cochin Nayar Bank (1929), Sree Radha Krishna bank (1940), Nayar Union bank (1941) and Thiyya bank (1941) were started, which led to an increase in the number of banks in the region from 5 in 1917-18 to 167 in 1932-33, a spectacular increase within a period of a decade and a half.

The number of banks in the Travancore state also increased from 5 in 1917 to 274 by 1932-33, which was an all-time-high record in the history of Kerala. A good many of these new banks were located in the Travancore state, which accounted for about 20 percent of the total number of banks then existing in the whole of the erstwhile British India.

It is worth noting that even though the forces of world depression set in by 1930, the number of banks in the Travancore State showed an increase and reached the peak in 1933. Thus the number of banks increased from 258 in 1930 to 262 in 1932 and 274 in 1933. Even though the profitability of the existing banking concerns was adversely affected during the period of world depression as that of other economic activities, their earnings were not so crucially affected as to result in their liquidation on a large scale (Travancore-Cochin Banking Inquiry Commission 1956:20).

One of the reasons for the increase in the number of banks was the sharp increase in prices of cash crops, and the resulting increase in farmer's income. The other plausible reasons for the spurt in the banking institutions are the success

of the Kandathil family in banking business which might have prompted several others to follow the gold rush of the trade boom. The lack of regulations in starting new banks and the possibility of combining them with non-banking businesses, especially chitties.

In 1940 five scheduled banks operated in Kerala. They were Nedungadi Bank (Kozhikode), Palai Central Bank (Kottayam 1927), South Indian Bank (Trichur 1929), Travancore Forward Bank (Kottayam 1929), and Indo-Mercantile Bank (Cochin 1937). Further there were 11 other banks[3] which were non-scheduled but having more than Rs 5 lahks as share capital in Kerala.

But from the mid thirties there was a fall in the number of banks as a large number of banks in Travancore were wiped out. Also the flotations of new banks were only few. In the Cochin State also a large number of banks went into liquidation. For instance, the number of banks went down from 155 in 1936-37 to 82 in 1943-44. The closure of banks coincided with a piece of legislation introduced by the then Travancore Government as well as by the Cochin Government for the regulation of the business of joint stock enterprises. The Government of the erstwhile Travancore State enacted the Travancore companies Act in 1938, imposing certain restrictions on banking companies including one prohibiting them from conducting chitties. This probably augmented momentum for the larger number of closures. The Cochin State's proclamation in 1937 imposing similar restrictions on banks, except as regards prohibition of chitties, reduced the number of banking institutions.

For a long time the Travancore Bank was the most important bank of local origin. This bank was registered on september 12, 1945, after the disappearance of 2 major banks namely the Travancore National and Quilon Bank. (The Travancore National Bank established at Alleppey in 1912 and the Quilon Bank established later at Quilon in 1919, had been amalgamated in september 1937 to form a bigger institution known as "the Travancore National and Quilon Bank" with its registered office at Quilon. But this bank was wound up in september 1938, following the order of Travancore High Court and the Madras High Court). The Travancore Bank's growth was fairly rapid as the Palai Central Bank was its only major competitor in the state.

Palai Central Bank, a medium-sized scheduled bank which was established in the twenties was the most important bank in Kerala. It had more deposits than any other local institution. The Palai bank was served in addition by the branches of two other scheduled banks, namely, the Travancore Forward Bank and the Kottayam Orient Bank. They too had been established in the twenties. But in August 1960 there was a run on the Palai bank and it failed. The Palai Central Bank was ordered to be wound up in December 1960 by the Kerala High Court, in accordance with the provisions of the Banking Companies Act 1949. After the disappearance of Palai bank, the Travancore Bank, reconstituted as a subsidiary of the State Bank of India and renamed as the State Bank of Travancore, still continues to grow by taking over a number of other banks in the state.

The widespread growth of the banking in Kerala by the latter half of the century is brought out by the fact that by

1953 Trichur district in Kerala had the second largest number of registered banking offices (19), the first being Calcutta (21) (Oomen 1976:37). This large number of bank offices in Trichur was mainly due to its nearness to the important port and trading centers like Cochin and the preponderance of the Syrian Christian community, who showed much enthusiasm in the banking and trading activities. Actually these Christian families in Trichur were inspired by the popularity as well as the experience with church-managed Kuries known as `pallikuries', which were started in the nineteenth century.

Though there was a spurt in the banking activities in the State, the mid of the 20th century witnessed a sudden fall in the number of banks. The reason was the disappearance of many informal banks, takeover of small banks by scheduled commercial banks and amalgamation of banks mainly due to the implementation of the Banking Companies Act, 1949. The failure of the most prominent Palai Central Bank led to the deterioration of people's confidence in the banking activities in the region.

A noteworthy feature of banking operations in Kerala, is its larger proportion of advances for agriculture even in the fifties. Even as early as 1955, when stricter controls on bank advances were imposed, the agricultural advances of commercial banks incorporated within the Travancore-Cochin state (Travancore-Cochin banks) formed 9.8 per cent (Rs. 1.56 crores) of their total advances as against a negligible proportion of 0.2 per cent by "non- Travancore-Cochin banks" operating in the state and 1.8 per cent by banks in the country as a whole. In the Travancore-Cochin state, the amount advanced by both the banks

together (i.e., banks incorporated in the state and other banks) for agricultural production which included seasonal agricultural operations as well as improvements of long-term nature, was Rs.1.57 crores forming 6.9 per cent of the total advances. Out of the total of Rs.1.57 crores advanced for agriculture, about Rs. 1.14 crores were utilised to finance seasonal agricultural operations while the remaining amount was invested on agricultural improvements (GoI 1956:29). Apart from this, a part of the gold loans (on gold ornaments as security) common in the State might also have gone to finance agriculture. The percentages would be much higher for periods prior to 1949 when the Reserve Bank did not exercise any control over the pattern and distribution of assets of the banks. Most of the agricultural credit was on personal security or on real estate. By the end of 1955, unsecured advances formed about 31 percent and those secured by real estate constituted about 27 per cent of the total advances of the Travancore-Cochin banks, as against 4.6 and 4 per cent respectively in regard to 'other banks' working in the state (Oomen 1976:39).

## Financial Institutions and its Activities in Kerala in the Post Nationalisation Period

The nationalisation of major commercial banks ushered a new era of economic activity in Kerala as in other parts of the country, resulting in the end of "class banking" and the beginning of "mass banking" in Kerala. More and more bank branches were opened in rural and unbanked areas of the state to set the pace of balanced economic growth and development. However, in contrast to other regions there was also a spurt in the growth of private financial institutions. Till mid-eighties

one can observe two important characteristics in the financial spectrum of Kerala, viz. operations of the non-banking financial institutions on a large scale and the inflow of foreign remittances. Private financial companies, chit funds, investment companies, etc., were successful in mobilizing substantial resources of different cross sections of people in the state. According to the Kerala Small Financiers Association, the number of such institutions in the state was about 12,000 in the early eighties. Of the total, Trichur district alone accounted for nearly 50 per cent of these institutions. The spurt in the growth of private financial institutions in Trichur town may be attributed to factors such as the historical background of Trichur town as a centre of private financial and banking institutions, the decline of the private Kuries business, the fast expansion of business activities of the town since the mid 1970s, credit restriction by commercial banks for business purposes and accumulation of surplus money with certain sections of the community (Prakash 1984:2129). This unorganized banking sector gave a stiff competition to the organised banking sector in the state in mobilizing resources. Due to the introduction of Kerala Government Money Lenders (Amendment) Ordinance of 1987 there has been a noteworthy decline in the impact of Private Financial Uncorporated Bodies (PFUBs) popularly known as `Blade Companies'(because of their cut-throat practices). The other main factors which led to the failure or closure of these private finance companies were as follows: a) promoters had no stake in business, b) funds were diverted for speculative purposes and there was no prudent ratio between the quantum of deposits and advances, c) interest and other costs were very high, d) failure

of one company in an area led to a chain reaction shaking public confidence d) raids by the Reserve Bank of India and State Government officials and the restrictions imposed by the Kerala Money-lenders (Amendment) Ordinance 1987. The failure of these companies during the recent past has opened up new vistas to the organised banking sector in Kerala to develop and expand (IBA 1988:56).

In the wake of the oil boom, a great number of Keralites migrated to the Middle East which offered abundant employment potential. According to a survey conducted by the Department of Economics and Statistics, the total out-migrants from Kerala as at the beginning of 1987 were estimated at 6.82 lakhs. Out of this 3.01 lakhs i.e 44.1 per cent had migrated to the Gulf countries itself[4]. The survey also reveals that the average annual remittance to home per migrant worked out at Rs.10,455 and on this basis the annual remittance from 3.01 lakh emigrants is estimated at Rs.315 crores. The organised banking sector was successful in channelising the foreign remittances from these non-resident Indians, who had contributed richly to its deposit growth. In the recent years, there has been a return flow of people from the Gulf region into Kerala, owing largely due to loss of employment (IBA 1988:58.59).

The end of the Gulf boom has resulted in the fall in the incomes of Gulf emigrants leading to a drop in NRE (Non-Resident-External) remittances growth rate (Table 2.1) and also increased the number of gulf returnees[5]. However, the NRE deposits with banks in Kerala in terms of outstanding continue to show an increasing trend. The NRE deposits of all the scheduled

commercial banks in Kerala increased from Rs.844 crores in 1985 to Rs.1,584 crores in March 1989 (Canara Bank).

Table 2.1

Growth of NRE Deposits in Kerala (Rs in crores)

| Year | Total Deposits | of which NRE | % growth of NRE |
|---|---|---|---|
| 1985 | 3479 | 844 | --- |
| 1986 | 4189 | 1156 | 37.00 |
| 1987 | 4816 | 1359 | 17.60 |
| 1988 | 5501 | 1562 | 14.90 |
| 1989 March | 5667 | 1584 | 1.40 |

Source: Canara Bank, circle office, Trivandrum.

During the past 20 years after nationalisation, the active involvement of the banks made their presence felt in the economic development of the state. Recently of the 2801 branches of scheduled commercial banks functioning in the state, 717 belong to the State Bank group, 824 to the nationalised banks, 991 to private banks and 269 to regional rural banks (RRBs). The important banks operating in the State are State Bank of Travancore (506 branches), State Bank of India (202 branches), Canara Bank (196 branches), Federal Bank (271 branches), Catholic Syrian Bank (182 branches) and South Indian Bank (180 branches). Two RRBs, South Malabar Gramin Bank and North Malabar Gramin Bank are operating in 5 districts, viz. Malappuram, Kozhikode, Wynad, Cannanore and Kasargod.

Population per office and per capita deposit and advances

Table 2.2 gives the figure of the growth of banking in Kerala and India, since nationalisation. In 1969 when a bank branch had to cater to the banking needs of 69,000 people in the country as a whole, Kerala had a bank office for every 41,000 population.

Table 2.2

Major Indicators of Growth of Banking in Kerala
1969 to 1989

| Indicators | 1969 | | | March 1989 | | |
|---|---|---|---|---|---|---|
| | Kerala | India | % share of Kerala to India | Kerala | India | % share of kerala to India |
| No. Of Branches | 516 | 8832 | 5.84 | 2801 | 56960 | 4.92 |
| Deposits(Rs Crs.) | 153 | 5148 | 2.97 | 5667 | 144891 | 3.91 |
| Advances( " ) | 105 | 3717 | 2.82 | 3701 | 96009 | 3.85 |
| C D Ratio | 68.60 | 72.20 | | 66.00 | 66.30 | |
| Population Per Branch | 41000 | 69000 | | 9000 | 13800 | |
| Deposit Per Branch (Rs. in Lakhs) | 29.65 | 58.30 | | 202.30 | 254.40 | |
| Advances Per Branch (Rs. in Lakhs) | 20.35 | 42.60 | | 132.10 | 168.60 | |
| Per Capita Deposit (In Rs.) | 73.40 Dec`69 | 95.80 Dec`69 | | 2222 | 1830 | |
| Per Capita Advances (In Rs) | 50.50 Dec`69 | 64.20 Dec`69 | | 1451 | 1213 | |

Source: Canara Bank (1989).

The population served per branch has reduced to 9,000 in Kerala and 13,800 in India over 20 years. Out of the total branches of 8,832 for all the banks in India in 1969, 516 was in Kerala. By 1989 the figures had increased to 56,960 and 2801 respectively. But Kerala's share of bank branches in the countries total decreased from 5.84 per cent in 1969 to 4.92 per cent in march 1989. This reduction in the share of bank offices in the State may be attributed to the fact that the thrust of the nationalisation was to reach banking business in the hitherto neglected regions, whereas Kerala has always been in the forefront of banking development. However the Kerala's share in the countries total deposit and advances increased from 2.97 per cent to 3.91 per cent and 2.82 per cent to 3.85 per cent

respectively. As a result of rapid branch expansion in the state, the per capita deposits in Kerala stood at Rs.2,222 as at the end of March 1989, comparing favourably with the all India figure of Rs.1,830. In terms of per capita credit outstanding too, the state is better placed. The per capita outstanding credit at the end of 1989 was Rs.1,451 in Kerala, as compared to Rs.1,213 for the country as a whole (Table 2.2).

It is interesting to note that per capita deposit in Kerala was above the national average from 1978 onwards and per capita credit in Kerala was above the national average from 1980 onwards (Table 2.3).

Table 2.3

Population Per Office and Per Capita Deposits and Advances
(as on last friday of december)

| Kerala | | | | | India | | | |
|---|---|---|---|---|---|---|---|---|
| Population per office (000s) | Per capita deposits (Rs) | Per capita credit (Rs) | c/d ratio | Year | Population per office (000s) | Per capita deposits(Rs) | per capita credit (Rs) | c/d ratio |
| 41 | 73.4 | 50.5 | 69 | 1969 | 61 | 95.8 | 69.2 | 72 |
| 31 | 86.3 | 61.5 | 71 | 1970 | 50 | 110.11 | 83.6 | 76 |
| 25 | 102.3 | 70.5 | 69 | 1971 | 43 | 132.2 | 92.2 | 70 |
| 23 | 115.9 | 81.9 | 71 | 1972 | 38 | 152.6 | 102.5 | 67 |
| 21 | 148.5 | 105.2 | 71 | 1973 | 34 | 184.0 | 129.4 | 70 |
| 19 | 170.7 | 121.4 | 71 | 1974 | 30 | 211.9 | 150.4 | 71 |
| 16 | 207.2 | 148.5 | 72 | 1975 | 27 | 250.1 | 183.8 | 73 |
| 14 | 266.0 | 180.0 | 68 | 1976 | 23 | 321.0 | 247.0 | 77 |
| 11 | 356 | 218.0 | 61 | 1977 | 20 | 387.0 | 279.0 | 72 |
| 11 | 488 | 307 | 63 | 1978 | 19 | 484 | 339 | 70 |
| 10 | 569 | 363 | 64 | 1979 | 17 | 574 | 392 | 68 |
| 9 | 682 | 460 | 68 | 1980 | 16 | 675 | 451 | 67 |
| 11 | 672 | 480 | 72 | 1981 | 18 | 647 | 441 | 68 |
| 10 | 817 | 541 | 66 | 1982 | 17 | 765 | 522 | 68 |
| 10 | 967 | 636 | 66 | 1983 | 15 | 899 | 604 | 67 |
| 10 | 1149 | 772 | 67 | 1984 | 14 | 1053 | 724 | 69 |
| 9 | 1343 | 853 | 64 | 1985 | 13 | 1253 | 822 | 66 |
| 9 | 1623 | 992 | 61 | 1986 | 13 | 1498 | 944 | 63 |
| 9 | 1867 | 1192 | 64 | 1987 | 13 | 1737 | 1059 | 61 |

Source: 1. Indian Banker's Association (IBA) (1988:62).
2. Canara Bank (1989).

Notes: 1. Data other than credit/deposit ratio is on last friday of December
2. Credit/deposit ratio is on march every year.

But when it comes to credit deposit (C/D) ratio there is a decline from 69 in 1969 to 61 in 1987. By the end of March 1987, however, the C/D ratio in Kerala had crossed the All-India figure of 61 per cent by three percentage points.

The rural areas of the State were also better served by the commercial banks both at the time of nationalisation and there after (Table 2.4). About 75 per cent of the total bank offices were functioning in the rural and semi-urban areas of the state in 1969 while it was only 58.39 per cent for the country as a whole. This ratio further increased to 84.57 in 1980 and it was 84.05 per cent in 1987 in the state. The corresponding proportion for the country was 71.42 per cent in 1980 and 75.72 per cent in 1987.

Table 2.4
Population Group-Wise Offices Deposits and Credit
(amount in lakhs)

| | Kerala | | | India | | |
|---|---|---|---|---|---|---|
| | Offices | Deposits | Credit | Offices | Deposits | Credit |
| June Rural | 118 | 1299 | 422 | 1443 | 14496 | 5429 |
| %age to total | 21.53 | 8.54 | 4.28 | 17.63 | 3.11 | 1.50 |
| 1969 Semi-urban | 293 | 7283 | 2896 | 3337 | 102406 | 40657 |
| % age to tot | 53.47 | 47.91 | 29.34 | 40.76 | 21.95 | 11.27 |
| Urban& Metropolit | 137 | 6620 | 6553 | 3407 | 349617 | 314800 |
| % age to tot | 25.00 | 43.55 | 66.39 | 41.61 | 74.94 | 87.23 |
| Total | 548 | 15202 | 9871 | 8187 | 466519 | 360886 |
| June Rural | 867 | 22781 | 12825 | 14817 | 396637 | 216188 |
| % age to tot | 40.29 | 17.69 | 14.75 | 45.71 | 11.90 | 9.66 |
| 1980 Semi-urban | 953 | 64303 | 30245 | 8331 | 771228 | 364143 |
| % age to tot | 44.28 | 49.93 | 34.78 | 25.70 | 23.15 | 16.27 |
| Urban& Metropolit | 332 | 41702 | 43902 | 9264 | 2164274 | 1657795 |
| % age to tot | 15.43 | 32.38 | 50.48 | 28.58 | 64.95 | 74.07 |
| Total | 2152 | 128786 | 86972 | 32412 | 3332139 | 2238126 |
| June Rural | 607 | 41185 | 28906 | 30022 | 1563224 | 1002571 |
| % age to tot | 22.25 | 9.33 | 10.17 | 55.83 | 14.43 | 14.82 |
| 1987 Semi-urban | 1686 | 271146 | 136861 | 10692 | 2314572 | 1161387 |
| % age to tot | 61.80 | 61.46 | 48.17 | 19.88 | 21.36 | 17.17 |
| Urban& Metropolit | 435 | 128876 | 118343 | 13058 | 6957619 | 4601491 |
| % age to tot | 15.95 | 29.21 | 41.65 | 24.28 | 64.21 | 68.01 |
| Total | 2728 | 441208 | 284109 | 53772 | 10835415 | 6765450 |

Source: IBA (1988:64).

Similarly from the Table 2.4, we can also make out increase in advance of credit and mobilisation of deposit in the rural and semi-urban areas of the state, over a period of 20 years. About 75 per cent of the total bank offices were functioning in the rural and semi-urban areas of the State in 1969 while it was only 58.39 per cent for the country as a whole (Table 2.4). This ratio further increased to 84.57 in 1980 and further to 84.05 per cent in 1987 in the state. The corresponding proportion for the country was 71.42 per cent in 1980 and 75.72 per cent in 1987. Similarly, from the Table, we can also make out tremendous increase in advance of credit and mobilisation of deposit in the rural and semi-urban areas of the state, over a period of 20 years.

District- Wise performance of Banks

Even though the state is better placed in the spread of banking activities, the problem of regional imbalance in banking activities persist even after more than 20 years of nationalisation. The number of branches, credit/deposit ratio and population per branch varies very much across the districts. The number of branches ranges between 398 branches in Ernakulam to 59 branches in Wynad (Table 2.5). Similarly, in the case of credit/deposit ratio, the variation is 201.93 in Wynad to 19.55 in Pathanamthitta, which shows there is a need for improvement. Among the districts, Ernakulam is better served by the commercial banks. As a result of rapid branch expansion in Ernakulam, the per branch population served is only 6370 compared to the state average of 9140 and national average of 13,800.

Table 2.5

District-Wise Performance of Banks (March 1989)

| Name Of District | Number of Branches | c/d. Ratio | Population Per Branch |
|---|---|---|---|
| Trivandrum | 283 | 57.40 | 9173 |
| Quilon | 175 | 117.06 | 13157 |
| Pathanamthitta | 170 | 19.55 | 6939 |
| Alleppey | 193 | 53.30 | 9099 |
| Kottayam | 226 | 58.61 | 7511 |
| Idikki | 96 | 118.11 | 10677 |
| Ernakulam | 398 | 90.65 | 6370 |
| Trichur | 298 | 41.84 | 8186 |
| Palghat | 219 | 60.11 | 9335 |
| Malappuram | 176 | 64.74 | 13730 |
| Kozhikode | 217 | 82.37 | 10347 |
| Wynad | 59 | 201.93 | 9390 |
| Cannanore | 192 | 57.40 | 10056 |
| Kasargod | 99 | 95.03 | 8997 |
| Total Kerala | 2801 | 66.00 | 9140 |
| All India Total | 56960 | 66.00 | 13800 |

Source: Canara Bank (1989).

## Progress of Regional Rural Banks

Of the 196 Regional Rural Banks (RRBs) established in the country by the end of June 1987, only 2 are in Kerala. The South Malabar Gramin Bank (SMGB), sponsored by Canara Bank and the North Malabar Gramin Bank (NMGB), sponsored by the Syndicate Bank are the two RRBs operating in the State. The districts covered by these two banks are Malappuram, Kozhikode and part of Wynad (South) by the SMGB and Cannanore, Kasargod and part of Wynad (North) by the NMGB. Compared to the all-India average for RRBs, both SMGB and NMGB have done exceedingly well in terms of both deposit mobilisation and disbursement of loans. In fact, both the RRBs operating in Kerala are among the few banks in the country that have recorded a profit during 1986. In appreciating the impressive performance of the 2 RRBs in Kerala, however, it

may be noted that the level of income of the target group of these banks is comparatively much better (IBA 1988:81).

Table 2.6

Progress of Regional Rural Banks (June 1987)

| Indicators | Kerala | India |
|---|---|---|
| No. of RRBs | 2 | 196 |
| No. of Districts Covered | 6 | 362 |
| No. of Branches | 262 | 13076 |
| Deposits (Rs. In Lakhs) | 5704 | 190968 |
| Advances(outstanding Rs.in Lakhs) | 11037 | 193353 |
| c/d Ratio | 194 | 101 |
| Staff | 1829 | 48608 |
| Recovery position | | |
| Demand amount(Rs.In Lakhs) | 9688 | 103468 |
| Collection amount ( " ) | 7533 | 51516 |
| Balance (overdue amount) | 2155 | 51953 |
| Percentage of Balance to Demand | 22 | 50 |

Source: IBA (1988:80).

## Priority Sector Advances

After nationalisation of banks the advances of commercial banks towards `priority sectors' which comprised agriculture, small-scale industries, road and water transport operators, retail trade and small business, professional and self-employed persons, and education increased considerably.

Table 2.7
Scheduled Commercial Banks Priority Sector Advances in Kerala for the year 1969 (Amt in lakhs of rupees)

| Sector-wise | Number of Accounts | Amount Outstanding |
|---|---|---|
| a) Agriculture & Allied Activities | 53410 | 819.1 |
| b) Small-Scale Industries | 8109 | 2152.0 |
| c) Road & Water Transport Operators | 352 | 72.3 |
| d) Loans for setting up Industrial Estates | --- | --- |
| Total | 61871 | 3043.4 |

Source: RBI, Statistical Tables Relating To Banks (1970:34).

On the recommendations of the working group on priority sector lending, the Reserve Bank of India, in 1980 issued instructions for the implementation of the following targets. a) Priority sector advances should constitute 40 per cent of the aggregate advances by 1985 and the same is expected to be maintained thereafter. b) 40 per cent of the priority sector advances should be earmarked for agriculture and allied activities. In other words, advances to the agriculture sector would be at least 16 per cent of the total advances by 1985. (Direct finance to agriculture and allied activities is expected to reach a level of 17 per cent of total credit by March 1989. In February 1989, this target was further raised to 18 per cent which was to be achieved by March 1989). c) Direct advances to the weaker sections in agriculture and allied activities (i.e., small and marginal farmers and landless labourers) should reach a level of at least 50 per cent of the total direct lending to agriculture (including allied activities) by 1983. 4) Advances to rural artisans, village craftsmen and cottage industries should constitute 12.5 per cent of the total advances to the small-scale industries by 1985.

Owing to the concerted effort by the successive governments, the total priority sector advances by scheduled Commercial banks have increased from Rs.3,043.4 lakhs in 1969 (Table 2.7) to Rs.1,50,862 lakhs in 1988 (Table 2.8). It is also clear from the Table 2.8 that about 51.05 per cent of total credit is alloted to Priority sector. In that agriculture and allied activities share to total priority sector advances is 39 per cent. But their share in the total credit is 19.94 per cent, which is more than the target fixed.

Table 2.8

Priority Sector Advances In Kerala (Accounts in 000s)(Amount in Rs. lakhs)

| SECTOR | March 1985 | | March 1988 | | | |
|---|---|---|---|---|---|---|
| | No. of Accoun-ts | Balance Outstan-ding | No.of Accou-nts | Balance Outstan-ding | % of Total Advances | %of Total Prio.Sect Advances |
| Agri. & Allied Activities | 1119 | 34752 | 1467 | 58930 | 19.94 | 39.06 |
| Direct Finance | 1110 | 32509 | 1459 | 56534 | 19.13 | 37.47 |
| Indirect Finance | 10 | 2243 | 8 | 2396 | 0.81 | 1.58 |
| Small Scale Industires | 83 | 27639 | 144 | 42741 | 14.46 | 28.33 |
| Setting Up Industrial Estates For SSI | @ | 112 | @ | 9 | 0.003 | 0.006 |
| Small Road & Water Trans-port Operations | 27 | 12056 | 35 | 15196 | 5.14 | 10.07 |
| Retail Trade | 164 | 6582 | 296 | 12188 | 4.12 | 8.08 |
| Small Business | 186 | 5119 | 277 | 9993 | 3.38 | 6.62 |
| Professionals & Self Employed | 168 | 5482 | 259 | 9388 | 3.18 | 6.22 |
| Education | 9 | 204 | 11 | 406 | 0.14 | 0.27 |
| Housing Finance To Weaker Sections | 18 | 666 | 24 | 1514 | 0.51 | 1.00 |
| Consumption Loans | 66 | 491 | 45 | 496 | 0.17 | 0.33 |
| Total Advances To Priority Sectors | 1841 | 93103 | 2559 | 150862 | 51.05 | --- |
| Total Advances To Weaker Sections Of Priority Sector Of which | 1186 | 27490 | 1861 | 56016 | 18.95 | 37.13 |
| I R D P Scheme | 326 | 4937 | 412 | 8314 | 2.81 | 5.61 |
| DRI Scheme | 258 | 2870 | 391 | 6682 | 2.26 | 4.43 |
| Small & Marginal Farmers Landless Labours, Tenant Farmers & Share Croppers | 754 | 21309 | 1159 | 36382 | 12.31 | 24.12 |
| Artisans Village & Cottage Industries | 61 | 1352 | 95 | 3660 | 1.24 | 2.43 |
| SC/ST Beneficiaries | 188 | 2376 | 257 | 8310 | 2.81 | 5.51 |
| Advances under the 20 Point Programme | 475 | 12817 | 1029 | 30445 | 10.30 | 20.18 |

Source: IBA 1988: 68.

Notes: 1. @ Less than 000s.

2. As on March 1988
   No: of branches 2683
   Deposits Rs.4698 crores
   Advances Rs.2955 crores

Between March 1985 and March 1988 the performance under the IRDP scheme and DRI scheme has also seen a significant

improvement. Lending under DRI scheme has accounted for 2.26 per cent of the total advances.

Service Area Approach

With a view to strengthening the existing rural credit delivery system and improve the quality and mechanics of credit planning and ensuring the bank credit is wholly channelised in increasing production, productivity and income levels, Reserve Bank of India recently suggested a new concept known as the "Service Area Approach". The RBI issued comprehensive guidelines to all banks in March 1988 outlining the modalities of implementation of the new scheme. Under this scheme the area of operation of commercial bank branches is specified. Each bank branch is allotted a few panchayat wards/villages for overall development.

In Kerala because of the density of population instead of villages, panchayat wards have been alloted. The total 10092 panchayat wards in Kerala are alloted among the 2277 rural and semi-urban bank branches[6]. On an average 4.5 wards are alloted per bank in Kerala for under the Service Area Approach. The banks after completing the ward survey prepared their credit disbursement plan for the financial year 1989-90 and they were able to achieve the target set on 1989-90.

As at the end of March 1990, credit assistance by scheduled commercial banks under the Service Area Approach stood at Rs.91,415.90 lakhs as against the target of Rs.95,381.85, forming 95.84 per cent achievement (Table 2.9). In 5 districts

(Quilon, Kottayam, Idikki, Palghat and Kasargod) the percentage of achievement was more than the target.

Table 2.9

Service Area Plan 1989-1990 District-Wise Targets and Achievements (all banks) as on 31.03.1990 (Amt in Lakhs)

| Districts | Agriculture and Allied Activities | | SSI/Rural Artisans/ Cottage Industries | | Trade & Services | | Total | | % age |
|---|---|---|---|---|---|---|---|---|---|
| | Target | Achievements | Target | Achievement | Target | Achievement | Target | Achievement | Achieveme |
| Trivandrum | 5531.29 | 4829.01 | 1937.49 | 1758.54 | 2316.33 | 1401.82 | 9785.11 | 7989.37 | 81.65 |
| Quilon | 3888.19 | 3654.89 | 1783.89 | 922.89 | 1901.74 | 4095.01 | 7573.82 | 8672.79 | 114.51 |
| Pathanamthitta | 2240.28 | 2530.16 | 650.76 | 198.59 | 1027.88 | 960.11 | 3918.92 | 3688.86 | 94.13 |
| Alleppey | 2716.98 | 2355.26 | 761.67 | 538.52 | 817.79 | 1154.00 | 4296.44 | 4047.78 | 94.21 |
| Kottayam | 4134.26 | 3995.17 | 1216.96 | 800.14 | 1169.10 | 1865.34 | 6520.32 | 6660.65 | 102.15 |
| Idikki | 2737.85 | 2839.34 | 313.06 | 240.14 | 691.77 | 926.07 | 3742.68 | 4005.55 | 107.02 |
| Ernakulam | 4675.04 | 4226.86 | 2567.52 | 3277.49 | 2422.89 | 2028.14 | 9665.45 | 9532.49 | 98.62 |
| Trichur | 4463.06 | 4381.42 | 1179.68 | 1133.67 | 2026.89 | 1958.89 | 7669.63 | 7473.98 | 97.45 |
| Palghat | 3727.95 | 3585.17 | 170.78 | 481.81 | 1667.75 | 2355.79 | 5566.48 | 6422.77 | 115.38 |
| Malappuram | 5796.27 | 4059.63 | 539.48 | 473.76 | 2272.28 | 2869.14 | 8608.03 | 7402.53 | 86.00 |
| Kozhikode | 5513.73 | 4524.99 | 1256.66 | 990.49 | 3810.42 | 3536.16 | 10580.81 | 9051.64 | 85.55 |
| Wynad | 4592.40 | 3145.41 | 226.70 | 135.10 | 701.90 | 924.80 | 5521.00 | 4205.31 | 76.17 |
| Cannanore | 3985.39 | 3386.74 | 934.08 | 452.98 | 2531.92 | 3605.61 | 7451.39 | 7445.33 | 99.92 |
| Kasargod | 2840.30 | 2703.17 | 411.27 | 479.32 | 1230.20 | 1634.36 | 4481.77 | 4816.85 | 107.48 |
| Kerala (Total) | 56842.99 | 50217.22 | 13950.00 | 11883.44 | 24588.86 | 29315.24 | 95381.85 | 91415.90 | 95.84 |

Source: Canara Bank, Circle Office, Trivandrum.

But this is mainly because of the achievement in the trade and service sector. The credit disbursement faired well in Palghat (115.38 percentage of achievement). Trivandrum is the least performing district (only 81.65 per cent) in this respect. Out of the 14 districts, only Pathanamthitta and Idikki have reached the target on the disbursement of credit for agricultural and allied activities.

## Co-operative Banks in Kerala

In Kerala, the phase of co-operative credit was started following the Indian Co-operative Credit Societies Act (ICCSA) of 1904. The first Agricultural Credit Society registered in the Malabar area was in the Palghat district in 1909. In Cochin it was started in 1913 (Kuttan 1985:7) and only in 1914 in Travancore. Though the ICCSA of 1904 was specially designed to deal with credit aspects only, recognition was later granted to

non-credit societies, central financing societies and unions. The revision of the ICCSA in 1912 was followed by the Travancore Co-operative Societies Regulation, X of 1089 (1914), which initiated the work in the form of co-operative departmental activities in Travancore.

The co-operative movement was enthusiastically welcomed by the needy peasants of Kerala. Though there was a mushroom growth in the number of societies and their membership, the thirties witnessed a rapid decline in both these variables. During the forties the co-operative movement recorded slow but steady progress as it has undergone a process of consolidation and rectification.

The five Year Plans gave more emphasis for the development of co-operatives in Kerala. During the first Five Year Plan (1951-56) the state began to encourage the starting of Co-operative Farming Societies like Collective farming, Joint farming, Tenant farming etc. The Second Plan provided a liberal pattern of State assistance for each farming society. The effect of this was explicit in the growth of number of societies, from 34 in 1955-56 to 126 by 1959-60 (Pillai and Panikar 1965:106). The Second Plan period also witnessed a re-organization of the co-operative movement in Kerala on the basis of the recommendation of the Rural Credit Survey. This phase was crucial for the co-operative movement in the state as there was a withdrawal of both the non-institutional and commercial banks from the field of rural credit. But because of pyramiding (three-tier) financing structure established at this time and also due

to the channelising of funds from the Reserve Bank of India, they could maintain their strength and stability.

Co-operative Credit Structure in Kerala

The co-operative credit structure in the state consists of two parts, one engaged in short and medium-term credit and the other in long-term credit. The former has a three-tier structure which is of pyramid type, the broad base of which is represented by numerous primary agricultural credit societies at the village level. At the top are the apex societies at State level known as the State Co-operative Bank, which is closely linked with the RBI and between these two are found the Central Co-operative Banks at the district level. The purpose of this federal type of structure is to strengthen the primary societies. If the primary society has no funds at its disposal, it applies for finances to the Central Bank and if the Central Bank is in need of funds, it applies to the State Co-operative Bank. The long-term credit structure also is organised under a federal set-up with Central Land Development Bank at the State or apex level and affiliated with primary land development banks at the base level. The institutions are not only federal in structure at the different levels, but also have independent legal entities, which implies that the strength of the chains depends upon the strength of each of the links.

Kerala State Co-operative Apex Bank which was registered as the Trivandrum Central Co-operative Bank in 1915 was the first Co-operative bank started under the Travancore Co-operative Societies Act[7]. When the state was formed in 1956, the bank was

named as Kerala State Co-operative Bank. Since then it was functioning as the State Apex Co-operative Bank. The Kerala State Co-operative Bank has to function within the framework set up on in the co-operative principles of the RBI. The members of Kerala State Co-operative Bank are 12 Central Co-operative Banks and the Kerala Government.

Table 2.10

Performance of Kerala State Co-operative Banks (Amt in lakhs)

| Items | 1969-70 | 1978-79 | 1987-88 |
|---|---|---|---|
| Share Capital (Paid up) | 114.00 | 249.05 | 859.52 |
| Reserve Fund and Other funds | 94.00 | 327.47 | 1675.61 |
| Deposits | 402.00 | 3693.03 | 14328.26 |
| Borrowings | 1053.00 | 965.27 | 13667.52 |
| Working Capital | 1663.65 | 5729.25 | 32732.58 |
| Loans issued to Central Banks | 1330.15 | 3939.73 | 27465.26 |
| Investments | 111.46 | NA | 4055.05 |
| Loans O.S(S.T & M.T) | 1510.69 | 3414.37 | 24240.42 |
| Net profit for the year. | 15.34 | NA | 44.53 |

Source: GoK, The Registrar of Co-operative Societies (1969-70, 1978-79 and 1987-88).

Note: O.S - Outstanding amount, S.T- Short-Term, M.T-Medium-Term.

For working capital (resources) the apex body depend on their share capital, deposits and loans from RBI, NABARD, SBT, National Co-operative Development Corporation (N.C.D.C.) and Industrial Development Bank of India (I.D.B.I.). It accepts all types of deposits including fixed deposits of non-resident Indian's. It has been allowed by Government to accept deposits from municipal corporation, autonomous local bodies and panchayats. It also performs the routine banking business.

The progress of Kerala State Co-operative Bank is depicted in Table 2.10. The Table shows that there was manifold increase in owned funds, deposit mobilisation, loans issued etc by the Kerala State Co-operative Banks over the years.

Kerala District Central Co-opertive Banks (DCCBs) are established at the district level to tap the resources from a wider area and make more resources available to the primary credit societies. These banks also have a few private shareholders who provide both finance and management. The central co-operative banks have three sources of funds, namely (a) their own share capital and reserves (b) deposits from the public, and (c) loans from the State Co-operative Bank. The Co-operative Central Banks are playing a very useful role in attracting funds from the general public and using them for agricultural purposes. They serve as a media through which the funds of the State Co-operative Bank and of the Reserve Bank are passed on to the rural sector. They supervise the working and management of the affiliated Primary Agricultural Credit Societies (PACSs) and train their members in co-operation. They also provide an outlet for investing the reserve of the primary societies. The progress of the Central Co-operative Banks is given in Table 2.11. The bank has an impressive progress over the years, which is revealed from its ten fold increase in the net profit (Table 2.11).

Table 2.11

Performance of Kerala Central Co-operative Banks (Amt in lakhs)

| Items | 1969-70 | 1978-79 | 1987-88 |
|---|---|---|---|
| Share Capital (Paid up) | 418.12 | 1236.56 | 2649.74 |
| Reserve Fund and Other funds | 105.60 | 845.96 | 34976.73 |
| Deposits | 1400.94 | 9463.77 | 18793.83 |
| Borrowings | 1531.71 | 2113.85 | 2863.01 |
| Working Capital | 3456.37 | 14371.01 | 62049.82 |
| Loans issued | 2000.70 | 6608.29 | 40541.65 |
| Loans O.S | 2244.17 | 8588.75 | 34965.88 |
| Net profit for the year | 14.93 | NA | 143.11 |

Source:- GOK, The Registrar of Co-operative Societies, 1969-70, 1978-79 and , 1987-88.

Note: O.S - Outstanding amount.

Kerala Primary Agricultural Credit Societies: Any ten person can form an agricultural credit society with the approval of the Registrar of the Co-operative Societies. The working capital of these societies is obtained by entrance fees, deposits, Government loans and loans from central societies and the State Co-operative Bank. The PACSs provide short and medium-term credit, supply agricultural and other production requirements, and also undertake marketing of agricultural produce as their functions. Loans are given only to members and are given against personal security or under mortgage. Co-operatives also help in formulating and implementing a plan for agricultural production for the village and undertake such educative, advisory and welfare functions as the members might be willing to take up. The societies are also expected to inculcate the habit of thrift and saving among their members. The progress made by PACSs is depicted in the following Table.

Table 2.12

Performance of Kerala Primary Agricultural Credit Societies (Amt in lakhs)

| Items | 1969-70 | 1978-79 | 1987-88 |
|---|---|---|---|
| No: Of Societies | 1912 | 1616 | 1537 |
| No: of Members (in Lakhs) | 15.02 | 31.58 | 70285.08 |
| Share Capital (Paid up) (in Lakhs) | 791.11 | 2254.19 | 5996.61 |
| Reserve Fund and Other funds | 270.67 | 1195.92 | 4654.46 |
| Deposits | 877.87 | 9081.02 | 52356.88 |
| Borrowings | 2219.36 | 6328.99 | 27804.54 |
| Working Capital | 4159.01 | 18860.12 | 90812.49 |
| Loans issued | 2572.6 | 13897.39 | 65659.72 |
| Loans O.S | 2970.67 | 13013.41 | 67618.06 |
| Loans Overdue | 710.71 | 2600.65 | 12761.77 |
| No:of societies worked at profit | 1131 | 915 | 757 |
| No: of societies worked at loss | 711 | 699 | 739 |
| No: of societies without profit/loss | 70 | 2 | 41 |

Source: GoK, The Registrar of Co-operative Societies, (1969-70, 1978-79 and 1987-88).

Note: O.S - Outstanding amount.

Even though the number of primary credit societies is declining over the years, the membership has shown a significant

increase over the years. Deposit has also registered a significant increase. One of the disquieting feature of the Kerala PACSs is the decrease in the number of societies 'worked at profit, and the increase in the number of societies 'worked at loss' between 1970-1988. The reduction in the number of societies has been due to the policy of revitalisation and reorganisation of PACSs by weeding out dormant and non viable units, followed by the Government.

Kerala State Co-operative Agricultural Development Banks Ltd is the is the main institution which provides long-term credit to the farmers. It was set up in 1956 with its head quarters in Trivandrum. This bank was earlier named Kerala State Central Land Mortgage Banks. Till 1968 the main function of the bank was helping farmers in redemption of old debts. After 1968 they changed their lending policy.

Table 2.13
Performance of Kerala State Co-operative Agriculture Development Banks
(Amt inlakhs)

| Items | 1969-70 | 1978-79 | 1987-88 |
|---|---|---|---|
| Share Capital (Paid up) | 55.05 | 246.31 | 739.79 |
| Reserve Fund and Other funds | 23.36 | 158.01 | 1997.11 |
| Deposits | 1.97 | 16.99 | 148.95 |
| Borrowings | 772.43 | 4625.79 | 24028.87 |
| Working capital | 852.81 | 5258.64 | 28768.30 |
| Investments | 224.49 | NA | 5540.25 |
| Loans issued | 129.88 | 1027.07 | 4880.82 |
| Loans O.S | 615.13 | 3935.57 | 20484.36 |
| Debentures O.S | 772.43 | NA | NA |
| Net profit for the year. | 8.72 | NA | 121.17 |

Source: GOK, The Registrar of Co-operative Societies, 1969-70, 1978-79 and 1987-88.
Note: O.S - Outstanding amount.

Acting on RBI directions they started lending for development purposes. It was stipulated that 70 per cent should be channeled for directly productive activities. Now loans are

given for small scale irrigational purposes, bunding, for buying machines, etc. Each loan is sanctioned on the recommendation of Director of Agricultural Department and project report prepared by the agricultural officers. The time duration of the loan is for 7 to 15 years. The loan period is determined on the basis of the security given and the ability of the borrowers to repay the loan. Loans are repaid on annual installments. The performance of PADBs is given in Table 2.13. Compared to other banks the deposit mobilisation of agricultural development bank is low.

Kerala Primary Agricultural Development Bank

The main institution which extend long-term credit directly to the farmers are the Primary Agricultural Development Banks. The progress of PADBs is shown in Table 2.14.

Table 2.14

Performance of Primary Agricultural Development Banks (Amt in lakhs)

| Items | 1970-71 | 1978-79 | 1987-88 |
|---|---|---|---|
| No: Of Banks | 22 | 33 | 39 |
| Membership | 69032 | 249775 | 375463 |
| Paid up capital | 52.00 | 286.47 | 1393.81 |
| Reserves & other funds | 7.22 | 66.85 | 820.63 |
| Deposits & other borrowings | 728.04 | 3868.93 | 19839.21 |
| Working capital | 787.26 | 4486.66 | 22053.65 |
| Loans outstanding | 720.99 | 3909.53 | 21721.99 |
| Loans overdue | 21.86 | 157.36 | 460.64 |
| Loans advanced | 155.38 | 976.44 | 4966.21 |
| Profit amount | 6.88 | 28.87 | 150.54 |
| Branches having profit | 19 | 25 | 30 |
| Loss amount | .11 | 10.96 | 51.57 |
| Branches showing loss | 2 | 8 | 9 |

Source: GoK, The Registrar of Co-operative Societies (1970-71, 1978-79 and 1987-88).

Note: O.S - Outstanding amount.

It will be seen that the membership had increased from 0.69 lakhs in 1970-71 to 3.75 lakhs in 1987-88. Unlike the PACSs the number

of PADBs have increased from 22 in 1970-71 to 39 in 1987-88. The advances of PADBs increased from Rs. 155.38 lakhs in 1970-71 to Rs. 4966.21 lakhs by 1987-88. This shows the increase in the disbursement of long-term loans in the state.

Thus the main function of Co-operative Banks in Kerala is the disbursement of credit for agricultural purposes through 12 district Co-operative Bank (having 257 branches), 1569 Primary Agricultural Credit Societies, non-agricultural credit societies and urban co-operative banks. They give short-term and medium-term loans to farmers for agricultural production and also give credit for its allied activities like animal husbandry and poultry. In addition to that advances are given for other priority sector also. They also give financial assistance for several development projects like, integrated fisheries development project and rubber processing unit with the help of NABARD, National Co-operative Development Corporation etc.

Conclusion

Thus, the main focus of discussion of this chapter was on the evolution, nature and composition of banking in Kerala. We have tried to provide detailed information regarding the development process of the banking sector in Kerala in an almost chronological manner along with the socio-economic background for its emergence. The possible factors which acted as catalysts for the development of banking activities in Kerala are the large scale sub-division of holdings due to the changing property right regulations, the large scale reclamation of land, commercialisation of agriculture and the sporadic development of

agro-processing and trade activities with the help of sound transport facilities. One can also observe tremendous increase in the banking activities in the state from the post nationalisation period. An overview of the current banking activities reveals that in Kerala even though there is regional imbalance in the banking activities, the state as a whole is in the forefront of banking activities compared to all-India especially in the spread of branches, per capita deposit and per capita advances. But compared to the commercial banks performance in the spreading of branches in Kerala the number of Primary Agricultural Credit Societies has been showing a declining trend, even though there was an increase in membership in each of the societies. In the fifties itself the banking sector in Kerala gave much importance towards agriculture and its allied activities. In the next chapter we will be analysing the performance of agricultural credit disbursement from co-operative institutions and commercial banks in a disaggregated level.

## Foot notes

1. The Thiruvalla bank was established by Paulose, father of C.P.Mathen of Chalakuzhiyil family, who founded the Quilon bank later.

2. Thayyil Bank was a partnership business started by K.I.Cherian (Kandathil), father of K.C.Mammen Mappillai.

3. The 11 non-scheduled banks existed in 1940 were as follows:-

| | Name of the bank | Year of starting |
|---|---|---|
| a) | Bank of Cochin, Ernakulam | 1928 |
| b) | Catholic Bank of India, Chaganasherry | 1938 |
| c) | Catholic Syrian Bank, Trichur | 1920 |
| d) | Central Banking Corporation of Travancore, Alleppey | 1925 |
| e) | Caldian Syrian Bank, Mattacheri | 1936 |
| f) | Cochin Nayar Bank, Trichur | 1929 |
| g) | Dhanalakshmi Bank, Trichur | 1927 |
| h) | Kottayam Bank, Kottayam | 1926 |
| i) | Melarkode Bank, Palghat | 1933 |
| j) | Trivandrum Permanent fund, Trivandrum | 1899 |

4. The total out-migrants from Kerala in November 1977 stood at 4.32 lakh, out of which 1.35 lakh were working outside India. This increased to 6.82 lakh in early 1987. Out of the 6.82 lakh migrants from Kerala, 48 per cent are foreign migrants. Gulf emigrants constitute over 91 per cent of the foreign migrants. Between early 1980 to early 1987 the total number of migrants increased by 34 per cent. While the number of migrants to gulf countries increased by 60 per cent. (GOK 1987: 4.7).

5. The total number of gulf returnees between the period 1970 to 1987 was estimated as 86,475. Out of this the percentage of returnees between 1970 to 1975 was only 0.5 per cent. Over 70 per cent of the returnees came during the three year period 1984-86 (GOK 1987: 4.8).

6. The allotment of wards under each branch under Service Area Approach.

| | Branches | Wards |
|---|---|---|
| Rural | 568 | 3440 |
| Semi-urban | 1688 | 6529 |
| Urban | 21 | 123 |
| | 2277 | 10092 |

Source: Canara Bank, Trivandrum.

7. In 1943 Kerala State Co-operative Apex bank was named Travancore Central Co-operative Bank and in 1954 it was changed to Travancore Cochin State Co-operative Bank.

# Chapter 3

## Disaggregated Analysis of Agricultural Credit in Kerala

One of the main objectives of this study is to examine the structure, pattern and growth of institutional credit for agriculture in Kerala. Hence in this chapter, we shall deal with the above issues in detail for the state as a whole and across the districts for the period 1961-62 to 1985-86.

Financing agriculture simply means the extension of financial assistance to the farmers for productive agricultural purposes. Evidently from the Kerala experience both co-operatives and commercial banks have offered a noteworthy service to the agricultural sector by providing short-term, medium-term and long-term loans to the farmers. The overall performance of the agricultural finance can be measured by the growth rate of different types of credit, viz, short-term, medium-term and long-term credit by co-operatives and direct and indirect finance by commercial banks.

The Agricultural Credit Review Committee chaired by A.M.Khusro calculated the compound rate of growth of direct agricultural credit by institutional agencies in India over the period from 1974-75 to 1984-85. The compound rate of growth of direct agricultural credit by co-operative institutions and commercial banks for the period is given in the Table 3.1.

In the case of short-term loans, the growth rate during the period 1974-75 to 1984-85 was higher in respect of Scheduled Commercial Banks (CBs) as compared to the Primary Agricultural Credit Societies (PACSs). This is mainly because of the low base

of the former in 1974-75. Similarly, in the case of medium and long-term loans, the growth rate of term loans by the PACSs was higher than that of commercial banks for the same period. This is also due to the lower base of term loans advances by the PACSs. In the case of Land Development Banks (LDBs) the growth rate of term loans stood low owing to the high level of overdue (RBI 1989:800).

Table 3.1
Growth of Direct Agricultural credit in India during the period 1974-75 to 1984-85

| | Compound rate of growth-percent per annum |
|---|---|
| A. Short-term Credit | |
| Primary Agricultural Credit Societies (PACSs) | 11.84 |
| Scheduled Commercial Banks (CBs) | 19.63 |
| Total | 14.17 |
| B.Medium and Long-term Credit | |
| Primary Agricultural Credit Societies | 26.43 |
| Land Development Banks (LDBs) | 9.45 |
| Scheduled Commercial Banks | 21.75 |
| Total | 20.41 |
| C.Total Direct Agricultural Credit | |
| | Loans issued / Loans outstanding |
| PACSs,LDBs & CBs | 16.28 / 16.53 |

Source: RBI (1989:799, Chapter xxii, Table 15).

For understanding the institutional credit performance in Kerala we have calculated the compound growth rates of the credit extended by the institutional agencies using the exponential function. Although general functional forms such as linear, semilog, gompertz, logistic, etc., are available, for the purpose we have selected the exponential method mainly due to the following reasons: 1) exponential function assumes a non-linear trend but it can be linearised using logarithmic transformation;

2) it has the remarkable mathematical property of being its own derivative; and 3) it can be given an economic interpretation of a special process of interest compounding.

The growth rate of credit is also examined for the two sub-periods called period I (1961-62 to 1974-75) and period II (1975-76 to 1985-86). We have chosen 1974-75 as the year for separating the two sub-periods because studies have shown that in Kerala since the mid-seventies there is stagnancy in agricultural production, yield and area (Kannan and Pushpangadan 1988). So it will be interesting to probe whether there is a change in the pattern of agricultural credit before and after stagnation has set on. As the district-wise data on co-operative credit are available only from 1964-65 onwards, the first period can only be taken from 1964-65 onwards. Similarly, due to unavailability of data the growth rates of commercial bank credit is computed only for the second period and whole period (1968-69 to 1985-86 for the state as a whole and 1972-73 to 1985-86 for district-wise analysis). For period-wise calculation we have used kinked exponential suggested by Boyce (1986) for removing the possible inconsistency due to discontinuous growth rate estimation using exponential trend function.

Sources of data

The data on co-operative credit (as on 30 June of every year) are obtained from the Registrar of Co-operative Societies. The data for commercial banks are obtained from the Reserve Bank of India, Basic Statistical Returns (BSR) and Statistical Tables relating to Banks. Since BSR is obtained only from 1972-73 onwards, data on commercial banks direct and indirect finance

from 1968-69 to 1971-72 is taken from Statistical Tables Relating to Banks as on last Friday of December every year (data as on June 30 is not available till 1973). But from 1972-73 onwards, we depended on BSR data as on last Friday of June every year, to ensure comparability of co-operatives and commercial bank data. To get a time series data of direct and indirect finance the data from 1978 to 1986 is taken as such, and direct finance from 1973 to 1977 is obtained by adding direct finance for agriculture excluding plantations, plantations, and allied activities. For total institutional credit since data for commercial banks is "outstanding credit" and not advanced both outstanding credit of co-operative and commercial banks is clubbed together. Till 1969 data on commercial bank agricultural credit is not available, but it is negligible. Outstanding credit is defined as this year's credit advanced plus last year's outstanding credit minus this year's recovery. It is also called `Stock'.

Combination of districts

For district-wise analysis the growth rate for the period may be misleading due to the new district formation, combining different taluks from different districts. All the districts came across this process except Trivandrum and Trichur. In order to overcome the problem of district formation we have combined the affected districts under three different groups such as QPA group (it includes Quilon, Pathanamthitta and Alleppey), KIE group (it includes Kottayam, Idikki and Ernakulam) and PMKWCK group (it includes Palghat, Malappuram, Kozhikode, Wynad, Cannanore and Kasargod). More details can be seen in Appendix3.1.

## Growth Rates of Total Institutional Agricultural Credit

Table 3.2 brings out the growth rates of total institutional credit for agriculture both for the state as a whole and district/group of districts-wise. Total institutional credit includes, outstanding credit of both co-operatives and commercial banks. From the Table it is clear that the credit extended to agriculture and allied activities have considerably increased over the period of analysis in the state and also in the districts/group of districts.

The significant growth rate in the second period may not be much in real terms. In order to examine this we have calculated the sub-period growth rate of inflation proxied by the change in the wholesale price index. The period-wise growth rate is 7.60 for the first period and 8.19 for the second period (GoK, State Planning Board Various issues). Therefore the difference in the growth rate of inflation between the two periods is only 0.59 percent. So the increased growth rate at the state level is valid in real terms as well. Since the difference between the inflationary rate is very small between the two period we have decided to use only nominal growth rate in credit for the rest of the analysis. Since the period of analysis is different at the district level due to unavailability of data, we have calculated growth rate in inflation for the same period of the district-wise analysis. The sub-period growth rates are 7.42 for the first period and 8.25 for the second period. The difference between the two growth rates is 0.83 percent. The conclusions are still valid in real terms if the second period growth rate is lower than the first period. If the second period growth rate is higher than the

first period, conclusions are valid only if the difference between the two growth rates in credit is more than the difference between the inflation. Moreover, the conclusions on the inter-institutional and inter-district analysis will not be affected, whether it is nominal term or real term.

Table 3.2
Growth rates in Total Agricultural Credit

| Regions/Districts | Period I | Period II | Period I&II |
|---|---|---|---|
| Trivandrum | 24.82 | 27.67 | 26.24 |
| QPA | 20.27 | 21.74 | 21.00 |
| KIE | 23.73 | 20.90 | 22.31 |
| Trichur | 19.97 | 18.90 | 19.43 |
| PMKWCK | 20.20 | 21.98 | 21.09 |
| Kerala | 21.30 | 20.66 | 21.04 |

Source: 1. GoK, The Registrar of Co-operative Societies (various issues);
2. RBI, Statistical Tables Relating to Banks (various issues);
3. RBI, Banking Statistics, Basic Statistical Returns (various issues).

Notes: 1. For Kerala, period I= 1961-62 to 1974-75;
district-wise period I= 1964-65 to 1974-75;
period II is 1975-76 to 1985-86.
2. QPA- Quilon, Pathanamthitta and Alleppey;
KIE- Kottayam, Idikki and Ernakulam;
PMKWCK- Palghat, Malappuram, Kozhikode, Wynad, Cannanore and Kasargod.
3. The growth rates are significant at 5 % level.

In the state, the rate of growth of agricultural credit was around 21 percent through out the whole period and more or less same for the two sub-periods. But when it comes to district/group-wise, the growth rate is higher for the second period for Trivandrum, QPA group and PMKWCK group. Among the districts/regions, Trivandrum has the highest and Trichur has the lowest growth rate for the two sub-periods and for the whole period. The higher growth rate in the first period for Trichur, KIE group and in the state as a whole may be mainly because of the entry of commercial banks by 1969.

The significant increase in total institutional credit for agriculture in the state and across the districts may be due to the increase in the number of marginal and small land holders, because considering the fact that they are low income farmers, there will be an increase in the demand for agricultural credit.

Table 3.3
Proportion of Marginal and Small Farm Holders in the Total Land Holdings

| Regions/Districts | 1974-75 | 1985-86* |
|---|---|---|
| Trivandrum | 98.51 | 99.38 |
| QPA | 98.10 | 98.98 |
| KIE | 93.80 | 96.46 |
| Trichur | 98.11 | 98.67 |
| PMKWCK | 93.44 | 95.98 |
| Kerala | 95.55 | 97.35 |

Source: GoK, DES, Agricultural Census (1976-77 & 1985-86).
Notes: 1. ` * '= provisional.
2. See note 2 of Table 3.2.

Usually the marginal and small farmers will not have any surplus to invest specially for long term purposes or even for short term seasonal operations. Even the surplus which a very few have would be far less than adequate for efficient cultivation using modern agricultural practices. From Table 3.2 and Table 3.3, it is evident that Trivandrum has the highest growth rate in credit with highest proportion of marginal and small farm holders in the second period.

Another reason for the increase in agricultural credit may be due the increase in the area of non-food crops as is revealed from Table 3.4. As for bringing more area under cultivation, more credit is needed. Usually cash crops obtain more credit than the food crops. Of the non-food crops, rubber has perhaps the best institutional support among all the major

crops in Kerala. Because of this financial support, rubber is the only crop which shows consistently positive growth in output for all the districts for both the periods except for Trichur for the second period. Along with rubber, the only crop which has registered a good performance in terms of growth in output is coffee. But this crop is confined mainly to two districts namely, Wynad and Idikki. The good performance in terms of growth in output is mainly due to growth in area especially in Wynad district for both the periods (Kannan and Pushpangadan 1990).

Table 3.4
Proportion of Area Under Non-Food Crops

| Regions/Districts | Percentage of area under non-food crops 1974-75 | 1985-86 | change between the period 1974-75 1985-86 |
|---|---|---|---|
| Trivandrum | 36.08 | 42.55 | 6.47 |
| QPA | 38.44 | 47.20 | 8.76 |
| KIE | 44.35 | 49.42 | 5.06 |
| Trichur | 29.82 | 34.59 | 4.77 |
| PMKWCK | 35.69 | 41.48 | 5.79 |
| Kerala | 37.72 | 43.92 | 6.20 |

Source: GoK, DES, Seasonal and Crop Report of Kerala state (1974-75 and 1985-86).
Note: See note 2 of Table 3.2.

The increase in total agricultural credit in the state and also across the districts may be also due to the implementation of the `Kerala Chitties Act' in August 25, 1975, which made almost all private Kuri institutions reluctant to start new kuries and a large number of kuri companies and individually run kuries were forced to close down their business (Prakash 1986:2129). So naturally people in need of short term easy credit (which form a major share in the total credit) must have increasingly turned to institutional agencies like

co-operatives and commercial banks mainly for agricultural purposes, even though their dependence on private financing firms for business purposes continued for a long time.

Growth Rates of Co-operative and Commercial Bank Credit

From Graph 3.1 and 3.2, it is clear that there is accelerated growth rates in the credit expansion of co-operatives and commercial banks, especially in the second period. In the case of PACSs and total co-operative institutions the second period growth rate is more than the first period at the state and disaggregated level (Table 3.5). This may be mainly because of the increase in the number of members served by PACSs (Table 3.10). At the same time in the case of PADBs, the second period growth rate is less than that of the first period, for the state as well as for the groups KIE and PMKWCK. For the whole and second period, commercial bank credit has also increased considerably.

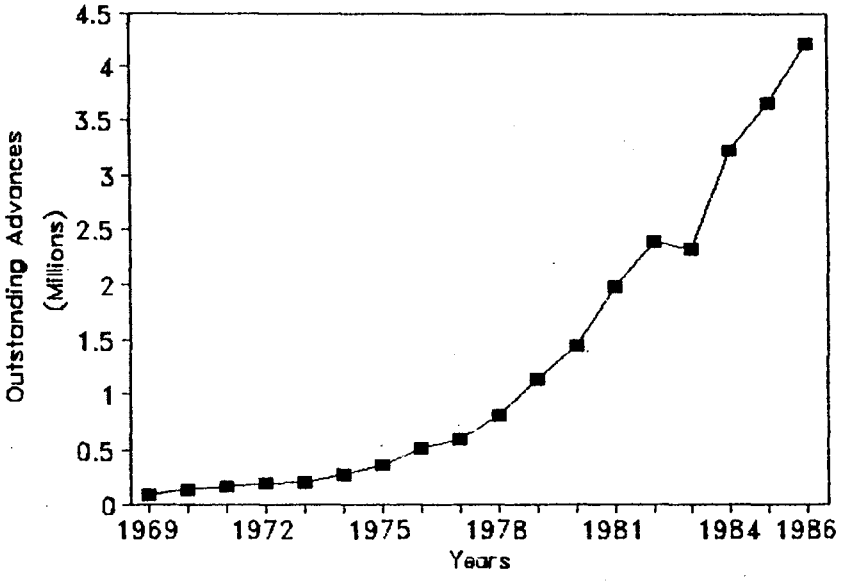
Table 3.5
Institution-Wise Rates of Growth of Total Outstanding Agricultural Credit

| Regions | PACSs | | | PADBs | | | Co-operatives | | | Commercial Banks | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Period I | II | I & II | I | II | I & II | I | II | I & II | II | Whole |
| Trivandrum | 15.90 | 24.78 | 20.34 | 22.76 | 24.81 | 23.78 | 18.25 | 25.00 | 21.63 | 30.65 | 26.49 |
| QPA | 14.75 | 19.87 | 17.31 | 17.67 | 21.41 | 19.54 | 15.36 | 20.22 | 17.79 | 20.41 | 25.64 |
| KIE | 17.40 | 21.15 | 19.28 | 21.29 | 19.05 | 20.17 | 18.06 | 20.75 | 19.40 | 17.91 | 19.73 |
| Trichur | 15.39 | 16.10 | 15.75 | 17.27 | 18.56 | 17.91 | 15.77 | 16.48 | 16.12 | 21.17 | 23.87 |
| PMKWCK | 14.27 | 19.87 | 17.07 | 22.02 | 20.75 | 21.39 | 15.59 | 20.15 | 17.87 | 22.29 | 25.23 |
| Kerala | 16.12 | 19.67 | 17.57 | 23.26 | 19.77 | 21.83 | 17.30 | 19.82 | 18.33 | 21.69 | 23.54 |

Source: Same as in Table 3.2.
Notes: 1. For Co-operatives, Period 1 & period 11 same as in Table 3.2.
For Commercial Banks, State Whole Period= 1968-69 to 1985-86;
district-wise= 1972-73 to 1985-86;
period II= 1975-76 to 1985-86.
2. PACSs - Primary Agricultural Credit Societies;
PADBs - Primary Agricultural Development Banks.
3. See note 2 of Table 3.2.
4. Growth rates are significant at 5 % level.

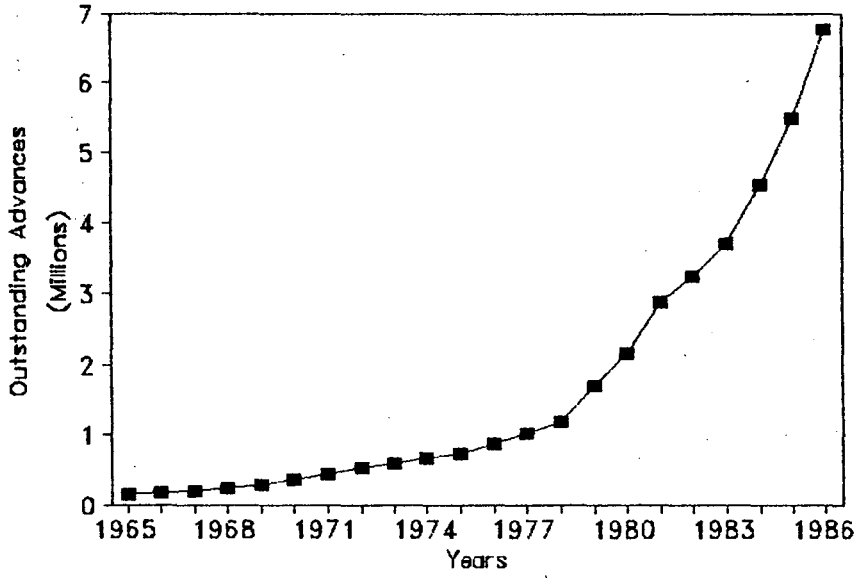
Graph 3.1

Scheduled Commercial Banks Advances to Agriculture and Allied Activities




Graph 3.2

Co-operatives Advances to Agriculture and Allied Activities



In the institution/district-wise analysis also, for the whole period and second period Trivandrum displays the highest growth rate.

When we compare the performance of agricultural credit institutions (by considering the second period growth rate), it is clear that the only district/group of districts where the PADBs outstanding agricultural credit growth rate is less than that of PACSs is the KIE district group. It is also the only district group where the outstanding agricultural credit growth rate of commercial banks is less than that of the co-operatives. Thus commercial banks are performing better than co-operative institutions in majority of the district groups during the second period.

To investigate whether the high agricultural credit growth rate of commercial banks have influenced their share in the total institutional credit, we have analysed in this section the share of co-operatives and scheduled commercial banks in the total agricultural credit at the state level and disaggregated level.

The share analysis begins with an examination of the all-India pattern given in the Agricultural Credit Review Committee (1989) reproduced in Table 3.6. It may be seen from the Table that, in India there has been an increasing trend in the share of commercial banks agricultural loans in the total agricultural credit, in the short-term, medium and long-term credit. This is also true in the case of flow (i.e., loans issued) as well as in the stock (i.e., outstanding).

Table 3.6

Institution-Wise Share of Agricultural Credit in India

| Category | 1974-75 | | 1980-81 | | 1984-85 | |
|---|---|---|---|---|---|---|
| | Co-operative | Commercial/RRBs | Co-operative | Commercial/RRBs | Co-operative | Commercial/RRBs |
| Short-term loans | 83.69 (78.61) | 16.31 (21.39) | 68.70 (60.00) | 31.30 (40.00) | 64.15 (56.65) | 35.85 (43.35) |
| Term loans (M.T & L.T) | 69.27 (79.80) | 30.73 (20.20) | 45.60 (57.42) | 54.40 (42.58) | 29.68 (40.74) | 70.32 (59.26) |

Source: RBI (1989:800, Chapter XXII, Table 16).

Notes: 1. Figures in brackets relate to share in stock, i.e., outstanding.

2. RRBs- Regional Rural Banks.

Now let us analyse the share of institutions in the total agricultural credit in Kerala and region-wise. We found that as against the all-India pattern co-operatives still dominate in agricultural credit in almost all the places in Kerala (Table 3.7). But in Trivandrum inspite of the late entry of commercial banks into the field of agricultural credit, for many years their proportionate share was more than that of the co-operatives. It is interesting to note that in almost all the districts (especially in the northern parts of Kerala, ie., from Trichur to Kasargod) the commercial banks share in the total agricultural credit is showing a rising trend.

One possible reason for the high growth rate of commercial bank credit, and also for their increasing share in the total agriculture is that, it has to achieve the target mandated by the RBI. For example, 16 per cent of total scheduled commercial bank credit should be given for agriculture by 1985, etc.

Table 3.7

Institution-Wise Share of Agricultural Credit (In Percentages)

| Year | Kerala PACSs | PADBs | Co-operat-ive Total | Commer cial | Trivandrum PACSs | PADBs | Co-operat-ive Total | Comme-cial | QPA PACSs | PADBs | Co-operat-ive Total | Comme cial |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1968-69 | 37.50 | 8.33 | 45.83 | 54.17 | | | | | | | | |
| 1969-70 | 38.33 | 7.78 | 46.11 | 53.89 | | | | | | | | |
| 1970-71 | 38.45 | 7.70 | 46.15 | 53.85 | | | | | | | | |
| 1971-72 | 37.58 | 8.28 | 45.86 | 54.14 | | | | | | | | |
| 1972-73 | 58.38 | 15.01 | 73.39 | 26.61 | 29.72 | 16.06 | 45.78 | 54.22 | 67.79 | 15.85 | 83.64 | 16.36 |
| 1973-74 | 55.94 | 15.39 | 71.34 | 28.66 | 35.08 | 23.04 | 58.12 | 41.88 | 62.46 | 16.28 | 78.74 | 21.26 |
| 1974-75 | 51.84 | 15.53 | 67.37 | 32.63 | 31.14 | 22.28 | 53.42 | 46.58 | 56.87 | 14.90 | 71.77 | 28.23 |
| 1975-76 | 47.79 | 14.62 | 62.41 | 37.59 | 30.30 | 24.65 | 54.94 | 45.06 | 48.83 | 12.83 | 61.66 | 38.34 |
| 1976-77 | 46.98 | 16.22 | 63.20 | 36.80 | 30.94 | 28.41 | 59.35 | 40.65 | 48.66 | 14.59 | 63.25 | 36.75 |
| 1977-78 | 43.10 | 16.21 | 59.32 | 40.68 | 30.41 | 28.89 | 59.30 | 40.70 | 44.57 | 15.77 | 60.34 | 39.66 |
| 1978-79 | 45.95 | 13.81 | 59.76 | 40.24 | 32.86 | 27.02 | 59.89 | 40.11 | 44.70 | 14.86 | 59.56 | 40.44 |
| 1979-80 | 47.51 | 12.40 | 59.91 | 40.09 | 34.02 | 13.41 | 47.42 | 52.58 | 43.63 | 14.28 | 57.91 | 42.09 |
| 1980-81 | 45.34 | 14.05 | 59.39 | 40.61 | 28.26 | 28.15 | 56.41 | 43.59 | 40.91 | 15.87 | 56.77 | 43.23 |
| 1981-82 | 43.02 | 14.50 | 57.52 | 42.48 | 23.76 | 25.95 | 49.71 | 50.29 | 37.57 | 15.30 | 52.86 | 47.14 |
| 1982-83 | 45.88 | 15.53 | 61.41 | 38.59 | 22.35 | 26.42 | 48.76 | 51.24 | 53.04 | 14.30 | 67.34 | 32.66 |
| 1983-84 | 44.03 | 14.42 | 58.45 | 41.55 | 19.20 | 17.43 | 36.63 | 63.37 | 47.72 | 14.52 | 62.24 | 37.76 |
| 1984-85 | 45.33 | 14.75 | 60.08 | 39.92 | 27.70 | 18.04 | 45.74 | 54.26 | 49.80 | 14.48 | 64.28 | 35.72 |
| 1985-86 | 46.82 | 14.79 | 61.60 | 38.40 | 30.97 | 18.65 | 49.62 | 50.38 | 50.03 | 15.00 | 65.03 | 34.97 |

Source: Same as in Table 3.2.

Notes: Total institutional credit comprises the sum of total co-operative share and commercial share ; or the sum of PACSs share, PADBs share and share of commercial bank.
Total institutional credit is given in Appendix 3.4.

(continued)

Table 3.7

Share of Agricultural Credit Institutions in the Total Agricultural Credit (In Percentages)

| Year | KIE PACSs | PADBs | Co-operat-ive Total | Commer cial | Trichur PACSs | PADBs | Co-operat-ive Total | Comme cial | PMKWCK PACSs | PADBs | Co-operat-ive Total | Commer cial |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1972-73 | 50.53 | 12.87 | 63.40 | 36.60 | 68.73 | 13.51 | 82.24 | 17.76 | 63.48 | 16.41 | 79.89 | 20.11 |
| 1973-74 | 46.21 | 13.10 | 59.31 | 40.69 | 61.99 | 15.24 | 77.22 | 22.78 | 61.45 | 15.25 | 76.70 | 23.30 |
| 1974-75 | 44.37 | 10.36 | 54.73 | 45.27 | 57.25 | 17.64 | 74.89 | 25.11 | 54.46 | 14.60 | 69.06 | 30.94 |
| 1975-76 | 44.37 | 11.94 | 56.31 | 43.69 | 50.19 | 17.19 | 67.38 | 32.62 | 51.25 | 14.35 | 65.59 | 34.41 |
| 1976-77 | 43.36 | 11.88 | 55.24 | 44.76 | 48.62 | 17.65 | 66.27 | 33.73 | 50.95 | 16.96 | 67.91 | 32.09 |
| 1977-78 | 47.15 | 12.23 | 59.38 | 40.62 | 40.85 | 15.43 | 56.27 | 43.73 | 42.40 | 16.30 | 58.69 | 41.31 |
| 1978-79 | 48.32 | 10.27 | 58.59 | 41.41 | 52.09 | 12.99 | 65.08 | 34.92 | 45.41 | 13.06 | 58.47 | 41.53 |
| 1979-80 | 49.62 | 9.28 | 58.90 | 41.10 | 53.40 | 11.35 | 64.74 | 35.26 | 48.13 | 13.40 | 61.53 | 38.47 |
| 1980-81 | 46.79 | 9.60 | 56.39 | 43.61 | 44.29 | 11.46 | 55.75 | 44.25 | 50.51 | 12.68 | 63.19 | 36.81 |
| 1981-82 | 44.25 | 10.66 | 54.91 | 45.09 | 52.65 | 12.43 | 65.08 | 34.92 | 47.20 | 13.66 | 60.86 | 39.14 |
| 1982-83 | 53.47 | 11.46 | 64.92 | 35.08 | 50.32 | 13.18 | 63.51 | 36.49 | 43.43 | 15.80 | 59.23 | 40.77 |
| 1983-84 | 50.80 | 11.37 | 62.17 | 37.83 | 44.84 | 12.92 | 57.75 | 42.25 | 46.12 | 15.09 | 61.20 | 38.80 |
| 1984-85 | 50.53 | 11.50 | 62.03 | 37.97 | 44.88 | 14.03 | 58.91 | 41.09 | 45.42 | 15.50 | 60.92 | 39.08 |
| 1985-86 | 50.15 | 11.62 | 61.76 | 38.24 | 44.46 | 14.53 | 58.99 | 41.01 | 47.45 | 15.09 | 62.54 | 37.46 |

Source: Same as in Table 3.2.

Notes: Total institutional credit comprises the sum of total co-operative share and commercial share ; or the sum of PACSs share, PADBs share and share of commercial bank.
Total institutional credit is given in Appendix 3.4.

Another possible reason is the larger increase in the number of branches of commercial banks as compared to co-operatives (Table 3.8).

Table 3.8

Changes in the Number of Branches of Various Institutional Agencies

| | PACSs No:of Societies | | Change between the period | PADBs No:of Societies | | Change between the period | Co-operatives No:of Societies | | Change between the period | Commercial Banks No: of Offices | | Change between the period |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1974-75 | 1985-86 | 1974-75 & 1985-86 | 1974-75 | 1985-86 | 1974-75 & 1985-86 | 1974-75 | 1985-86 | 1974-75 & 1985-86 | 1974-75 | 1985-86 | 1974-75 & 1985-86 |
| Trivandrum | 56 | 38 | -18 | 1 | 1 | 0 | 57 | 39 | -18 | 49 | 104 | 55 |
| QPA | 93 | 74 | -19 | 2 | 1 | 1 | 95 | 75 | -20 | 42 | 92 | 50 |
| KIE | 87 | 68 | -19 | 1 | 1 | 0 | 88 | 69 | -19 | 70 | 130 | 60 |
| Trichur | 73 | 59 | -14 | 1 | 1 | 0 | 74 | 60 | -14 | 63 | 114 | 51 |
| PMKWCK | 61 | 47 | -14 | 2 | 1 | 1 | 63 | 48 | -15 | 42 | 86 | 44 |
| Kerala | 74 | 57 | -17 | 1 | 1 | 0 | 75 | 58 | -17 | 50 | 101 | 51 |

Source: 1. GoK, The Registrar of Co-operative Societies (1974-75 and 1985-86),
2. RBI, Banking Statistics, Basic Statistical Returns (1975 and 1986).

Notes: 1. See note 2 of Table 3.2.
2. See note 2 of Table 3.5.
3. Societies and offices are given per 10 lakh population.

Table 3.8 shows the changes in the number of branches of co-operative and commercial banks per 10 lakh population over the period 1974-75 and 1985-86. It is clear from the Table that compared to co-operative institutions there is an increase in the number of commercial banks. This increase in the number of branches of commercial banks in almost all the regions along with the RBI target stipulation, must have influenced the high positive growth rate of commercial bank agricultural credit.

Since outstanding credit amount is affected by the level of recovery of loans to some extent, the differences in the recovery performance of these institutions for the period of analysis can also be a reason for the different growth rate of credit for different institutions in the state and for different

district groups. Since time series data on recovery performance are not available for the co-operatives and commercial banks from the starting period of analysis, we are not in a position to explore this hypothesis in depth. But with the available data we will discuss it towards the end of this chapter.

Growth Rate of Agricultural Credit: Term-wise and Use-wise

The growth in the different types of agricultural credit can be analysed separately to get a better insight into the direction of agricultural credit advanced by co-operatives and commercial banks. This is important because the outstanding co-operative credit includes both agricultural and non-agricultural credit. Similarly, the outstanding commercial banks credit includes direct and indirect advances extended for agriculture and allied activities.

Co-operative credit

PACSs provide two types of short-term and medium-term loans. They are agricultural loans and non-agricultural loans. Usually short-term loans are given for 12 months and in certain cases it may extend to 15 to 18 months. They are given for meeting seasonal agricultural operations like buying seeds and fertilisers, marketing of crops, processing of agricultural produce, etc. The repayment schedule is related to the harvesting and marketing of particular crops. And non-agricultural loans are given for agro-industrial purposes and for consumption. Usually duration of medium-term loans are 15 months to 5 years. It is given for improving land, buying cattle, purchasing machinery, development of small irrigation, etc. Similarly medium-term non-

agricultural loans are extended for purchasing storage bins, setting up of gobar gas plants, agro-industrial purposes, etc. Long-term credit, ranging 5-15 years, are disbursed for making permanent improvements on land, for buying new land, and for buying costly machinery, etc. PACSs classification of loans issued by purpose is given in Appendix 3.2.

From the above classification it is clear that short term credit is required as working capital for financing current agricultural operations whereas medium term and long term credit are needed for investment purposes which increase the productive potential of land over a period. While short-term credit is directly productive, medium-term and long-term credit are indirectly productive through their capital formation function. Short-term loans were renamed as crop loans consequent on the reduction in the period of repayment from one year to one crop season. These loans were considered to be the most effective and quick yielding productive loans and the conditions and procedures for issue are much simpler. Though a small proportion of credit is given for marketing and processing of agricultural produce, short-term agricultural credit is intended mainly for current production. And as long-term credit for debt redemption was discontinued from 1967-68 onwards the entire medium-term and long-term credit may be deemed as investment credit.

From the Second Five Year Plan period onwards the Reserve Bank of India started reimbursing fully the short-term and medium-term loans issued by the rural credit societies. Distribution of non-agricultural loans through these institutions were discouraged and for a still further reduction of its volume

it is laid down by the RBI that the agricultural credit societies whose non-agricultural loans exceed 5 per cent of the total loans are not eligible for any assistance from the RBI. Ordinary loans and other non-agricultural loans which bear no restriction with regard to their utilisation are generally given from the owned funds of the primary co-operative societies; in certain cases they are partly reimbursed from the Central Co-operative Banks (GoK, 1972:24). From July 1982 onwards the National Bank For Agricultural and Rural Development took over the responsibility of refinancing. Accordingly NABARD will provide refinance (short-term, medium-term and long-term loans) to the co-operatives and regional rural banks, including for co-operative marketing and distribution. It will provide refinance to commercial banks against term lending for agriculture and rural development.

In Kerala till 1977-78 the PACSs were engaged only in the disbursement of short-term and medium-term loans, but from 1978-79 onwards the PACSs also started lending long term loans along with the PADBS. PACSs started lending towards medium-term non-agricultural purposes only from the year 1976-77 onwards.

From the Table 3.9, it can be seen that Trivandrum has the highest growth rate in almost all the term-wise and use-wise credit of co-operatives at the disaggregated level. As we have mentioned earlier this may be mainly of the larger proportion of marginal and small farmers and increase in the proportion of area under non-food crops. Moreover, total non-agricultural credit of PACSs has recorded the highest growth rate during this period. This is mainly because of the increase in the short-term non-agricultural loans in these districts.

Table 3.9

Disaggregated Growth Rates of Agricultural Credit in the Co-operative Sector

| Regions/ Districts | PACS S.T Agriculture | | | PACS S.T Non-Agri. | | | PACS S.T Total | | | PACS M.T Agri. | | | PACS M.T Non-Agri.II | PACS L.T II |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | I | II | I&II | I | II | I&II | I | II | I&II | I | II | I&II | | |
| Trivandrum | 22.10 | 19.45 | 20.78 | 31.55 | 38.07 | 34.81 | 23.49 | 21.13 | 22.31 | 24.12 | 24.77 | 24.44 | 27.02 | N.S |
| QPA | 17.93 | 10.17 | 14.05 | 22.21 | 29.94 | 26.08 | 18.20 | 13.97 | 16.08 | 6.76 | 18.41 | 12.59 | 20.89 | N.S |
| KIE | 20.94 | 19.73 | 20.33 | 14.04 | 35.61 | 24.83 | 19.78 | 23.11 | 21.45 | 15.84 | 16.38 | 16.11 | 21.97 | N.S |
| Trichur | 9.59 | 15.43 | 12.51 | 22.11 | 33.68 | 27.89 | 11.95 | 22.37 | 17.16 | 13.72 | N.S | 9.81 | 50.01 | N.S |
| PMKWCK | 15.38 | 14.52 | 14.95 | 20.89 | 33.12 | 27.01 | 16.04 | 22.42 | 19.23 | N.S | 17.95 | 10.86 | 29.74 | 23.47 |
| Kerala | 17.07 | 15.52 | 16.43 | 17.11 | 34.21 | 24.12 | 16.99 | 21.42 | 18.80 | 10.00 | 16.71 | 12.75 | 24.59 | 14.62 |

| Regions/ Districts | PACS M.T Total | | | PACS Total Agri. | | | PACS Total Non-Agri. | | | PACS Total Advances | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | I | II | I&II | I | II | I&II | I | II | I&II | I | II | I&II |
| Trivandrum | 24.64 | 33.04 | 28.84 | 23.18 | 19.85 | 21.51 | 33.42 | 43.48 | 38.45 | 24.41 | 22.58 | 23.49 |
| QPA | 8.33 | 22.33 | 15.33 | 13.69 | 13.53 | 13.61 | 25.18 | 32.89 | 29.03 | 14.68 | 16.97 | 15.82 |
| KIE | 16.44 | 21.08 | 18.76 | 18.99 | 19.26 | 19.12 | 16.96 | 36.70 | 26.83 | 18.71 | 22.76 | 20.73 |
| Trichur | 14.01 | 15.84 | 14.92 | 10.48 | 13.99 | 12.23 | 22.75 | 35.39 | 29.07 | 12.18 | 21.47 | 16.82 |
| PMKWCK | 4.70 | 25.31 | 15.01 | 13.77 | 15.35 | 14.56 | 21.39 | 33.53 | 27.46 | 14.72 | 22.86 | 18.79 |
| Kerala | 10.56 | 22.36 | 15.40 | 15.15 | 16.24 | 15.60 | 17.91 | 35.34 | 25.06 | 15.50 | 21.84 | 18.10 |

| Regions/ Districts | PADBS Total Advances | | | Co-operative Societies Total Agri.Advances | | | Co-op Socie.Total Non-Agri. Advances | | | Co-op.Socie. Total Advances | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | I | II | I&II | I | II | I&II | I | II | I&II | I | II | I&II |
| Trivandrum | 26.04 | 18.66 | 22.35 | 23.99 | 19.76 | 21.87 | 33.42 | 43.48 | 38.45 | 24.63 | 22.12 | 23.37 |
| QPA | 13.52 | 23.92 | 18.72 | 13.76 | 14.56 | 14.16 | 25.18 | 32.89 | 29.03 | 14.63 | 17.50 | 16.06 |
| KIE | 16.56 | 20.76 | 18.66 | 18.76 | 19.37 | 19.06 | 16.96 | 36.70 | 26.83 | 18.53 | 22.65 | 20.59 |
| Trichur | 26.68 | 17.83 | 22.25 | 11.38 | 14.45 | 12.91 | 22.75 | 35.39 | 29.07 | 12.92 | 21.15 | 17.04 |
| PMKWCK | 19.82 | 21.73 | 20.78 | 14.19 | 16.07 | 15.13 | 21.39 | 33.52 | 27.46 | 15.03 | 22.78 | 18.90 |
| Kerala | 21.80 | 20.09 | 21.10 | 15.59 | 16.68 | 16.04 | 17.91 | 35.34 | 25.06 | 15.84 | 21.74 | 18.26 |

Source: GoK, The Registrar of Co-operative Societies (various issues).

Notes: 1. Period, Same as in Table 3.2.
2. See note 2 of Table 3.5.
3. See note 2 of Table 3.2.
4. Growth rates are significant at 5 % level.
5. S.T is Short-Term, M.T- Medium-Term and L.T-Long-term.
6. N.S- not significant at 5 % level.

We feel this increase in short-term non-agricultural loans in the state and in almost all the districts/groups is mainly because, agro-processing industries (especially rubber processing) have been started in almost all the parts of the state and hence there is a tremendous flow of credit for these agro-industries. For example the number of registered rubber and rubber product

factories (which is one of the agro-industries) have increased from 217 in 1975 to 1017 in 1986 (GoK, State Planning Board, 1976 and 1988). Also during this period non-agricultural employment has shown a tremendous increase. This increase in the employment may also be an indirect evidence of the diversion of credit for non-agricultural purposes.

Another reason for the increase of non-agricultural credit of PACSs is due to the preference of the banks to extend credit for non-agricultural purposes because of the reduced risk in recovery. Unlike commercial banks the main business of co-operatives is lending for agricultural purposes. So they argue that, for the very existence of the institution, they have to lend for non-agricultural purposes also, as there is less risk element, banks can get higher rate of interest, they can demand greater margin requirements to be kept by the customers, and collateral security kept by the customers will also be sound. So these can be some of the reasons for the diversion of credit for non-agricultural purposes at the expense of agricultural purposes.

Unlike short-term agricultural loans, the increase in the growth rate of medium term agricultural loans in the second period may be because of the expansion of schematic loans. The Integrated Rural Development Programme (IRDP) intensified after its implementation in 1980, where by there is a large increase in the purchase of cattle, pumpsets, poultry, etc., with the help of bank loans.

In the disaggregated analysis the PACs's total advance growth rate is higher in the second period than the first period.

One plausible reason for this increase in total advances of PACs, is the implementation of the 'Kerala Chitties Act' in August 25, 1975. Thus even though there was decrease in the number of societies of PACS, the increase in the number of accounts/ borrowers (Table 3.10) led to the increase in the growth rate of total PACSs advances.

Table 3.10

Increase in the Number of Members Served by PACSs

| Regions/ Districts | PACS Number of Borrowers 1974-75 | 1985-86 | Percentage increase |
|---|---|---|---|
| Trivandrum | 58900 | 114968 | 95.19 |
| QPA | 199838 | 239030 | 19.61 |
| KIE | 194384 | 521525 | 168.30 |
| Trichur | 107562 | 292200 | 171.66 |
| PMKWCK | 441061 | 1393382 | 215.92 |
| Kerala | 1001745 | 2561105 | 155.66 |

Source: GoK, The Registrar of Co-operative Societies (1974-75 and 1985-86).

Commercial Bank Credit

For commercial banks there are two types of credit: Direct and Indirect. Direct advances are those granted directly to agriculturists. Indirect finance to agriculture is credit extended to farmers indirectly through agencies like Agro-Industries Corporation or individuals engaged in the supply of productional inputs, in the marketing of agricultural commodities and other service activities. Indirect finance are also given to Electricity Boards for financing their well energisation programmes. Both direct and indirect loans are further classified into short, medium and long-term on the basis of the repayment period of the loan. Scheduled commercial banks classification of loans and advances issued by purpose is given in Appendix 3.3.

Short-Term And Term Loan Advances: Since the information on credit by duration of commercial banks in Kerala is not available we used Rath's data (Rath, 1989(a), 1989(b)). From Table 3.11, we can see that, commercial bank's short-term and term loans advanced growth rate is higher in Kerala than the all-India growth rate for the overall period of analysis. But if we restrict our analysis for the second period it is less in Kerala than the all-India growth rate for both short-term and term-loans.

Table 3.11
Rate of Growth in Agricultural Credit of Commercial Banks

| Region | Short-Term | | Term-Loans | |
|---|---|---|---|---|
| | Period II | Whole | II | Whole |
| Kerala | 18.07 | 21.24 | 19.18 | 22.06 |
| India | 18.90 | 19.31 | 22.73 | 21.65 |

Source: Rath (1989(a) and 1989(b)).
Note: Period, Whole Period, 1973-74 to 1984-85;
Period II, 1975-76 to 1984-85.

Commercial bank term loan growth rate is greater than that of the short-term loans both in Kerala and in India. This is similar to the co-operative sector, where the PADBs growth rate of credit advanced (long term) is greater than that of the PACSs short term agricultural credit growth rate in Kerala and in almost all the districts/group of districts.

Now let us examine the performance of commercial bank direct and indirect finance. The Table 3.12 shows considerable increase in the agricultural credit disbursement of commercial banks for the period of analysis. As we have mentioned earlier commercial banks have been extending credit towards agriculture and allied activities to a large extent, especially after the implementation of Integrated Rural Development Programme. It had been found that commercial banks play an active role for the

successful working of IRDP. Similar to other types of analysis in the case of commercial banks total agricultural credit and indirect finance growth rate also Trivandrum ranks first among the districts/group of districts.

Table 3.12
Rate of Growth in Agricultural Credit of Scheduled Commercial Banks (Use-wise)

| Regions/ Districts | Direct Finance | | Indirect Finance | | Total Agri. credit | |
|---|---|---|---|---|---|---|
| | I | II | I | II | I | II |
| Trivandrum | 24.97 | 27.68 | 34.37 | 45.76 | 26.49 | 30.65 |
| QPA | 24.68 | 20.55 | 37.35 | 28.73 | 25.64 | 20.41 |
| KIE | 19.67 | 18.29 | 22.23 | 11.51 | 19.73 | 17.91 |
| Trichur | 22.71 | 19.19 | 28.66 | 32.64 | 23.87 | 21.17 |
| PMKWCK | 25.82 | 23.63 | NS | NS | 25.23 | 22.29 |
| Kerala | 23.90 | 21.74 | 21.39 | 22.50 | 23.54 | 21.69 |

Source: 1.RBI, Banking Statistics, Basic Statistical Returns (various issues).
2.RBI, Statistical Tables Relating to Banks (various issues).
Notes: 1. Period, same as in Table 3.5 (for commercial Banks).
2. See note 2 of Table 3.2.

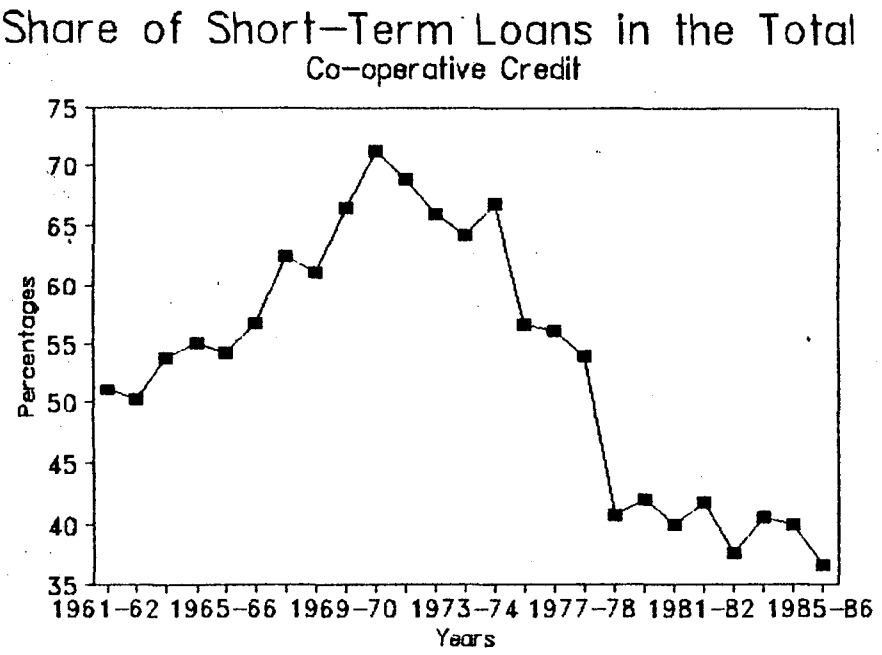
Since we found that there is a tremendous increase in the growth rate of non-agricultural loans extended by co-operatives and indirect finance of commercial banks, it will be interesting to look whether their share in the total co-operative credit and commercial credit has also increased over the years. And also, whether there is a shift in the share of short-term, medium-term and long-term loans in the total co-operative credit and commercial credit over the period of analysis. Therefore, we focus on these aspects in the following section.

Share Analysis of Co-operative Credit

From the Table 3.13 (given at the end of this chapter) it is clear that although there is substantial growth in the volume of credit disbursed for agriculture and allied activities

during the period of analysis, a close look at the use-wise and term-wise credit performance revealed significant change in their composition over the years. In the state as a whole and across the districts short-term loans has the highest share in the total co-operative credit. But the share of short-term agricultural loans is showing a declining trend in the state as a whole (Graph 3.3). For almost all the years total agricultural loans was more than total non-agricultural loans. But in the early eighties in the districts from Trichur to Kasargod (northern parts of Kerala), it was less than total non-agricultural loans.

Graph 3.3



This is mainly because of the reduction in the share of short-term agricultural loans in these places. Share of short-term loans and share of total agricultural loans in the total co-operative credit was highest in Trivandrum. In all the district groups, the share of non-agricultural loans have increased substantially along with their increase in the growth rate. But in KIE group, the tremendous increase in the growth rate of non-agricultural loans in the second period is not found in the increase of the share of non-agricultural loans. We feel this may be because of the existence of more non-food crops, with a greater demand for credit for agricultural purposes. Even then the share of non-agricultural loans is increasing. So even though the PACS's volume of credit is increasing year by year, it has shifted its emphasis from agricultural to non-agricultural purposes, which is totally unexpected. The share of total long-term loans (PACS and PADBs together) is showing an increasing trend, especially after mid seventies. So along with the shift to cash crops from food crops, there is a tendency to shift towards investment credit from credit for direct productive purposes in Kerala.

Share Analysis of Commercial credit

From the Table 3.14, it is clear that for the whole period of analysis, the share of short-term loans of commercial banks were more than that of the term-loans, similar to that of co-operatives. But this is against the all-India pattern, where the share of term loans are greater than that of the short-term loan for almost all the years, especially after 1976-77.

Table 3.14

Share of Short-Term and Term-loans (M.T+L.T)
on Total Scheduled Commercial Bank Credit

| Year | Kerala | | India | |
|---|---|---|---|---|
| | S.T | Term-Loan | S.T | Term-Loan |
| 1973-74 | 72.34 | 27.66 | 41.50 | 58.50 |
| 1974-75 | 68.33 | 31.67 | 53.26 | 46.74 |
| 1975-76 | 68.48 | 31.52 | 52.49 | 47.51 |
| 1976-77 | 73.75 | 26.25 | 50.00 | 50.00 |
| 1977-78 | 74.18 | 25.82 | 50.60 | 49.40 |
| 1978-79 | 71.94 | 28.06 | 45.63 | 54.37 |
| 1979-80 | 69.98 | 30.02 | 46.64 | 53.36 |
| 1980-81 | 63.85 | 36.15 | 41.39 | 58.61 |
| 1981-82 | 62.08 | 37.92 | 41.74 | 58.26 |
| 1982-83 | 72.71 | 27.29 | 45.80 | 54.20 |
| 1983-84 | 70.59 | 29.41 | 46.78 | 53.22 |
| 1984-85 | 71.46 | 28.54 | 42.10 | 57.90 |

Source: Same as in Table 3.10.
Note: 1. S.T- Short-Term; M.T- Medium-Term; and L.T- Long-Term.
2. S.T and Term Loan amount is given in Appendix 3.6.

When it comes to use-wise analysis it can be seen that direct finance constitutes the major portion of total agricultural credit in almost all the places of Kerala (Table 3.15).

Table 3.15
Share of Direct and Indirect Finance in the Total Scheduled Commercial Bank Agricultural Credit

| Years | Kerala | | Trivandrum | | OPA | | KIE | | Trichur | | PMKWCK | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Direct | Indirect | Direct | Indirect | Direct | Indirect | Direct | Indirect | Direct | Indirect | Direct | Indirect |
| 1969 | 79.50 | 20.50 | | | | | | | | | | |
| 1970 | 84.03 | 15.97 | | | | | | | | | | |
| 1971 | 86.33 | 13.67 | | | | | | | | | | |
| 1972 | 86.10 | 13.90 | | | | | | | | | | |
| 1973 | 90.28 | 9.72 | 70.19 | 29.81 | 97.22 | 2.78 | 98.31 | 1.69 | 89.19 | 10.81 | 94.06 | 5.94 |
| 1974 | 94.25 | 5.75 | 83.93 | 16.07 | 96.01 | 3.99 | 96.57 | 3.43 | 90.58 | 9.42 | 95.13 | 4.87 |
| 1975 | 94.10 | 5.90 | 94.45 | 5.55 | 92.82 | 7.18 | 95.25 | 4.75 | 90.09 | 9.91 | 94.52 | 5.48 |
| 1976 | 92.30 | 7.70 | 88.90 | 11.10 | 96.67 | 3.33 | 92.95 | 7.05 | 88.86 | 11.14 | 91.31 | 8.69 |
| 1977 | 94.68 | 5.32 | 95.23 | 4.77 | 98.21 | 1.79 | 93.23 | 6.77 | 94.39 | 5.61 | 94.14 | 5.86 |
| 1978 | 83.85 | 16.15 | 94.03 | 5.97 | 69.36 | 30.64 | 92.73 | 7.27 | 95.51 | 4.49 | 79.44 | 20.56 |
| 1979 | 84.57 | 15.43 | 75.22 | 24.78 | 66.67 | 33.33 | 93.51 | 6.49 | 95.11 | 4.89 | 85.76 | 14.24 |
| 1980 | 87.85 | 12.15 | 81.50 | 18.50 | 74.85 | 25.15 | 89.89 | 10.11 | 84.98 | 15.02 | 95.31 | 4.69 |
| 1981 | 89.68 | 10.32 | 78.26 | 21.74 | 78.96 | 21.04 | 91.92 | 8.08 | 86.26 | 13.74 | 97.75 | 2.25 |
| 1982 | 93.24 | 6.76 | 85.80 | 14.20 | 84.91 | 15.09 | 93.70 | 6.30 | 98.39 | 1.61 | 98.68 | 1.32 |
| 1983 | 93.11 | 6.89 | 71.65 | 28.35 | 97.01 | 2.99 | 94.73 | 5.27 | 94.41 | 5.59 | 97.20 | 2.80 |
| 1984 | 90.27 | 9.73 | 80.11 | 19.89 | 83.81 | 16.19 | 96.12 | 3.88 | 74.26 | 25.74 | 99.12 | 0.88 |
| 1985 | 88.55 | 11.45 | 65.17 | 34.83 | 84.53 | 15.47 | 94.81 | 5.19 | 77.69 | 22.31 | 98.50 | 1.50 |
| 1986 | 89.51 | 10.49 | 69.52 | 30.48 | 84.25 | 15.75 | 96.29 | 3.71 | 76.09 | 23.91 | 97.86 | 2.14 |

Source: Same as in Table 3.12.
Note: Total Scheduled Commercial Bank credit is given Appendix 3.7.

Since in major portion of Kerala more share of agricultural credit are going directly to the farmers, utilisation of the credit by the farmers for productive agricultural purposes is very important. Unless there is a strict feed back of information we cannot ensure that this money is utilised effectively for productive agricultural purposes.

As we have mentioned earlier, since outstanding credit amount is affected by the level of recovery of loans to some extent, in this section we are analysing the recovery performance of these institutions for the period for which data is available in a uniform pattern.

Recovery Performance

The efficiency of credit institutions to a large extent depends upon their recovery performance as this enables them to recycle funds and function more effectively. Proper utilisation of fund results in increased production/productivity/income of the borrowers, which enable them to timely repay the loan together with interest. For this the borrowers should be accountable for the amount taken from the bank. Thus timely repayment of dues is essential to maintain the mutual trust and confidence between the borrowers and lenders and also to ensure the further flow of credit to the borrowers.

"Levels of overdues in the credit system could be measured either in relation to `demand' for the year as in the co-operative credit structure or in relation to `outstandings' at the end of the year as was the case earlier in the commercial banks. At present, however the accepted standard of measurement

of overdues is in relation to `demand'. The rationale for the `demand' as the standard base for assessing the recovery position is that it is the quantum of loans which have fallen due and not those which are yet to become due for repayment is what is relevant in this context" (RBI, 1989:536). (Demand = Recovery + Overdue).

The overdues of all the credit agencies in India at the level of the ultimate borrowers quadrupled in the last decade i.e., from Rs.853 crores at the end of June 1976 to Rs.4262* crores (* Includes overdues under non-agricultural loans of RRBs and co-operatives) at the end of June 1986, which they constituted about 42 percent of the total demand (RBI, 1989:538).

The data for examining the recovery performance of commercial banks agricultural credit in Kerala, are obtained from the Canara Bank, Trivandrum, but only from 1987 onwards. So for comparative purposes, we have calculated recovery performance of co-operatives also only from the same period. Since no new districts were formed after 1987, district combination is not followed in this analysis.

As indicated earlier, the recovery performance of credit given for agriculture and allied activities by institutional agencies in Kerala was far better than the other states. Among the institutions the recovery position of PACSs is the best, followed by PADBs. Their performance is relatively better than that of the commercial banks mainly because for co-operative societies there are employed staff for collection,

which is absent in commercial banks. The commercial banks field officers will only remind the borrowers about their dues.

Table 3.16

Recovery Performance of Commercial Banks in Kerala as on June 30 (In percentages)

| Districts | Direct Finance | | | Indirect Finance | | | Total Agriculture | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1987 | 1988 | 1989 | 1987 | 1988 | 1989 | 1987 | 1988 | 1989 |
| Trivandrum | 61.40 | 65.17 | 58.47 | 47.47 | 98.76 | 98.01 | 60.49 | 69.17 | 59.81 |
| Quilon | 75.30 | 73.53 | 65.87 | 81.46 | 60.69 | 50.53 | 75.31 | 73.52 | 65.86 |
| Pathanamthitta | 77.37 | 72.46 | 75.03 | 52.73 | 51.91 | 72.76 | 77.29 | 72.38 | 74.96 |
| Alleppey | 66.40 | 66.89 | 63.69 | 61.20 | 63.21 | NIL | 66.38 | 66.86 | 63.69 |
| Kottayam | 79.20 | 77.28 | 72.89 | 82.93 | 76.53 | 46.40 | 79.30 | 77.28 | 71.95 |
| Idikki | 72.45 | 68.85 | 60.35 | 42.14 | 26.00 | 56.54 | 72.05 | 68.84 | 60.34 |
| Ernakulam | 73.01 | 71.71 | 68.34 | 38.77 | 15.49 | 22.35 | 69.70 | 68.51 | 65.59 |
| Trichur | 79.31 | 77.63 | 78.20 | 97.38 | 25.91 | 98.02 | 79.39 | 77.50 | 78.31 |
| Palghat | 64.65 | 66.46 | 67.85 | 81.57 | 84.54 | 82.44 | 64.79 | 66.63 | 67.96 |
| Malappuram | 68.73 | 67.65 | 71.63 | 6.30 | 47.53 | 52.39 | 66.67 | 67.51 | 71.51 |
| Kozhikode | 72.59 | 73.46 | 69.45 | 19.43 | 32.52 | 18.90 | 72.56 | 73.45 | 69.44 |
| Wynad | 72.66 | 66.04 | 65.78 | 77.55 | 72.85 | 60.25 | 73.92 | 66.05 | 65.76 |
| Cannanore | 78.93 | 69.52 | 70.82 | 19.20 | 68.19 | 97.45 | 78.63 | 69.51 | 70.84 |
| Kasargod | 73.00 | 70.41 | 68.57 | 87.05 | 55.03 | 98.32 | 73.02 | 70.40 | 68.89 |
| Kerala | 72.13 | 70.74 | 68.31 | 60.18 | 73.41 | 62.07 | 71.61 | 70.79 | 68.22 |

Source: Canara Bank, Trivandrum.

Notes: 1. Nil refers to no demand, recovery or overdue for indirect finance in that district for that year.
2. Amount of Demand is given in Appendix 3.8.

Figures relating to the recovery performance of commercial banks under agriculture and allied activities suggest, an almost steady trend for the period 1987-89, other than indirect finance for which fluctuations are seen (Table 3.16). The percentage of recovery, i.e., collection to demand of total agriculture credit has been below the state level figure in respect of Trivandrum, Alleppey, Ernakulam and Palghat for the period 1987-89. And for Idikki, Malappuram and Wynad for two years it was less than the state level figure. In most of the districts it is mainly because of the poor recovery of indirect finance, which they have improved by June 1989. For all the three years Trichur has the highest recovery of total agricultural credit.

Table 3.17 reveals that in majority of the districts PACSs maintained stability in their recovery performance. In Ernakulam, Trichur, Malappuram, Cannanore and kasargod,the recovery performance of PACSs was above the state level figure, and also above 80 per cent, for the period 1987-89. But there is no stability in maintaining the first position by any district.

Table 3.17

Recovery Performance of Co-operatives in Kerala as on June 30 (in Percentages)

| Districts | PACSs | | | PADBs | | |
|---|---|---|---|---|---|---|
| | 1987 | 1988 | 1989 | 1987 | 1988 | 1989 |
| Trivandrum | 72.29 | 73.55 | 73.16 | 56.04 | 48.67 | 50.00 |
| Quilon | 72.90 | 72.35 | 71.87 | 64.28 | 69.86 | 65.92 |
| Pathanamthitta | 81.46 | 77.08 | 79.07 | 81.18 | 75.15 | 71.15 |
| Alleppey | 72.65 | 71.65 | 70.53 | 71.75 | 79.68 | 70.80 |
| Kottayam | 84.45 | 81.68 | 79.64 | 90.52 | 90.09 | 84.81 |
| Idikki | 80.56 | 76.80 | 71.86 | 89.86 | 84.64 | 77.42 |
| Ernakulam | 86.44 | 93.46 | 83.60 | 87.40 | 82.75 | 78.43 |
| Trichur | 84.56 | 84.47 | 83.47 | 92.98 | 88.65 | 88.20 |
| Palghat | 79.51 | 80.19 | 78.79 | 77.48 | 69.05 | 83.44 |
| Malappuram | 82.98 | 83.75 | 83.89 | 73.69 | 59.31 | 56.94 |
| Kozhikode | 76.65 | 76.57 | 74.04 | 90.78 | 81.95 | 73.33 |
| Wynad | 78.20 | 70.86 | 72.32 | 81.23 | 73.86 | 67.16 |
| Cannanore | 87.80 | 85.84 | 87.14 | 86.02 | 76.74 | 61.02 |
| Kasargod | 91.29 | 89.81 | 89.73 | 89.84 | 90.17 | 85.29 |
| Kerala | 82.10 | 81.65 | 80.05 | 79.22 | 72.61 | 69.41 |

Source: GoK, The Registrar of Co-operative Societies (various issues).

In the case of PADBs, the percentage of recovery to demand in Pathanamthitta, Kottayam, Idikki, Ernakulam, Trichur, Kasargod and Kozhikode was satisfactory, and was above the state level figure (Table 3.17). Here also there is no stability in maintaining the first position by any district. The recovery performance of Kottayam, Trichur and Kasargod was above 80 per cent for the period 1987-89.

Thus the institutional agencies in Trichur are performing well as far as the recovery of credit given towards agriculture and allied activities is concerned. At the same time

Trivandrum, Quilon and Alleppey districts are the least performing districts in Kerala in the case of collection, irrespective of the type of agency disbursing credit.

Reasons for overdues in Kerala.

This section is based on the personal interview we had with the bank authorities. The following are the major factors which led to the existing overdues in the state.

1) Certain number of wilful defaulters are there even though there is no organisation, like in some other states, for persuading the borrowers not to repay the loan amount.

2) Even if the borrowers wish to repay the loan on due dates,there are many factors which are beyond their control, like

a) even though there may not be any drought or flood, certain projects may not be profitable. And so the borrowers would not get much from their investment. The amount they receive will be just enough for their consumption and in some cases not even for fulfilling that basic necessity.

b) In some cases if the borrowers cannot find any market for their products, they will find it difficult to get money to repay back the loan. This is mainly because of absence of linkages and supporting services.

3) Inspite of the existence of Revenue Recovery Act (which provides legislative support for recovering loans under agriculture), which does not exist in Tamil Nadu, Karnataka and many other states, there are certain projects, (eg.crop loans) for which it is difficult to recover the loans if crop failure occurs.

4) It has been found that the recovery performance is comparatively low in areas where follow up action is also weak.

5) In some cases even though money is available, non-availability of inputs and purchase of sub-standard assets will lead to overdues. Besides all this wrong selection of schemes unsuited to the areas, incapability of the borrowers, inadequate finance, etc also have contributed to the increase in overdues.

Conclusion

Thus, from the analysis it is clear that there is substantial growth in the volume of agricultural credit in Kerala and across the districts. The plausible reasons for this increase in agricultural credit can be the increase in the proportion of marginal and small land holders in the total, who need outside credit for carrying on agricultural activities, the increase in the area under non-food crops, and the implementation of `Kerala Chitties Act, 1975; which led to the reduction of kuries and there by to an increase in the need of institutional credit. The institution-wise growth rate also shows that there is tremendous increase in the quantity of credit disbursed for agriculture and allied activities, especially in the second period. In the inter-institutional comparison, commercial banks are performing better than co-operative institutions. We feel this may be due to the increase in the greater spread of branches of commercial banks all over the state. But in the comparison of the proportionate share of each institution in the total credit we found that co-operatives still dominate in agricultural credit in almost all the district groups except in Trivandrum district for a few years. But it is interesting to note that in almost all the districts (especially in the northern parts of Kerala, ie., from Trichur to Kasargod), the co-operatives share in the total agricultural credit is reducing year after year. This is mainly because of the reduction in the share of PACSs. From the analysis it can be seen that among all the district groups it is Trivandrum which is performing better as far as the disbursement of any type of agricultural credit is concerned, be it co-

operative or commercial bank. We feel this is mainly because of the opening of more new branches all over the district, the large increase in the number of operational holdings and also in the increase of the area under non-food crops. In the state as a whole and across districts the short-term loans occupy a high proportionate share in the total credit. But the share of short-term agricultural loans is showing a declining trend especially after 1974-75. Finally, the most important and interesting finding is the high growth rate of non-agricultural loans of PACs especially in the second period. We feel that this is mainly because of the high risk element and low interest in the agricultural loans, that banks prefer to advance more loans for non-agricultural purposes.

Thus, even though the agricultural growth is stagnant in the second period the agricultural credit disbursed by all the institutions are showing significant growth. The shift in the PACSs advances from agricultural purposes to non-agricultural purposes in a larger proportion must have adversely affected the farmers in Kerala. Also the decrease in the share of short-term agricultural loans must have led to insufficiency of credit for current agricultural purposes of a productive nature.

Also one of our main hunches for this tardy growth of agricultural production is the greater misutilisation of agricultural credit. One can go in detail in this aspect only with the help of a primary survey. Nevertheless, the Planning Board study done in Kerala in 1987 gives strength to our above argument. Out of the 497 sample loanees, eleven had completely

misutilised their loan amount in the wake of the receipt of the loan which shows the poor follow-up action from the lending agencies (Appendix 3.9). Eight beneficiaries utilised the loan amount for settling the previous debt, three loanees utilised for medical treatment, seven for education, 10 for house construction/maintenance, four for purchase of durable goods, 34 for consumption, 5 for social ceremonies. This works out to be about 17 per cent of the total beneficiaries (GOK, 1989:14).

Another plausible way of misutilisation of agricultural credit is for financing the out migrants to gulf countries as most of the migrants are from the lower middle class. The above point can be substantiated with the satisfactory recovery performance of these agricultural loans, which they repay with the increased money flow from abroad.

Table 3.13(a)

Share Analysis of Co-operative Credit in Kerala, Term-Wise and Use-Wise (In percentages)

| Years | Primary Agricultural Credit Societies (PACSs) | | | | | | | | | | PADBs | Co-operatives | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Short Term | | | Medium Term | | | Long Term | Total | Total | Total | Total | Total | Total |
| | Agri. | Non Agri. | Total | AGRI. | Non Agri. | Total | | Agri. | Non Agri. | Advance | Agri. | Agri. | Non Agri. |
| 1961-62 | 51.17 | 15.10 | 66.27 | 31.66 | 0.00 | 31.66 | 0.00 | 82.83 | 15.10 | 97.94 | 2.06 | 84.90 | 15.10 |
| 1962-63 | 50.32 | 15.24 | 65.56 | 31.04 | 0.00 | 31.04 | 0.00 | 81.36 | 15.24 | 96.60 | 3.40 | 84.76 | 15.24 |
| 1963-64 | 53.86 | 10.90 | 64.77 | 29.99 | 0.00 | 29.99 | 0.00 | 83.85 | 10.90 | 94.75 | 5.25 | 89.10 | 10.90 |
| 1964-65 | 55.10 | 11.35 | 66.45 | 27.09 | 0.00 | 27.09 | 0.00 | 82.19 | 11.35 | 93.54 | 6.46 | 88.65 | 11.35 |
| 1965-66 | 54.24 | 13.15 | 67.39 | 25.98 | 0.00 | 25.98 | 0.00 | 80.22 | 13.15 | 93.36 | 6.64 | 86.85 | 13.15 |
| 1966-67 | 56.73 | 13.06 | 69.79 | 22.82 | 0.00 | 22.82 | 0.00 | 79.55 | 13.06 | 92.61 | 7.39 | 86.94 | 13.06 |
| 1967-68 | 62.50 | 7.01 | 69.51 | 25.90 | 0.00 | 25.90 | 0.00 | 88.39 | 7.01 | 95.41 | 4.59 | 92.99 | 7.01 |
| 1968-69 | 61.05 | 9.63 | 70.68 | 24.44 | 0.00 | 24.44 | 0.00 | 85.49 | 9.63 | 95.12 | 4.88 | 90.37 | 9.63 |
| 1969-70 | 66.47 | 11.89 | 78.36 | 17.29 | 0.00 | 17.29 | 0.00 | 83.76 | 11.89 | 95.65 | 4.35 | 88.11 | 11.89 |
| 1970-71 | 71.31 | 11.59 | 82.90 | 12.19 | 0.00 | 12.19 | 0.00 | 83.50 | 11.59 | 95.09 | 4.91 | 88.41 | 11.59 |
| 1971-72 | 68.92 | 10.96 | 79.88 | 13.27 | 0.00 | 13.27 | 0.00 | 82.19 | 10.96 | 93.15 | 6.85 | 89.04 | 10.96 |
| 1972-73 | 65.95 | 15.05 | 80.99 | 12.27 | 0.00 | 12.27 | 0.00 | 78.22 | 15.05 | 93.26 | 6.74 | 84.95 | 15.05 |
| 1973-74 | 64.18 | 14.08 | 78.26 | 14.85 | 0.00 | 14.85 | 0.00 | 79.03 | 14.08 | 93.11 | 6.89 | 85.92 | 14.08 |
| 1974-75 | 66.84 | 12.01 | 78.85 | 14.40 | 0.00 | 14.40 | 0.00 | 81.24 | 12.01 | 93.25 | 6.75 | 87.99 | 12.01 |
| 1975-76 | 56.66 | 19.87 | 76.53 | 16.49 | 0.00 | 16.49 | 0.00 | 73.16 | 19.87 | 93.02 | 6.98 | 80.13 | 19.87 |
| 1976-77 | 56.17 | 15.52 | 71.69 | 14.89 | 2.69 | 17.58 | 0.00 | 71.06 | 18.21 | 89.27 | 10.73 | 81.79 | 18.21 |
| 1977-78 | 54.03 | 16.11 | 70.14 | 15.13 | 5.82 | 20.95 | 0.00 | 69.16 | 21.93 | 91.09 | 8.91 | 78.07 | 21.93 |
| 1978-79 | 40.69 | 27.55 | 68.24 | 15.38 | 8.14 | 23.51 | 1.78 | 57.82 | 35.68 | 93.51 | 6.49 | 64.32 | 35.68 |
| 1979-80 | 42.02 | 27.18 | 69.20 | 13.14 | 6.34 | 19.47 | 1.71 | 56.86 | 33.52 | 90.38 | 9.62 | 66.48 | 33.52 |
| 1980-81 | 39.87 | 32.60 | 72.47 | 10.83 | 5.74 | 16.57 | 1.18 | 51.88 | 38.34 | 90.22 | 9.78 | 61.66 | 38.34 |
| 1981-82 | 41.76 | 35.01 | 76.77 | 9.79 | 4.45 | 14.25 | 1.27 | 52.83 | 39.46 | 92.29 | 7.71 | 60.54 | 39.46 |
| 1982-83 | 37.54 | 38.40 | 75.94 | 11.91 | 4.41 | 16.32 | 1.95 | 51.41 | 42.81 | 94.21 | 5.79 | 57.19 | 42.81 |
| 1983-84 | 40.53 | 37.84 | 78.37 | 9.07 | 5.27 | 14.35 | 0.85 | 50.46 | 43.11 | 93.57 | 6.43 | 56.89 | 43.11 |
| 1984-85 | 39.93 | 37.10 | 77.03 | 7.36 | 7.75 | 15.11 | 1.35 | 48.64 | 44.85 | 93.48 | 6.52 | 55.15 | 44.85 |
| 1985-86 | 36.57 | 42.28 | 78.85 | 7.26 | 5.55 | 12.81 | 1.48 | 45.30 | 47.84 | 93.14 | 6.86 | 52.16 | 47.84 |

Source: Same as in Table 3.9.

Note: 1. PACS total advance is the sum of short-term, medium-term and long-term credit;
Co-operative total agriculture credit is the sum of PACS total agriculture and PADBs total advances.
2. Total Co-operative credit is given in Appendix 3.5.

(continued)

Table 3.13 (b)

Share Analysis of Co-operative Credit in Trivandrum, Term-Wise and Use-Wise (In percentages)

| Years | Primary Agricultural Credit Societies (PACSs) | | | | | | | | | | PADBs | Co-operatives | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Short Term | | | Medium Term | | | Long Term | Total | Total | Total | Total | Total | Total |
| | Agri. | Non Agri. | Total | AGRI. | Non Agri. | Total | | Agri. | Non Agri. | Advan. | Agri. | Agri. | Non Agri. |
| 1964-65 | 73.56 | 2.30 | 75.86 | 7.66 | 0.00 | 7.66 | 0.00 | 81.22 | 2.30 | 83.52 | 16.48 | 97.70 | 2.30 |
| 1965-66 | 61.83 | 2.96 | 64.80 | 14.49 | 0.00 | 14.49 | 0.00 | 76.32 | 2.96 | 79.28 | 20.72 | 97.04 | 2.96 |
| 1966-67 | 34.84 | 2.95 | 37.80 | 20.22 | 0.00 | 20.22 | 0.00 | 55.06 | 2.95 | 58.01 | 41.99 | 97.05 | 2.95 |
| 1967-68 | 58.83 | 1.72 | 60.55 | 14.93 | 0.00 | 14.93 | 0.00 | 73.77 | 1.72 | 75.49 | 24.51 | 98.28 | 1.72 |
| 1968-69 | 67.79 | 2.84 | 70.63 | 5.54 | 0.00 | 5.54 | 0.00 | 73.33 | 2.84 | 76.17 | 23.83 | 97.16 | 2.84 |
| 1969-70 | 71.34 | 2.12 | 73.46 | 11.84 | 0.00 | 11.84 | 0.00 | 83.17 | 2.12 | 85.30 | 14.70 | 97.88 | 2.12 |
| 1970-71 | 85.07 | 1.57 | 86.64 | 3.14 | 0.00 | 3.14 | 0.00 | 88.21 | 1.57 | 89.77 | 10.23 | 98.43 | 1.57 |
| 1971-72 | 76.91 | 1.54 | 78.45 | 1.57 | 0.00 | 1.57 | 0.00 | 78.48 | 1.54 | 80.02 | 19.98 | 98.46 | 1.54 |
| 1972-73 | 79.24 | 1.35 | 80.59 | 2.43 | 0.00 | 2.43 | 0.00 | 81.66 | 1.35 | 83.02 | 16.98 | 98.65 | 1.35 |
| 1973-74 | 73.06 | 0.50 | 73.56 | 9.10 | 0.00 | 9.10 | 0.00 | 82.16 | 0.50 | 82.66 | 17.34 | 99.50 | 0.50 |
| 1974-75 | 73.25 | 4.33 | 77.58 | 7.08 | 0.00 | 7.08 | 0.00 | 80.34 | 4.33 | 84.66 | 15.34 | 95.67 | 4.33 |
| 1975-76 | 49.20 | 14.41 | 63.61 | 16.69 | 0.00 | 16.69 | 0.00 | 65.89 | 14.41 | 80.29 | 19.71 | 85.59 | 14.41 |
| 1976-77 | 41.75 | 7.69 | 49.44 | 19.67 | 3.75 | 23.43 | 0.00 | 61.42 | 11.44 | 72.86 | 27.14 | 88.56 | 11.44 |
| 1977-78 | 41.68 | 11.08 | 52.76 | 18.05 | 3.09 | 21.13 | 0.00 | 59.73 | 14.16 | 73.89 | 26.11 | 85.84 | 14.16 |
| 1978-79 | 30.44 | 10.44 | 40.88 | 13.21 | 9.26 | 22.47 | 11.18 | 54.83 | 19.71 | 74.54 | 25.46 | 80.29 | 19.71 |
| 1979-80 | 19.99 | 11.24 | 31.22 | 7.24 | 11.24 | 18.48 | 4.75 | 31.98 | 22.48 | 54.45 | 45.55 | 77.52 | 22.48 |
| 1980-81 | 28.70 | 12.19 | 40.88 | 14.33 | 6.96 | 21.30 | 0.54 | 43.57 | 19.15 | 62.72 | 37.28 | 80.85 | 19.15 |
| 1981-82 | 40.56 | 11.57 | 52.13 | 14.66 | 5.70 | 20.36 | 0.19 | 55.41 | 17.26 | 72.67 | 27.33 | 82.74 | 17.26 |
| 1982-83 | 52.66 | 4.60 | 57.26 | 21.90 | 4.00 | 25.90 | 0.33 | 74.89 | 8.60 | 83.49 | 16.51 | 91.40 | 8.60 |
| 1983-84 | 57.98 | 14.04 | 72.02 | 6.78 | 7.57 | 14.35 | 1.39 | 66.15 | 21.61 | 87.76 | 12.24 | 78.39 | 21.61 |
| 1984-85 | 52.90 | 10.37 | 63.27 | 4.95 | 20.26 | 25.22 | 3.51 | 61.36 | 30.64 | 92.00 | 8.00 | 69.36 | 30.64 |
| 1985-86 | 49.01 | 23.82 | 72.83 | 8.33 | 4.81 | 13.14 | 0.47 | 57.81 | 28.63 | 86.44 | 13.56 | 71.37 | 28.63 |

Source: Same as in Table 3.9.

Note: 1. PACS total advance is the sum of short-term, medium-term and long-term credit;
Co-operative total agriculture credit is the sum of PACS total agriculture and PADBs total advances.

2. Total Co-operative credit is given in Appendix 3.5.

(continued)

Table 3.13 (c)

Share Analysis of Co-operative Credit in GPA, Term-Wise and Use-Wise (In percentages)

| Years | Primary Agricultural Credit Societies (PACSs) | | | | | | | | | PADBs | Co-operatives | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Short Tera | | | Medium Term | | | Long Tera | Total | Total | Total | Total | Total |
| | Agri. | Non Agri. | Total | AGRI. | Non Agri. | Total | | Agri. | Non Agri. | Advance | Agri. | Agri. Non Agri. |
| 1964-65 | 32.46 | 3.21 | 35.68 | 52.19 | 0.00 | 52.19 | 0.00 | 84.65 | 3.21 | 87.86 | 12.14 | 96.79 3.21 |
| 1965-66 | 40.90 | 11.21 | 52.10 | 38.93 | 0.00 | 38.93 | 0.00 | 79.82 | 11.21 | 91.03 | 8.97 | 88.79 11.21 |
| 1966-67 | 40.85 | 11.55 | 52.40 | 38.41 | 0.00 | 38.41 | 0.00 | 79.26 | 11.55 | 90.81 | 9.19 | 88.45 11.55 |
| 1967-68 | 55.43 | 1.52 | 56.95 | 37.91 | 0.00 | 37.91 | 0.00 | 93.34 | 1.52 | 94.85 | 5.15 | 98.48 1.52 |
| 1968-69 | 52.04 | 1.50 | 53.54 | 40.59 | 0.00 | 40.59 | 0.00 | 92.63 | 1.50 | 94.13 | 5.87 | 98.50 1.50 |
| 1969-70 | 70.45 | 2.08 | 72.53 | 23.23 | 0.00 | 23.23 | 0.00 | 93.67 | 2.08 | 95.76 | 4.24 | 97.92 2.08 |
| 1970-71 | 71.24 | 4.93 | 76.18 | 17.52 | 0.00 | 17.52 | 0.00 | 88.76 | 4.93 | 93.70 | 6.30 | 95.07 4.93 |
| 1971-72 | 74.99 | 3.90 | 78.89 | 17.02 | 0.00 | 17.02 | 0.00 | 92.02 | 3.90 | 95.91 | 4.09 | 96.10 3.90 |
| 1972-73 | 69.65 | 6.97 | 76.62 | 17.77 | 0.00 | 17.77 | 0.00 | 87.43 | 6.97 | 94.40 | 5.60 | 93.03 6.97 |
| 1973-74 | 61.85 | 6.93 | 68.77 | 24.27 | 0.00 | 24.27 | 0.00 | 86.12 | 6.93 | 93.04 | 6.96 | 93.07 6.93 |
| 1974-75 | 64.04 | 5.78 | 69.81 | 24.56 | 0.00 | 24.56 | 0.00 | 88.59 | 5.78 | 94.37 | 5.63 | 94.22 5.78 |
| 1975-76 | 55.47 | 17.53 | 73.00 | 21.82 | 0.00 | 21.82 | 0.00 | 77.29 | 17.53 | 94.82 | 5.18 | 82.47 17.53 |
| 1976-77 | 50.73 | 6.66 | 57.39 | 23.60 | 6.52 | 30.12 | 0.00 | 74.33 | 13.18 | 87.51 | 12.49 | 86.82 13.18 |
| 1977-78 | 55.32 | 9.17 | 64.49 | 18.08 | 4.51 | 22.59 | 0.00 | 73.40 | 13.68 | 87.08 | 12.92 | 86.32 13.68 |
| 1978-79 | 34.27 | 15.65 | 49.92 | 20.19 | 13.58 | 33.76 | 6.29 | 60.74 | 29.23 | 89.96 | 10.04 | 70.77 29.23 |
| 1979-80 | 32.84 | 18.72 | 51.57 | 21.71 | 12.47 | 34.18 | 3.55 | 58.10 | 31.19 | 89.29 | 10.71 | 68.81 31.19 |
| 1980-81 | 29.35 | 15.97 | 45.33 | 18.14 | 14.14 | 32.28 | 5.57 | 53.07 | 30.11 | 83.18 | 16.82 | 69.89 30.11 |
| 1981-82 | 32.52 | 21.97 | 54.49 | 17.51 | 13.22 | 30.73 | 4.32 | 54.35 | 35.19 | 89.54 | 10.46 | 64.81 35.19 |
| 1982-83 | 38.13 | 17.63 | 55.77 | 24.23 | 6.18 | 30.41 | 6.65 | 69.02 | 23.81 | 92.83 | 7.17 | 76.19 23.81 |
| 1983-84 | 39.65 | 20.01 | 59.66 | 19.35 | 8.58 | 27.92 | 1.21 | 60.21 | 28.58 | 88.79 | 11.21 | 71.42 28.58 |
| 1984-85 | 36.01 | 19.52 | 55.53 | 22.34 | 9.41 | 31.75 | 2.60 | 60.95 | 28.93 | 89.89 | 10.11 | 71.07 28.93 |
| 1985-86 | 37.47 | 20.87 | 58.34 | 18.30 | 9.98 | 28.28 | 2.91 | 58.68 | 30.86 | 89.53 | 10.47 | 69.14 30.86 |

Source: Same as in Table 3.9.

Note: 1. PACS total advance is the sum of short-term, medium-term and long-term credit;
Co-operative total agriculture credit is the sum of PACS total agriculture and PADBs total advances.

2. Total Co-operative credit is given in Appendix 3.5.

(continued)

Table 3.13(d)

Share Analysis of Co-operative Credit in KIE, Term-Wise and Use-Wise (In percentages)

| Years | Primary Agricultural Credit Societies (PACSs) | | | | | | | | | PADBs | Co-operatives | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Short Term | | | Medium Term | | | Long Term | Total | Total | Total | Total | Total |
| | Agri. | Non Agri. | Total | AGRI. | Non Agri. | Total | | Agri. | Non Agri. | Advance | Agri. | Non Agri. |
| 1964-65 | 40.89 | 17.37 | 58.26 | 34.03 | 0.00 | 34.03 | 0.00 | 74.92 | 17.37 | 92.29 | 7.71 | 82.63 | 17.37 |
| 1965-66 | 45.73 | 10.06 | 55.78 | 33.94 | 0.00 | 33.94 | 0.00 | 79.67 | 10.06 | 89.72 | 10.28 | 89.94 | 10.06 |
| 1966-67 | 46.71 | 11.58 | 58.28 | 31.66 | 0.00 | 31.66 | 0.00 | 78.37 | 11.58 | 89.94 | 10.06 | 88.42 | 11.58 |
| 1967-68 | 52.42 | 13.33 | 65.75 | 29.23 | 0.00 | 29.23 | 0.00 | 81.65 | 13.33 | 94.98 | 5.02 | 86.67 | 13.33 |
| 1968-69 | 46.65 | 10.24 | 56.89 | 37.86 | 0.00 | 37.86 | 0.00 | 84.51 | 10.24 | 94.75 | 5.25 | 89.76 | 10.24 |
| 1969-70 | 55.25 | 14.02 | 69.27 | 26.56 | 0.00 | 26.56 | 0.00 | 81.82 | 14.02 | 95.83 | 4.17 | 85.98 | 14.02 |
| 1970-71 | 69.77 | 8.52 | 78.29 | 18.39 | 0.00 | 18.39 | 0.00 | 88.16 | 8.52 | 96.68 | 3.32 | 91.48 | 8.52 |
| 1971-72 | 68.14 | 5.83 | 73.97 | 20.11 | 0.00 | 20.11 | 0.00 | 88.24 | 5.83 | 94.08 | 5.92 | 94.17 | 5.83 |
| 1972-73 | 65.71 | 7.06 | 72.78 | 19.38 | 0.00 | 19.38 | 0.00 | 85.09 | 7.06 | 92.15 | 7.85 | 92.94 | 7.06 |
| 1973-74 | 62.22 | 10.84 | 73.06 | 20.22 | 0.00 | 20.22 | 0.00 | 82.44 | 10.84 | 93.28 | 6.72 | 89.16 | 10.84 |
| 1974-75 | 60.62 | 8.97 | 69.59 | 24.64 | 0.00 | 24.64 | 0.00 | 85.26 | 8.97 | 94.23 | 5.77 | 91.03 | 8.97 |
| 1975-76 | 51.22 | 15.22 | 66.44 | 28.32 | 0.00 | 28.32 | 0.00 | 79.54 | 15.22 | 94.76 | 5.24 | 84.78 | 15.22 |
| 1976-77 | 58.83 | 5.92 | 64.75 | 22.32 | 4.03 | 26.36 | 0.00 | 81.15 | 9.96 | 91.11 | 8.89 | 90.04 | 9.96 |
| 1977-78 | 53.42 | 6.64 | 60.06 | 24.42 | 8.73 | 33.15 | 0.00 | 77.84 | 15.36 | 93.20 | 6.80 | 84.64 | 15.36 |
| 1978-79 | 44.66 | 15.64 | 60.30 | 22.85 | 11.66 | 34.51 | 0.65 | 68.16 | 27.30 | 95.46 | 4.54 | 72.70 | 27.30 |
| 1979-80 | 39.87 | 25.23 | 65.11 | 20.99 | 7.63 | 28.62 | 1.49 | 62.35 | 32.87 | 95.22 | 4.78 | 67.13 | 32.87 |
| 1980-81 | 43.96 | 21.81 | 65.77 | 21.05 | 5.61 | 26.66 | 0.30 | 65.31 | 27.42 | 92.73 | 7.27 | 72.58 | 27.42 |
| 1981-82 | 56.37 | 17.62 | 73.99 | 17.46 | 3.68 | 21.14 | 0.41 | 74.23 | 21.30 | 95.52 | 4.47 | 78.70 | 21.30 |
| 1982-83 | 48.81 | 27.90 | 76.72 | 16.37 | 3.18 | 19.55 | 0.23 | 65.41 | 31.09 | 96.50 | 3.50 | 68.91 | 31.09 |
| 1983-84 | 49.16 | 25.59 | 74.76 | 12.83 | 6.81 | 19.64 | 0.56 | 62.55 | 32.40 | 94.95 | 5.05 | 67.60 | 32.40 |
| 1984-85 | 54.18 | 19.68 | 73.85 | 10.05 | 10.10 | 20.15 | 1.12 | 65.35 | 29.77 | 95.12 | 4.88 | 70.23 | 29.77 |
| 1985-86 | 44.83 | 28.98 | 73.81 | 11.31 | 7.79 | 19.10 | 1.91 | 58.05 | 36.77 | 94.82 | 5.18 | 63.23 | 36.77 |

Source: Same as in Table 3.9.

Note: 1. PACS total advance is the sum of short-term, medium-term and long-term credit;
Co-operative total agriculture credit is the sum of PACS total agriculture and PADBs total advances.

2. Total Co-operative credit is given in Appendix 3.5.

(Continued)

Table 3.13(e)

Share Analysis of Co-operative Credit in Trichur, Term-Wise and Use-Wise (In percentages)

| Years | Primary Agricultural Credit Societies (PACSs) | | | | | | | | | | PADBs | Co-operatives | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Short Term | | | Medium Term | | | Long Term | Total | Total | Total | Total | Total | Total |
| | Agri. | Non Agri. | Total | AGRI. | Non Agri. | Total | | Agri. | Non Agri. | Advance | Agri. | Agri. | Non Agri. |
| 1964-65 | 53.33 | 14.56 | 67.89 | 29.13 | 0.00 | 29.13 | 0.00 | 82.46 | 14.56 | 97.02 | 2.98 | 85.44 | 14.56 |
| 1965-66 | 69.41 | 5.20 | 74.61 | 23.36 | 0.00 | 23.36 | 0.00 | 92.78 | 5.20 | 97.98 | 2.02 | 94.80 | 5.20 |
| 1966-67 | 75.50 | 9.05 | 84.56 | 12.31 | 0.00 | 12.31 | 0.00 | 87.81 | 9.05 | 96.86 | 3.14 | 90.95 | 9.05 |
| 1967-68 | 52.25 | 8.10 | 60.35 | 37.78 | 0.00 | 37.78 | 0.00 | 90.03 | 8.10 | 98.13 | 1.87 | 91.90 | 8.10 |
| 1968-69 | 70.81 | 8.34 | 79.15 | 18.38 | 0.00 | 18.38 | 0.00 | 89.19 | 8.34 | 97.52 | 2.48 | 91.66 | 8.34 |
| 1969-70 | 76.35 | 4.77 | 81.12 | 17.58 | 0.00 | 17.58 | 0.00 | 93.93 | 4.77 | 98.70 | 1.30 | 95.23 | 4.77 |
| 1970-71 | 77.34 | 6.79 | 84.13 | 13.64 | 0.00 | 13.64 | 0.00 | 90.99 | 6.79 | 97.77 | 2.23 | 93.21 | 6.79 |
| 1971-72 | 62.27 | 10.84 | 73.12 | 19.97 | 0.00 | 19.97 | 0.00 | 82.25 | 10.84 | 93.09 | 6.91 | 89.16 | 10.84 |
| 1972-73 | 61.05 | 13.20 | 74.25 | 18.99 | 0.00 | 18.99 | 0.00 | 80.04 | 13.20 | 93.24 | 6.76 | 86.80 | 13.20 |
| 1973-74 | 60.36 | 10.99 | 71.35 | 18.74 | 0.00 | 18.74 | 0.00 | 79.10 | 10.99 | 90.09 | 9.91 | 89.01 | 10.99 |
| 1974-75 | 52.34 | 12.80 | 65.14 | 21.55 | 0.00 | 21.55 | 0.00 | 73.89 | 12.80 | 86.68 | 13.32 | 87.20 | 12.80 |
| 1975-76 | 41.45 | 23.42 | 64.87 | 25.62 | 0.00 | 25.62 | 0.00 | 67.07 | 23.42 | 90.49 | 9.51 | 76.58 | 23.42 |
| 1976-77 | 39.30 | 30.00 | 69.30 | 23.04 | 0.06 | 23.10 | 0.00 | 62.34 | 30.06 | 92.40 | 7.60 | 69.94 | 30.06 |
| 1977-78 | 40.15 | 31.33 | 71.48 | 21.40 | 1.48 | 22.88 | 0.00 | 61.56 | 32.80 | 94.36 | 5.64 | 67.20 | 32.80 |
| 1978-79 | 35.74 | 30.96 | 66.69 | 16.92 | 13.55 | 30.47 | 0.00 | 52.66 | 44.51 | 97.17 | 2.83 | 55.49 | 44.51 |
| 1979-80 | 39.61 | 26.91 | 66.52 | 19.92 | 8.77 | 28.68 | 0.39 | 59.91 | 35.67 | 95.58 | 4.42 | 64.33 | 35.67 |
| 1980-81 | 31.95 | 46.86 | 78.81 | 6.15 | 6.85 | 13.00 | 0.88 | 38.98 | 53.71 | 92.69 | 7.31 | 46.29 | 53.71 |
| 1981-82 | 38.43 | 45.10 | 83.53 | 5.24 | 5.71 | 10.95 | 1.41 | 45.08 | 50.81 | 95.88 | 4.12 | 49.19 | 50.81 |
| 1982-83 | 34.72 | 36.12 | 70.84 | 3.10 | 14.65 | 17.74 | 7.59 | 45.41 | 50.77 | 96.18 | 3.82 | 49.23 | 50.77 |
| 1983-84 | 32.29 | 44.20 | 76.48 | 7.78 | 6.49 | 14.27 | 1.58 | 41.64 | 50.69 | 92.33 | 7.67 | 49.31 | 50.69 |
| 1984-85 | 25.95 | 48.67 | 74.62 | 6.48 | 9.70 | 16.17 | 1.36 | 33.78 | 58.36 | 92.14 | 7.86 | 41.64 | 58.36 |
| 1985-86 | 33.43 | 49.48 | 82.92 | 5.76 | 4.03 | 9.79 | 0.54 | 39.74 | 53.51 | 93.25 | 6.75 | 46.49 | 53.51 |

Source: Same as in Table 3.9.

Note: 1. PACS total advance is the sum of short-term, medium-term and long-term credit;
Co-operative total agriculture credit is the sum of PACS total agriculture and PADBs total advances.

2. Total Co-operative is given in Appendix 3.5.

(continued)

Table 3.13 (f)

Share Analysis of Co-operative Credit in PMKWCK, Term-Wise and Use-Wise (In percentages)

| Years | Primary Agricultural Credit Societies (PACSs) | | | | | | | | | | PADBs | Co-operatives | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Short Term | | | Medium Term | | | Long Term | Total | Total | Total | Total | Total | Total |
| | Agri. | Non Agri. | Total | AGRI. | Non Agri. | Total | | Agri. | Non Agri. | Advance | Agri. | Agri. | Non Agri. |
| 1964-65 | 65.34 | 11.47 | 76.81 | 19.05 | 0.00 | 19.05 | 0.00 | 84.39 | 11.47 | 95.86 | 4.14 | 88.53 | 11.47 |
| 1965-66 | 58.85 | 17.25 | 76.10 | 19.29 | 0.00 | 19.29 | 0.00 | 78.14 | 17.25 | 95.39 | 4.61 | 82.75 | 17.25 |
| 1966-67 | 63.46 | 15.88 | 79.34 | 15.08 | 0.00 | 15.08 | 0.00 | 78.54 | 15.88 | 94.41 | 5.59 | 84.12 | 15.88 |
| 1967-68 | 75.87 | 5.72 | 81.58 | 13.66 | 0.00 | 13.66 | 0.00 | 89.53 | 5.72 | 95.24 | 4.76 | 94.28 | 5.72 |
| 1968-69 | 68.90 | 14.04 | 82.94 | 12.68 | 0.00 | 12.68 | 0.00 | 81.58 | 14.04 | 95.62 | 4.38 | 85.96 | 14.04 |
| 1969-70 | 66.13 | 19.10 | 85.23 | 9.71 | 0.00 | 9.71 | 0.00 | 75.84 | 19.10 | 94.94 | 5.06 | 80.90 | 19.10 |
| 1970-71 | 68.64 | 18.79 | 87.44 | 6.81 | 0.00 | 6.81 | 0.00 | 75.45 | 18.79 | 94.25 | 5.75 | 81.21 | 18.79 |
| 1971-72 | 68.82 | 17.94 | 86.76 | 6.13 | 0.00 | 6.13 | 0.00 | 74.95 | 17.94 | 92.89 | 7.11 | 82.06 | 17.94 |
| 1972-73 | 64.67 | 25.05 | 89.72 | 4.84 | 0.00 | 4.84 | 0.00 | 69.51 | 25.05 | 94.56 | 5.44 | 74.95 | 25.05 |
| 1973-74 | 65.72 | 19.99 | 85.70 | 8.89 | 0.00 | 8.89 | 0.00 | 74.61 | 19.99 | 94.60 | 5.40 | 80.01 | 19.99 |
| 1974-75 | 72.54 | 16.48 | 89.01 | 5.39 | 0.00 | 5.39 | 0.00 | 77.93 | 16.48 | 94.40 | 5.60 | 83.52 | 16.48 |
| 1975-76 | 64.11 | 22.86 | 86.97 | 6.09 | 0.00 | 6.09 | 0.00 | 70.20 | 22.86 | 93.06 | 6.94 | 77.14 | 22.86 |
| 1976-77 | 62.33 | 22.37 | 84.70 | 4.67 | 0.91 | 5.58 | 0.00 | 66.99 | 23.28 | 90.28 | 9.72 | 76.72 | 23.28 |
| 1977-78 | 59.09 | 22.13 | 81.22 | 5.36 | 5.63 | 10.99 | 0.00 | 64.45 | 27.75 | 92.20 | 7.80 | 72.25 | 27.75 |
| 1978-79 | 42.76 | 39.65 | 82.41 | 8.81 | 2.49 | 11.30 | 0.64 | 52.21 | 42.14 | 94.34 | 5.66 | 57.86 | 42.14 |
| 1979-80 | 50.67 | 33.95 | 84.62 | 4.54 | 2.12 | 6.66 | 1.06 | 56.27 | 36.07 | 92.35 | 7.65 | 63.93 | 36.07 |
| 1980-81 | 43.31 | 43.02 | 86.33 | 3.08 | 3.18 | 6.27 | 0.73 | 47.12 | 46.21 | 93.33 | 6.67 | 53.79 | 46.21 |
| 1981-82 | 35.08 | 50.01 | 85.09 | 3.25 | 2.33 | 5.59 | 1.17 | 39.50 | 52.35 | 91.85 | 8.15 | 47.65 | 52.35 |
| 1982-83 | 29.98 | 52.27 | 82.25 | 7.64 | 2.67 | 10.31 | 0.94 | 38.56 | 54.94 | 93.51 | 6.49 | 45.06 | 54.94 |
| 1983-84 | 35.90 | 49.97 | 85.87 | 5.02 | 3.14 | 8.16 | 0.72 | 41.64 | 53.11 | 94.75 | 5.25 | 46.89 | 53.11 |
| 1984-85 | 33.70 | 52.94 | 86.64 | 2.62 | 3.78 | 6.39 | 0.87 | 37.18 | 56.72 | 93.90 | 6.10 | 43.28 | 56.72 |
| 1985-86 | 31.11 | 55.67 | 86.78 | 2.31 | 3.55 | 5.86 | 1.18 | 34.59 | 59.22 | 93.81 | 6.19 | 40.78 | 59.22 |

Source: Same as in Table 3.9.

Note: 1. PACS total advance is the sum of short-term, medium-term and long-term credit;
Co-operative total agriculture credit is the sum of PACS total agriculture and PADBs total advances.

2. Total Co-operative credit is given in Appendix 3.5.

# Chapter 4

## Size-Class And Regional Variations

So far we have discussed the performance of institutional credit for agriculture with respect to users as a whole. It will be interesting to explore the disparity in the agricultural credit disbursement for each size class of land holding and also the extent of regional variations. This chapter therefore examines these aspects. In the first section we examine the inter-class disparity in the disbursement of agricultural credit and in the second section the inter-district variations in agricultural credit are dealt with.

### Section I

### Inter-Class Disparity

Kerala is one of the most densely populated states in India. It ranks the lowest in terms of the average size of operational holdings as compared to all other states. The average size of operational holding for Kerala was only 0.36 hectares, as against the all-India average of 1.28 hectares (Nair et.al, 1990:6). One may point out that the factors such as the positive policies adopted by the princely state of Travancore, the agrarian reforms introduced later by the successive Governments after the formation of Kerala, increase in population, migration and spread of commercial cultivation in hitherto marginal lands, as the possible reasons for the increase in the number of land owners accompanied by a corresponding decline in size of ownership holdings in Kerala.

The number of land owners in Kerala has been increasing steadily as a result of establishment and diffusion of ownerships. The Legislative measures like allotment of waste land to the landless, conferring ownership rights to hutment dwellers, ceilings on size of ownerships, and changes in inheritance system led to further increase and diffusion of ownerships (Varghese 1987).

Our analysis in this section is for the two time points, 1980-81 and 1985-86, since only for these two years data for both credit disbursed and area under cultivation along with number of operational holding are available. For other years simultaneous data of both these variables were not available.

Data on number and area of operational holdings are based on the Agricultural Census carried out by the Department of Economics and Statistics. An operational holder is defined as either an individual or joint or institutional. If the holding was operated either by one person alone or by a group of persons who are the members of the same household, it was considered as an individual holding. If two or more persons belonging to two different households shared jointly the economic and technical responsibility for the operation, it was treated as joint operational holding. Holdings such as government farms, sugarcane factories, co-operative farms, land managed by trust etc. were treated as institutional holdings. Operated area included both cultivated and uncultivated area provided a part of it is used for agricultural production during the reference period. It covered the land occupied by farm buildings including the house of the holder provided such buildings are within the

cultivated area. Operated area would exclude government forest land, government waste land etc.

Since in the present section, we are analysing the inter-class disparity in the disbursement of direct agricultural credit, only the individual owners (or families) are taken into consideration. Individuals (or families) are the most important group in terms of number of ownerships and area owned. Out of this small farmers and agricultural labourers constitute the vast majority of the farming population in the state.

Data relating to credit disbursement by size class are taken from the Report on Currency and Finance, published by the RBI. It provides the data for the state as a whole only. Based on the available data of co-operative and commercial bank credit under different size class, we have clubbed the number and area of different size classes.

Analysis

Inter-size class variations can be explained with the help of the following indicators.

(1) The share of each size group in the total area operated and in the total supply of credit;
(2) Per hectare credit supplied to each size group;
(3) Per borrower credit supplied in each size group.

For both the periods the highest share of credit extended for agriculture and allied activities by commercial banks is towards the marginal farmers, i.e., farmers having holdings up to one hectare (Table 4.1).

Table 4.1

Area, Number of holdings and Distribution of Commercial Bank Credit by Size-class

| Size-class (Hectares) | Number of Holders 1980-81 | 1985-86[a] (In Percentages) | Number of accounts 1980-81 | 1985-86 (In Percentages) | Percentage of no: of a/cs to no: of holders 1980-81 | 1985-86 | Area* 1980-81 | 1985-86 (In Percentages) | Credit disbursed 1980-81 | 1985-86 (In Percentages) | Credit/hectare 1980-81 | 1985-86 (In Rupees) | Credit per borrower 1980-81 | 1985-86 (In Rupees) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| upto 1 hectare | 88.23 | 91.61 | 85.88 | 76.79 | 4.94 | 8.02 | 43.25 | 48.95 | 74.99 | 70.18 | 431.36 | 1299.25 | 1931.53 | 2920.30 |
| 1 to 2 hectare | 7.56 | 5.74 | 9.38 | 16.46 | 6.29 | 27.44 | 23.03 | 22.82 | 11.81 | 16.87 | 127.56 | 669.91 | 2785.16 | 3274.66 |
| Above 2 hectares | 4.21 | 2.65 | 4.74 | 6.75 | 5.71 | 24.33 | 33.72 | 28.23 | 13.20 | 12.95 | 204.30 | 415.83 | 12156.64 | 6130.69 |
| All sizes | 100.00 | 100.00 | 100.00 | 100.00 | 5.07 | 9.57 | 100.00 | 100.00 | 100.00 | 100.00 | 763.22 | 906.24 | 16873.33 | 3195.37 |

Source: GoK, DES, Agricultural Census (1976-77 and 1985-86) and RBI, Report on Currency and Finance (1983-84 and 1987-88).

Notes: 1. Agricultural Census 1985-86 is provisional.

2. The absolute figures of Area, Number of accounts, No. of holders and Credit disbursed are given in the Appendix 4.1.



Table 4.2

Area, Number of holdings and Distribution of Co-operative Credit by Size-class

| Size-class (Hectares) | Number of Holders 1980-81 | 1985-86 (In percentages) | Number of accounts 1980-81 | 1985-86 (In percentages) | Percentage of no: of a/cs to no: of holders 1980-81 | 1985-86 | Area* 1980-81 | 1985-86 (In percentages) | Credit disbursed 1980-81 | 1985-86 (In percentages) | Credit/hectare 1980-81 | 1985-86 (in Rupees) | Credit per borrower 1980-81 | 1985-86 (in Rupees) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Upto 2 hectares | 95.79 | 97.35 | 72.04 | 87.20 | 26.51 | 41.70 | 66.28 | 71.77 | 67.05 | 67.07 | 1283.68 | 2885.01 | 1511.42 | 1720.62 |
| Above 2 hectares | 4.21 | 2.65 | 27.96 | 12.80 | 234.09 | 224.36 | 33.72 | 28.23 | 32.95 | 32.93 | 1239.66 | 3601.88 | 1913.35 | 5758.22 |
| All sizes | 100.00 | 100.00 | 100.00 | 100.00 | 35.25 | 46.55 | 100.00 | 100.00 | 100.00 | 100.00 | 1268.84 | 3087.37 | 1623.80 | 2237.24 |

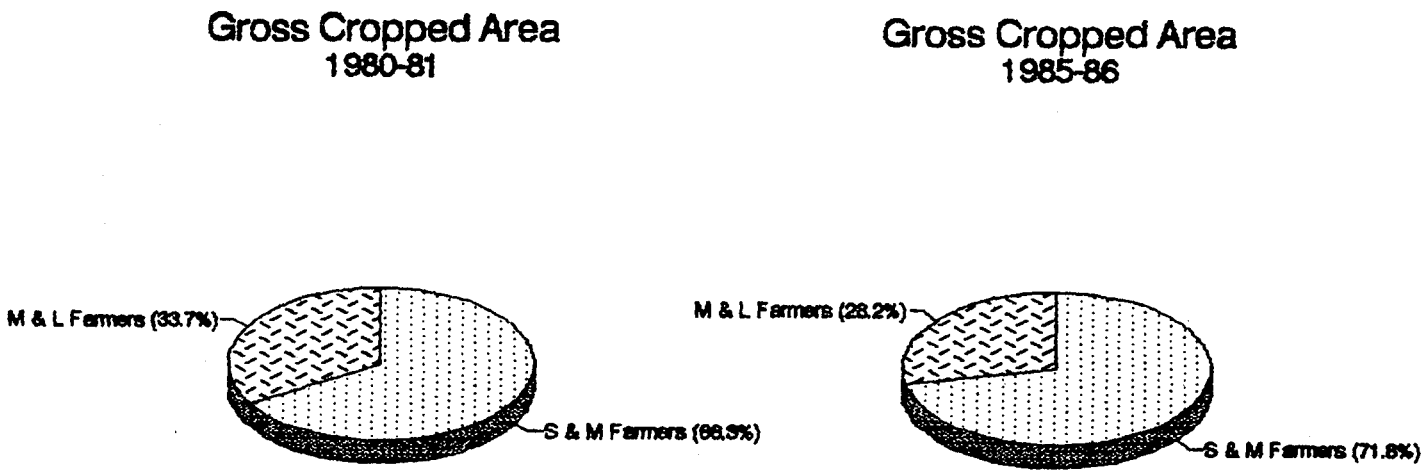
Source: GoK, DES, Agricultural Census (1976-77 and 1985-86) and RBI, Report on Currency and Finance (1982-83 and 1987-88).

Notes: 1. Same as in Table 4.1.

2. The absolute figures of Area, No. of accounts, No. of Holders and Credit disbursed are given in the Appendix 4.2.

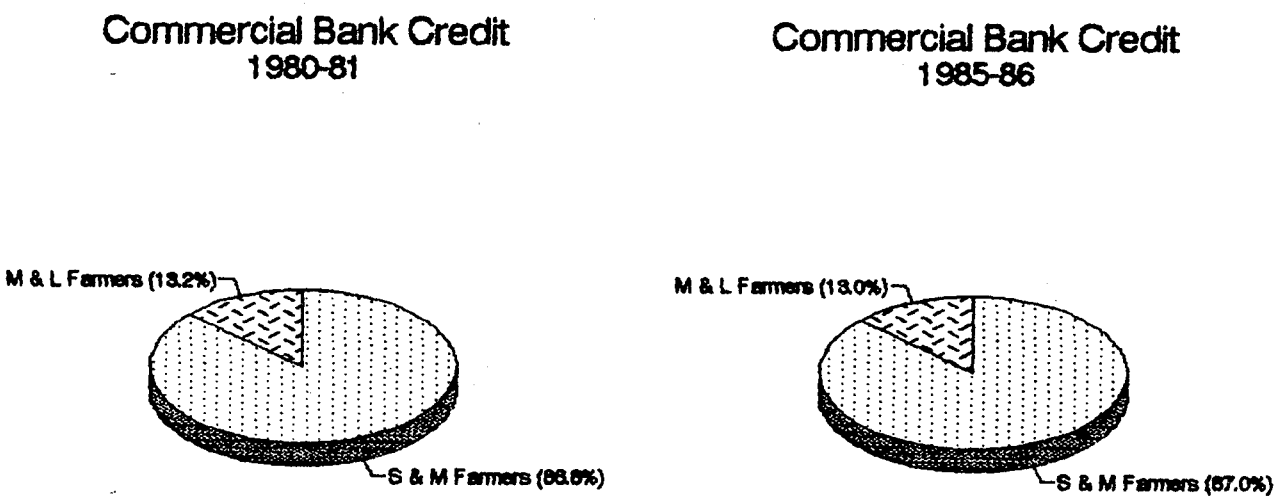
Graph 4.1

Share of Small and Marginal Farmers and Medium and Large Farmers in Total Gross Cropped Area



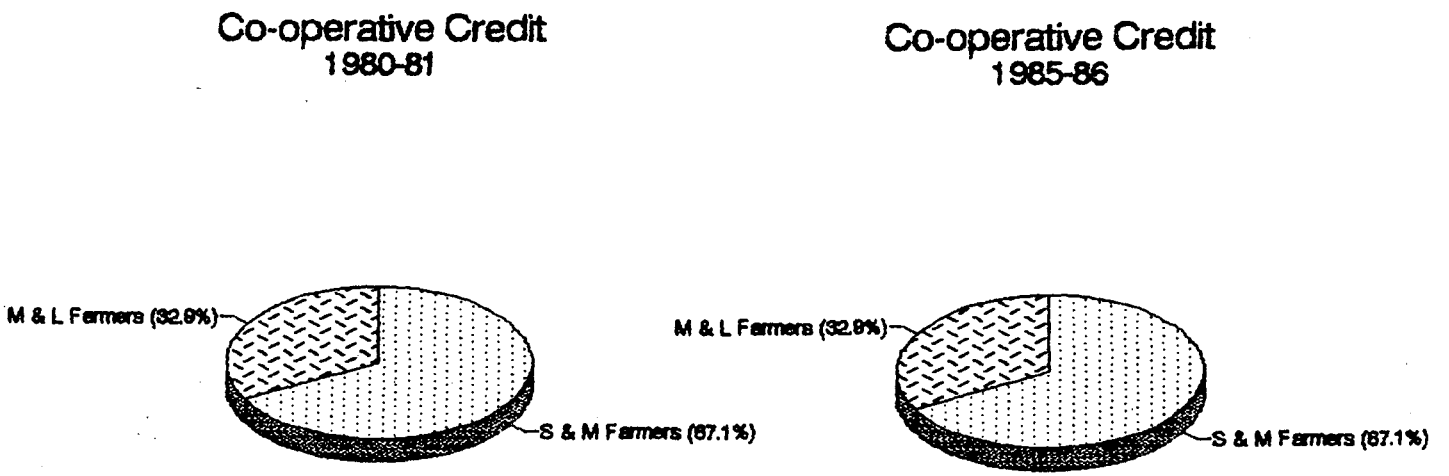
Graph 4.2

Share of Small and Marginal Farmers and Medium and Large Farmers in Commercial Bank Agricultural Credit



Graph 4.3

Share of Small and Marginal Farmers and Medium and Large Farmers in Co-operative Agricultural Credit



Even though the share of marginal and small farmers (farmers having holdings up to 2 hectares) in the total area operated is only 66.28 per cent in 1980-81 and 71.77 per cent in 1985-86 (Graph 4.1), their share in total credit disbursed by commercial banks is 86.80 per cent and 87.05 per cent respectively (Graph 4.2). Since the credit per hectare is also high for small and marginal farmers, i.e. Rs.558.92 in 1980-81 and Rs. 1969.16 in 1985-86 as against Rs. Rs.204.30 and Rs.415.83 respectively for medium and larger farmers, the possible reasons behind this may be the emphasis of policy on credit allocation for marginal and small farmers. The various policy measures initiated are as follows: Reserve Bank of India, based on the recommendations of the working group constituted by the RBI on Priority Sector Lending and 20 point Economic Programme, issued in October 1980, gave instructions to all commercial banks that direct advances to 'weaker sections'[1] in agriculture and allied activities should constitute at least 50 per cent of total direct lending to agriculture (including allied activities) by March 1983 and that the share of both direct and indirect credit for agriculture and allied activities in the total priority sector should be at least 40 per cent and the overall assistance to the priority sector should constitute 40 per cent of total advances by March 1985 (RBI 1980-81:71).

This was revised after 1983, and the banks were asked to ensure that direct finance itself, extended to agriculture (including allied activities) should reach a level of at least 15 per cent of total credit by March 1985 and at least 16 per cent by March 1987. And also it was stipulated that advances to

weaker sections should reach a level of 25 per cent of priority sector advances or 10 per cent of total bank credit by the end of March 1985 (also relevant for 1986) (RBI 1983:32).

Among the size-classes credit per borrower is high in the size class of above 2 hectares for both the periods (Table 4.1). This is because that as the size increases, the credit required per borrower will also increase i.e. credit per borrower appears to be proportional to the size of land. But there is decrease in the per borrower amount obtained by holders of this size-class (medium and large farmers). This decrease is mainly because of the decrease in the per borrower amount of term loans (Table 4.3 (b)).

Not only in the total commercial bank credit, but also in the short-term and term loan credit availability also, marginal and small farmers are getting larger share (Table 4.3(a) and Table 4.3(b)). During 1980-81 to 1985-86, there is an increase in the proportion of number of accounts to number of farm holders depending on commercial bank credit, both for short-term or term loans (Table 4.3(a) and 4.3(b)).

In the case of PACSs and PADBs, the credit per borrower is high in the size-class of above 2 hectares as in the case of commercial bank credit. But there is increase in the per borrower amount obtained by all the size-class farmers (Table 4.4(a) and 4.4(b)). Like commercial banks the PADB's credit per hectare is also high for marginal and small farmers.

Table 4.3 (a)

Distribution of Commercial Banks Short-Term Credit by Size-class

| Size-class (Hectares) | Number of accounts 1980-81 (In percentages) | 1985-86 | Percentage of no: of a/cs to no: of holders 1980-81 | 1985-86 | Credit disbursed 1980-81 (In Percentages) | 1985-86 | Credit/hectare 1980-81 (In Rupees) | 1985-86 | Credit per borrower 1980-81 (In Rupees) | 1985-86 |
|---|---|---|---|---|---|---|---|---|---|---|
| upto 1 hectare | 86.77 | 79.57 | 4.63 | 7.25 | 77.16 | 74.97 | 393.68 | 1148.15 | 1878.69 | 2852.88 |
| 1 to 2 hectares | 8.80 | 15.79 | 5.48 | 22.98 | 11.30 | 16.72 | 108.28 | 549.26 | 2715.08 | 3206.27 |
| Above 2 hectares | 4.43 | 4.63 | 4.96 | 14.57 | 11.54 | 8.31 | 75.52 | 387.82 | 5502.27 | 5432.28 |
| All sizes | 100.00 | 100.00 | 4.71 | 8.35 | 100.00 | 100.00 | 220.66 | 6164.15 | 2112.83 | 3028.20 |

Source: Same as in Table 4.1.

Note: The absolute figures of No. of accounts and Credit disbursed are given in the Appendix 4.3.



Table 4.3(b)

Distribution of Commercial Banks Term loans According to Size-class.

| Size-class (Hectares) | Number of accounts 1980-81 (In percentages) | 1985-86 | Percentage of no: of a/cs to no: of holders 1980-81 | 1985-86 | Credit disbursed 1980-81 (In Percentages) | 1985-86 | Credit/hectare 1980-81 (In Rupees) | 1985-86 | Credit per borrower 1980-81 (In Rupees) | 1985-86 |
|---|---|---|---|---|---|---|---|---|---|---|
| upto 1 hectare | 74.29 | 57.64 | 0.30 | 0.77 | 58.00 | 47.24 | 37.68 | 151.10 | 2735.29 | 3559.41 |
| 1 to 2 hectares | 16.99 | 21.06 | 0.81 | 4.46 | 15.80 | 17.59 | 19.27 | 120.65 | 3257.61 | 3626.82 |
| Above 2 hectares | 8.72 | 21.30 | 0.75 | 9.75 | 26.20 | 35.17 | 21.82 | 342.77 | 10526.32 | 7174.24 |
| All sizes | 100.00 | 100.00 | 0.36 | 1.22 | 100.00 | 100.00 | 28.09 | 1287.39 | 3503.28 | 4343.39 |

Source: Same as in Table 4.1.

Note: The absolute figures of No. of accounts and Credit disbursed are given in the Appendix 4.3.

Table 4.4 (a)

Distribution of PACS Credit by Size-class

| Size-class (Hectares) | Number of accounts 1980-81 (In percentages) | 1985-86 | Percentage of no: of a/cs to no: of holders 1980-81 | 1985-86 | Credit disbursed 1980-81 (In Percentages) | 1985-86 | Credit/hectare 1980-81 (In Rupees) | 1985-86 | Credit per borrower 1980-81 (In Rupees) | 1985-86 |
|---|---|---|---|---|---|---|---|---|---|---|
| Upto 2 hectares | 71.37 | 87.11 | 25.44 | 40.93 | 64.61 | 65.27 | 1106.91 | 2590.38 | 1357.95 | 1573.99 |
| Above 2 hectares | 28.63 | 12.89 | 232.18 | 222.08 | 35.39 | 34.73 | 1191.51 | 3504.76 | 1854.18 | 5660.35 |
| All sizes | 100.00 | 100.00 | 34.15 | 45.74 | 100.00 | 100.00 | 1135.44 | 2848.50 | 1500.00 | 2100.72 |

Source: Same as in Table 4.2.

Note: The absolute figures of No. of accounts and Credit disbursed are given in the Appendix 4.4.



Table 4.4 (b)

Distribution of PADBs Credit by Size-class

| Size-class (Hectares) | Number of accounts 1980-81 (In percentages) | 1985-86 | Percentage of no: of a/cs to no: of holders 1980-81 | 1985-86 | Credit disbursed 1980-81 (In Percentages) | 1985-86 | Credit/hectare 1980-81 (In Rupees) | 1985-86 | Credit per borrower 1980-81 (In Rupees) | 1985-86 |
|---|---|---|---|---|---|---|---|---|---|---|
| Upto 2 hectares | 92.70 | 92.55 | 1.07 | 0.77 | 87.83 | 88.52 | 176.77 | 294.63 | 5170.50 | 9508.31 |
| Above 2 hectares | 7.30 | 7.45 | 1.91 | 2.27 | 12.17 | 11.48 | 48.15 | 97.11 | 9096.86 | 15313.46 |
| All sizes | 100.00 | 100.00 | 1.10 | 0.81 | 100.00 | 100.00 | 133.40 | 238.87 | 5457.20 | 9940.79 |

Source: Same as in Table 4.2.

Note: The absolute figures of No. of accounts and Credit disbursed are given in the Appendix 4.4.

But credit per hectare is less in the case of PACSs. This is because the PACS's share of assistance to small and marginal farmers compared to other institutions is less for both the periods (65 per cent).

When both PACS and PADBs (i.e co-operative banks as a whole) are combined together, the share of number of accounts of marginal and small farmers served by them have increased from 72.04 per cent in 1980-81 to 87.20 per cent in 1985-86 (Table 4.2). But only very little increase in the credit given for small and marginal farmers i.e. 67.05 to 67.07 respectively for the periods. (Table 4.2 and Graph 4.3).

Though the commercial banks are serving the marginal and small farmers in a greater proportion, in quantitative terms they are much below than Co-operatives (Appendix 4.1 and 4.2).

In the state, hardly 4.63 per cent of marginal farmers and 5.48 per cent of small farmers have taken commercial banks short term credit in 1980-81 (Table 4.3 (a)) and 0.30 per cent and 0.81 per cent respectively of commercial banks term loans (Table 4.3 (b)). Whereas 25.44 per cent of marginal and small farmers are members of PACSs (Table 4.4 (a)) and 1.07 per cent are members of PADBs (Table 4.4 (b)). But even this is low compared to other size classes in 1980-81. By 1985-86 the situation has improved especially in the number of small farmers served by Commercial banks through short-term and term loans and also the marginal and small farmers served by PACS.

The possible reasons for the lower proportion of operational holders served by institutional agencies can be: (1) the people's lack of awareness of the credit facilities, (2) having their own resources for agricultural operations (3) because of the formalities they have to undergo while taking a loan (4) because of approaching other credit institutions for their needs and (5) because of the large number of marginal and small farm holders in the state (ie. above 95 per cent of the total holders in Kerala are having land less than 2 hectares), the proportion of holders served by banks will be less.

At the same time in the case of medium and large farmers, much more than the number of operational holders, the number of accounts have been opened in the PACSs for both the periods (Table 4.4(a)). One possible reason for this can be the opening of accounts by the same land holder in more than one bank.

Section II

Inter-District Variations

The review of various articles and studies reveals that there is wide inter-regional variation in the agricultural credit per hectare. As noted earlier Kerala ranks first in the availability of agricultural credit per hectare. So it is necessary to analyse whether intra-regional or inter-district disparity in agricultural credit exists in the state.

We took agricultural credit per hectare of net sown area (NSA) as an indicator for studying regional disparity, where net area sown is the net geographical area on which cultivation

takes place. First we adopted gross cropped area (GCA) as the indicator as it is the net geographical area on which cultivation takes place multiplied by the intensity of cultivation. But it was replaced by NSA, as we have taken GCA for our subsequent analysis, where we are trying to investigate the effect of change in the intensity of cultivation itself on the quantum of agricultural credit given by the institutions. Therefore, to divide the absolute quantum of agricultural credit by total gross cropped area in a district and to term it agricultural credit per hectare of GCA which we want to investigate in its relationship with intensity of cultivation would trap us in circular reasoning. Here agricultural credit means pure agricultural credit as far as co-operative societies are concerned and it excludes non-agricultural credit portion. So in order to obtain that figure, we took the pure agricultural credit advanced by the primary agricultural credit societies and primary agricultural development banks. And only the direct finance which is given to the farmers by the commercial banks are taken, as the indirect finance includes credit for non-agricultural purposes also. The inequality is measured by Coefficient of Variation.

a) Variations in Co-operative Agricultural Credit/hectare

From Table 4.5, it can be seen that considering the total supply of co-operative credit in 1974-75, per hectare availability varied among the districts from Rs 128.03 in Malappuram to Rs 259.50 in Kottayam. The districts of Trivandrum, Quilon, Idikki and Malappuram had lower amount of co-operative credit available per hectare for the period 1974-75 than the State average of Rs 199.22 per hectare. The values of c\v

(coefficient of variation) of credit per hectare presented in the Table reflect the degree of inter-district variation in the distribution of credit between 1974-75 and 1985-86. The coefficients of variation in credit per hectare of net sown area for the years 1974-75 (19.78) and 1985-86 (36.87) reveal that the regional disparities in co-operative credit have widened over the years.

Table 4.5

Co-operatives Per Hectare Credit Disbursement to Pure Agriculture

| Districts | Credit Amount in '000s | | Net Sown Area Hectares | | Credit Per Hectare (Rs) | | Rank | |
|---|---|---|---|---|---|---|---|---|
| | 1974-75 | 1985-86 | 1974-75 | 1985-86 | 1974-75 | 1985-86 | 1974-75 | 1985-86 |
| Trivandrum | 26422 | 193669 | 151923 | 143017 | 173.92 | 1354.17 | 9 | 6 |
| Quilon | 41285 | 179499 | 229511 | 142795 | 179.88 | 1257.04 | 8 | 7 |
| Pathanamthitta | NA | 97035 | NA | 101101 | NA | 959.78 | NA | 11 |
| Alleppey | 35087 | 202988 | 164384 | 103019 | 213.45 | 1970.39 | 5 | 2 |
| Kottayam | 47475 | 452687 | 182943 | 182573 | 259.50 | 2479.48 | 1 | 1 |
| Idikki | 22582 | 171197 | 166861 | 165971 | 135.34 | 1031.49 | 10 | 9 |
| Ernakulam | 40357 | 313404 | 185698 | 178430 | 217.32 | 1756.45 | 4 | 4 |
| Trichur | 32533 | 274414 | 139332 | 155879 | 233.49 | 1760.43 | 3 | 3 |
| Palghat | 69250 | 258405 | 293036 | 216049 | 236.32 | 1196.05 | 2 | 8 |
| Malappuram | 26944 | 154564 | 210453 | 201274 | 128.03 | 767.93 | 11 | 14 |
| Kozhikode | 33460 | 131782 | 166426 | 162469 | 201.05 | 811.12 | 7 | 12 |
| Wynad | NA | 90164 | NA | 114203 | NA | 789.51 | NA | 13 |
| Cannanore | 67740 | 306807 | 317884 | 189501 | 213.10 | 1619.03 | 6 | 5 |
| Kasargod | NA | 134978 | NA | 134704 | NA | 1002.03 | NA | 10 |
| State Average | | | | | 199.22 | 1339.64 | | |
| Standard Devi. | | | | | 39.40 | 493.94 | | |
| C/V | | | | | 19.78 | 36.87 | | |

Source: 1. GoK, DES.
2. GoK, Registrar of Co-operative Societies (1974-75 and 1985-86).

In 1985-86, the co-operative credit per hectare ranged from Rs 767.93 in Malappuram to Rs 2479.48 in Kottayam. And the districts of Kottayam, Alleppey, Trichur and Ernakulam had relatively higher amount of Co-operative credit available per hectare than the State average of Rs 1339.64 per hectare. Compared to 1974-75 Trivandrum came above the State average in the availability of co-operative credit in 1985-86. But Palghat's

position in the availability of credit per hectare declined very much from second position in 1974-75 to eighth position in 1985-86. For both the periods Malappuram's position has not improved and Kottayam maintained its first position.

b) Variations in Commercial Banks Agriculture credit/hectare

As far as commercial banks are concerned, from Table 4.6 it is clear that regional disparities in commercial bank agricultural credit have declined over the years, as the coefficient of variation falls from 41.28 percent in 1974-75 to 26.36 percent in 1985-86.

Table 4.6

Commercial Banks Per Hectare Outstanding Credit to Agriculture

| Districts | Direct Finance Amt in '000s | | Net Sown Area Hectares | | Credit Per Hectare (Rs) | | Rank | |
|---|---|---|---|---|---|---|---|---|
| | 1974-75 | 1985-86 | 1974-75 | 1985-86 | 1974-75 | 1985-86 | 1974-75 | 1985-86 |
| Trivandrum | 35728 | 388646 | 151923 | 143017 | 235.17 | 2717.48 | 2 | 1 |
| Quilon | 26226 | 243118 | 229511 | 142795 | 114.27 | 1702.57 | 8 | 8 |
| Pathanamthitta | NA | 114446 | NA | 101101 | NA | 1132.00 | NA | 14 |
| Alleppey | 22646 | 209124 | 164384 | 103019 | 137.76 | 2029.96 | 6 | 4 |
| Kottayam | 42438 | 317106 | 182943 | 182573 | 231.97 | 1736.87 | 3 | 7 |
| Idikki | 12783 | 202909 | 166861 | 165971 | 76.61 | 1222.56 | 10 | 13 |
| Ernakulam | 35792 | 351069 | 185698 | 178430 | 192.74 | 1967.54 | 4 | 6 |
| Trichur | 25883 | 306897 | 139332 | 155879 | 185.76 | 1968.82 | 5 | 5 |
| Palghat | 31957 | 286123 | 293036 | 216049 | 109.05 | 1324.34 | 9 | 11 |
| Malappuram | 13617 | 318135 | 210453 | 201274 | 64.70 | 1580.61 | 11 | 9 |
| Kozhikode | 45990 | 332981 | 166426 | 162469 | 276.34 | 2049.50 | 1 | 3 |
| Wynad | NA | 278990 | NA | 114203 | NA | 2442.93 | NA | 2 |
| Cannanore | 42854 | 258688 | 317884 | 189501 | 134.81 | 1365.10 | 7 | 10 |
| Kasargod | NA | 165420 | NA | 134704 | NA | 1228.03 | NA | 12 |
| State Average | | | | | 159.93 | 1747.74 | | |
| Standard Devi. | | | | | 66.03 | 460.78 | | |
| C/V | | | | | 41.28 | 26.36 | | |

Source: GoK, DES.
RBI, Basic Statistical Returns (June 1975 and June 1986).
Note: Direct Finance is the sum total of direct finance for agriculture excluding plantations, plantations and allied activities.

The districts of Kozhikode, Trivandrum, Kottayam, Ernakulam and Trichur were the districts whose credit per hectare

was above the State average in 1974-75. And credit per hectare ranged between Rs 64.70 in Malappuram to Rs 276.34 in Kozhikode.

Towards 1985-86 the situation has improved and more districts like Trivandrum, Wynad, Kozhikode, Alleppey, Trichur and Ernakulam came above the State average. In 1985-86, credit per hectare varied between Rs 1132.00 in Pathanamthitta to Rs 2717.48 in Trivandrum.

Palghat's position in co-operative and commercial bank credit per hectare is declining over the years. That means, in the most important rice producing district, availability of credit per hectare is declining and is low compared to other districts. Similarly in the northern districts of Kerala, the co-operative credit per hectare is very low compared to other districts.

Conclusion

Thus in the analysis of size-class variations of agricultural credit, one can see that the institutional agencies are giving priority in their agriculture lending activities to marginal and small farmers, i.e. in a State like Kerala, where the number of marginal and small farmers are high and where area under this size class is high, direct agriculture credit to this size class is also high and increasing. But even though the institutions have followed the RBI stipulation of providing 50 per cent of direct agricultural loans to marginal and small farmers, except PACSs, the number or percentage of farmers out of the total land holders served by rest of the institutions is very low, especially the proportion of marginal and small farmers

served. So along with the amount stipulation, more farmers are to be served by these institutions. At the same time making people aware of the type of loan facilities, reducing the formalities involved, monitoring the end-use of credit and assessing its impact on increasing in the levels of production, productivity and income levels of beneficiaries are essential. But along with the increase in the number of accounts, they have to increase the total amount alloted to this sector also, otherwise per borrower amount will considerably be reduced.

The analysis of inter-district variations of agricultural credit shows that for both the periods the only districts where the co-operative credit/hectare and commercial credit/hectare are above the state average are Ernakulam and Trichur. As we have mentioned earlier these districts are the highly developed areas as far as banking facilities are concerned from the pre-independence period itself. We also found that, while the inter-district disparity of commercial banks agricultural credit per hectare decreased between the end periods 1974-75 and 1985-86, the co-operative banks agricultural credit per hectare disparity across the districts increased over the period of analysis.

In the next chapter we are analysing the reasons for the inter-district variations in agricultural credit per hectare, why the two credit institutions are performing in two different ways in their disbursement of agricultural credit and there by make out the factors influencing institutional credit for agriculture across the districts.

## Foot Notes

1. Weaker Sections in this section would comprise small and marginal farmers and landless labourers.

# Chapter 5

## Factors Influencing Agricultural Credit in Kerala (A Principal Component Analysis Approach)

The foregoing analysis has revealed the presence of some very sharp inter-district variations in the disbursement of agricultural credit per hectare of both commercial banks and co-operative banks. Another interesting finding of our previous analysis is the decrease in the inter-district disparity of commercial bank credit per hectare over the period 1974-75 (41.28 per cent) to 1985-86 (26.36 per cent), as compared to the increase in inter-district disparity of co-operative bank credit over the same period from 19.78 per cent to 36.87 per cent. Therefore the variations on the credit allocation need to be explained in terms of institutional and other economic variables. This chapter is an attempt in this direction.

More specifically we shall focus on the answers for the following questions;

1) What are the reasons for the inter-district variations in agricultural credit?
2) Why did the inter-district disparity in co-operative credit per hectare increased and commercial bank credit per hectare decreased over the period 1974-75 to 1985-86?
3) Whether the inter-district variation in agriculture credit is associated with the variation in the economic characteristics of different districts; or, what are the factors specific to the region which influence the disbursement of agricultural credit?

There are several quantitative methods available for the identification of the factors that explain the variability of supply of credit per hectare to agriculture. The standard one is the multiple regression technique. However the method is inappropriate in the present context due to the following reasons. Since there are a large number of economic and other institutional variables to be included for explaining the supply of agricultural credit, it is quite likely that they are highly correlated. This would imply that the estimated equation has severe multicollinearity problem. As a result, the statistical inference based on the estimated equation has very low precision. Moreover, the causality assumed in the specification has no apriori theoretical basis. In fact the relationship between the explanatory variable and credit are simultaneously determined. In such a situation, Principal Component Analysis, which is one of the methods of Factor Analysis is considered to be a better tool for the investigation. As it is a study of mutual association, and reduces the original number of explanatory variables to a smaller number of independent factors in terms of which the whole set of variables can be understood.

In addition to the above reasons, generally studies on differences in inter-regional or intra-regional development levels should take into consideration various physical variables which have some bearing on the overall development. The procedure normally followed is basically to rank countries/states/regions according to the index of each indicator (say with the high developed country = 100) or according to the absolute values on the indicators or to pool the rankings of all the indicators together. The limitation of this method is that

while combining various physical variables either they are given subjective weights or are without weights. Since the indicators vary in terms of their relative importance, assigning equal weights would not be justified (Hemlata Rao 1984:28).

Composite Weighted Index Of Development

In view of the considerable diversity between regions, and the consequent inadequacy of any single measure of development various composite measures have been put forward. The basic principle behind these measures is to combine a number of economic, social and cultural factors in order to produce an overall picture of a region (Hemlata Rao 1984:29).

Therefore to arrive at a composite index of development it is desirable to assign weights to indicators. The weights should not be given arbitrarily or should not be based on subjective valuation or should not be derived unscientifically. If the `weights' are not properly derived the resultant index of development would be more inappropriate than an unweigted index or an index based on proxy variable. Hence it is important to be careful on the method of deriving weights. Realising the importance of a scientific and less subjective index of development, in the recent times, the multivariate statistical technique called the Factor Analysis is being widely used by the regional planners, economists and geographers. `Factor Analysis' technique provides factor loadings for each variable and these `factor loadings' are nothing but co-efficient of correlation between the observed variables and the unknown derived factor (Hemlata Rao 1984:32.33).

Factor Analysis is based on the fundamental assumption that some underlying factors, which are smaller in number than the number of observed variables, are responsible for the co-variance among the observed variables. The credit for developing a composite index with the help of 'Principal Component Analysis' (PCA), which is one of the methods of Factor Analysis goes to Hagood (1943), who employed this technique in regional analysis to delineate major regions of relatively greater homogeneity. By classifying some 104 variables in 14 groups, Hagood applied PCA to derive implicit weights (factor loadings) and subsequently worked out a combined index for each group. At the next step the combined indices of each group were pooled together with their respective implicit weights and a composite index of development was thus constructed (Hemlata Rao 1984:33).

Principal Component Analysis, Theory

The Principal Components Analysis transforms the original set of variables into a smaller set of linear combinations that account for most of the variance of the original set. The purpose of PCA is to determine factors (i.e., principal components) in order to explain as much of the total variation in the data as possible with as few of these factors as possible.

The principal components are extracted so that the first principal component, denoted by $PC_{(1)}$, accounts for the largest amount of the total variation in the data. That is, $PC_{(1)}$ is that linear combination of the observed variables

$X_j$, j=1,2....,p - say

$$PC_{(1)} = W_{(1)1}X_1 + W_{(1)2}X_2 + \ldots\ldots + W_{(1)p}X_p$$

Where the weights $W_{(1)1}$, $W_{(1)2}$,...,$W_{(1)p}$ have been chosen to maximise the ratio of the variance of $PC_{(1)}$ to the total variation, subject to the constraint that $\Sigma P_j = {}_1w^2{}_{(1)j} = 1$. The second principal component, $PC_{(2)}$, is that weighted linear combination of the observed variables which is uncorrelated with the first linear combination and which accounts for the maximum amount of the remaining total variation not already accounted for by $PC_{(1)}$. In general, then, the $m^{th}$ principal component is that weighted linear combination of the X's,

$$PC_{(m)} = W_{(m)1}X_1 + W_{(m)2}X_2 + \ldots\ldots + W_{(m)p}X_p .$$

which has the largest variance of all linear combinations that are uncorrelated with all of the previously extracted principal components (Goldstein & Dillon 1984:24.25).

In short, the Principal Component Analysis enables one to determine a vector known as the first principal component/factor, linearly dependent on the constituent variables, having the maximum sum of squared correlation with the variables. The eigne vector F1 corresponding to the maximum eigne value of the correlation matrix R, gives the required factor loadings (weights) (Kundu 1980:100).

In the present study as we have mentioned earlier, the Principal Component Analysis have been used for extracting factors which are responsible for the covariance among the observed variables. For the application of Principal Component Analysis, the first principal component method at two stages is adopted. First principal component method means for the preparation of composite index or factor scores we have taken only the first factor or principal component.

At the first stage, the selected variables have been divided into sub-groups in such a way that, within a sub-group, they "have inter correlation while canonical correlation between pairs of sub-groups is low on an average". The Principal component analysis are then applied to each sub-groups. At the second stage, all the first factor scores or sectoral indices obtained from different sub-groups are treated as a set of new variables and once again PCA is applied. This method, it has been argued, alleviates the necessity of taking more than one principal factor, since the correlation among the variables in a sub-group will be generally high and consequently, the first principal factor explains an 'adequate' proportion of the variation in the data matrix (Kundu 1980:101.102).

In this study the composite index or sectoral indices at the first stage is obtained as follows:

$$S_{jk} = \sum_{i=1}^{ni} P_{i1k} * Z_{ji1k}$$

where $S_{jk}$ = Composite index of jth district for the kth sector/ sub-group;

ni depends on the number of variables in each sector;

Pi1 = The factor loading or weight for the ith variable in the first factor or principal component in the kth sector; and

$Z_{ji1k}$ = Standardised variable values of jth district's ith variable in the kth sector or sub-group. The standardised values are calculated using the formula given below

$$Z_{ji} = \frac{x_{ji} - \bar{x}_i}{\sigma_i}$$

where $x_{ji}$ = Value of ith variable in jth region; j= 11 districts in 1974-75 and 14 districts in 1985-86;

$\bar{x}_i$ = arithmetic mean of ith variable and

$\sigma_i$ = standard deviation of ith variable.

The Standardised values are scale-free values. In order to convert raw data which are measured in different units, (eg.: bank branches are measured in numbers, deposits and advances in rupees, area in hectares and so on) into a single unit.

Normally, the factors obtained are rotated in order to make them more interpretable. In this analysis we have used the 'Varimax' criterion for rotating them (both first and second stage). The Varimax criterion of rotation of factors ensures that the variation of the squared factor loadings for a given factor is made large. This method is used most commonly to rotate the Principal Component Solutions.

Selection of Indicators

The variables selected for the present study are those economic characteristics which would influence the level of agricultural credit disbursement in a region. The selection of 21 economic indicators were based on some apriori reasoning on the basis of existing literature and the availability of data at the district level. These 21 indicators are grouped under four heads viz. 'Banking variables', 'Agricultural variables', 'Stock or Asset creation variables' and 'Land holding variables', to know the influence or association of each group to the agricultural credit per hectare across districts. The variables coming under each head and the sources of data are given in Table 5.1. Every effort was made to collect data for the said end periods of our previous analysis of growth rates of agriculture credit and inter-district disparity i.e., 1974-75 and 1985-86 or nearest to those periods. We have tried our best to eliminate duplication of

information while selecting variables. For example, combining agricultural production along with agricultural input variables means high collinearity between input and output (since output is the result of the application of combination of inputs), also due to cause and effect relationship the resultant index values get boosted up (Hemlata Rao 1984:161).

Table-5.1

| Variable | Indicators | Sources of Data |
|---|---|---|
| 1. Banking Variable | V1- Commercial banks no: of branches per 10 lakh population | RBI, Basic Statistical Returns (BSR) |
| | V2- Commercial banks Per capita deposit | RBI, BSR |
| | V3- Commercial banks Per capita credit | ,, ,, |
| | V4- Commercial banks Credit/Deposit ratio | ,, ,, |
| | V5- Co-operative banks no: of branches per 10 lakh population | GoK, The Registrar of Co-operative Societies |
| 2. Agriculture Variables | V6- Percentage of Gross cropped area to Net sown area | GoK, DES, Statistics for planning. |
| | V7- Percentage of area under H.Y.V of paddy to gross cropped area | ,, ,, |
| | V8- Percentage of area under Non-food crops | GoK, DES, |
| | V9- Percentage of Net Irrigated Area to NSA | Season and Crop Report |
| | V10-Consumption of Fertilisers/Hectare of gross cropped area. | ,, ,, & Statistics for Planning |
| 3. Stock or Asset creation variable | V11- No: of tractors per '000 hectares | GoK, DAH, Live Stock Census |
| | V12- No: of Power tillers per '000 hectares | |
| | V13- No: of Pumpsets (Diesel) ,, ,, | ,, ,, |
| | V14- No: of Pumpsets (Electric) ,, ,, | ,, ,, |
| | V15- No: of Wooden Plough per ,, ,, | ,, ,, |
| | V16- No: of Steel Plough per ,, ,, | ,, ,, |
| | V17- Live stock density | ,, ,, |
| | V18- Poultry density | ,, ,, |
| 4. Land Holding Variable | V19- Avg. size of holding of Marginal Farmers | GoK, DES, Agriculture Census |
| | V20- Avg. size of holding of Non-Marg. Farmers | ,, ,, |
| | V21- % age of Non-Marginal Farmers to total | ,, ,, |
| 5. Commercial Bank Credit/Hectare | | Same as Table 4.6 |
| 6. Co-operative Credit/ Hectare | | Same as Table 4.5 |

Note: Further details about the data and its sources are given in the Appendix 5.1(a), 5.1(b), 5.2(a) & 5.2(b).

In the second stage for finding the variation of 'agricultural credit per hectare' along with the other economic variables, among the districts, we have included the agricultural credit per hectare of net sown area (of both commercial banks and

co-operative banks) as a variable along with the selected indices of banking, agriculture, stock and land holding variables. In order to assess the performance of each institution, principal component analysis has been run separately for both commercial banks and co-operative banks. (i.e., running PCA with commercial bank credit/hectare (standardised value), along with the indices of banking, agriculture, stock and land holding variables respectively. A similar exercise has been done for co-operative banks also.

Rank Correlation analysis technique has also been used for examining the level of significance of correlation between agricultural credit per hectare and banking, agriculture, stock (asset creation), and land holding variables or to find out the factors influencing agricultural credit across the districts.

## Estimation and Its Inferences

### First Stage of the Analysis:

As mentioned earlier, in this section the 21 indicators (variables) relating to 11 districts in 1974-75 and 14 districts in 1985-86 has been divided into 4 sub-groups and PCA is applied to know the extent of variation in each sub-group. Districts which are developed as far as each sub-group has been analysed. And also we have looked into the stability of the ranks of these districts for the two periods.

### 1. Banking Variables: (V1 to V5)

Based on the 5 indicators, the principal component analysis brought out two factors. From the Table 5.2 it is clear

that the first factor has been found to be responsible for 54.3 per cent of the variation in 1974-75 and 49.6 per cent of the variation in 1985-86. For both the periods the first factor of the banking variables have high loading (or weights) in 1) commercial banks number of branches per 10 lakh population, 2) Commercial banks per capita deposit and 3) Commercial banks per capita credit. But the extent of variation and also their respective weights has come down over the period of analysis. This means that even though the variation in the banking variables across the districts may be explained in terms of these 3 variables, their degree of variation has come down over the period of analysis, which implies commercial banks have started attempting to reduce disparity in their functioning across the districts, which is encouraging.

Table 5.2

Factor Matrix of Banking Variables

| Sl. No. | Indicators | 1974-75 Factor Loadings F1 | F2 | 1985-86 Factor Loadings F1 | F2 |
|---|---|---|---|---|---|
| 1. | Comm.banks no:of branches/10 lakh popu. | 0.91498 | -0.30796 | 0.83746 | 0.42549 |
| 2. | Commercial banks Per capita deposit. | 0.96364 | -0.09530 | 0.74345 | 0.57107 |
| 3. | Commercial banks Per capita credit. | 0.92268 | 0.35996 | 0.88236 | -0.38950 |
| 4. | Commercial banks Credit/Deposit ratio. | 0.20474 | 0.88084 | 0.00695 | -0.90156 |
| 5. | Co-op banks no:of branches/10 lakh popu. | 0.23716 | -0.57034 | 0.12724 | 0.63478 |
| | Percentage of variance explained. | 54.3 % | 26.7 % | 49.6 % | 28.9 % |

Source: Table 5.1, variable 1.

As far as ranking of districts with respect to the level of development in banking variables, we found that Ernakulam has maintained the first position for both the periods (Table 5.3). When we analysed the rank correlation of the districts for the two periods (for this we deleted the newly formed districts and reordered the ranks), to know the extent of

stability in ranks, we found that there is very high correlation (0.9455; significant at 1 per cent).

Table 5.3

Composite Index of Banking Variables

| Sl.no: | Districts | 1974-75 Scores | 1974-75 Rank | 1985-86 Scores | 1985-86 Rank |
|---|---|---|---|---|---|
| 1. | Trivandrum | 0.33349 | 4 | 1.12406 | 4 |
| 2. | Quilon | -0.12149 | 5 | -0.53741 | 7 |
| 3. | Pathanamthitta | --- | --- | 2.65812 | 2 |
| 4. | Alleppey | -0.25126 | 6 | -0.05926 | 6 |
| 5. | Kottayam | 1.49139 | 2 | 1.28805 | 3 |
| 6. | Idikki | -2.78407 | 10 | -2.25670 | 13 |
| 7. | Ernakulam | 7.33368 | 1 | 5.63421 | 1 |
| 8. | Trichur | 0.75681 | 3 | 0.81280 | 5 |
| 9. | Palghat | -0.65112 | 7 | -1.21764 | 11 |
| 10. | Malappuram | -3.61036 | 11 | -2.73878 | 14 |
| 11. | Kozhikode | -1.22208 | 8 | -1.18297 | 10 |
| 12. | Wynad | --- | --- | -1.47559 | 12 |
| 13. | Cannanore | -1.27502 | 9 | -1.03662 | 9 |
| 14. | Kasargod | --- | --- | -1.01224 | 8 |

## 2. Agricultural variables: (V6 to V10)

With respect to agricultural variables, along with 5 indicators V6 to V10 listed in Table 5.1, initially we included value of agricultural commodities per Gross cropped area (GCA) of 16 crops (i.e., Productivity) and Per capita income from primary sector in our study. Subsequently, these were deleted from the analysis owing to theoretical constraints. As it has been argued that, " the output indicators should be treated separately and should not be combined with input variables".

Under the agriculture variables the first principal factor explains 60.7 per cent of the variation in 1974-75 and 50.0 per cent of variation in 1985-86 as is shown in Table 5.4. But the indicators coming under this factor or weights of each indicator have changed over the period of analysis. In 1974-75 it was the 1) percentage of area of high yielding variety of

paddy/hectare of GCA, 2) percentage of area under non-food crops to GCA, 3) percentage of net irrigated area to net sown area and consumption of fertilisers(i.e.,N.P.K) per hectare of GCA. But in 1985-86 only percentage of area under non-food crops and percentage of net irrigated area to net sown area, have high loadings in the first factor.

Table 5.4

Factor Matrix of Agricultural Variables

| Sl. No: | Indicators | 1974-75 Factor Loading F1 | F2 | 1985-86 Factor Loading F1 | F2 |
|---|---|---|---|---|---|
| 1. | Percentage of GCA to NSA. | 0.03596 | 0.98838 | 0.48586 | 0.37602 |
| 2. | % age of area under H.Y.V of paddy to GCA. | 0.94738 | -0.06384 | 0.44704 | 0.85425 |
| 3. | % age of area under Non-food crops to GCA. | -0.77275 | 0.14218 | -0.92156 | 0.14186 |
| 4. | Percentage of Net Irrigated Area to NSA. | 0.91217 | 0.20501 | 0.87337 | 0.25195 |
| 5. | Consumption of Fertilisers/Hectare of GCA. | 0.82671 | 0.19769 | -0.11870 | 0.92979 |
| | Total variance explained. | 60.7 % | 21.2 % | 50.0 % | 27.7 % |

Source: Table 5.1, variable 2.

For both the periods the first principal component has negative correlation with the indicator, percentage of area under non-food crops. In the sense in 1974-75, the districts where percentage of area under non-food crops is high, area under irrigation, area under H.Y.V of paddy, consumption of fertilisers is low and vice versa. So, one can see that in both the periods there is negative covariance between area under non-food crops and area under irrigation. Which means more than non-food crops, irrigation is needed where food crops are cultivated. Or is it because, due to the lack of irrigational facilities in these districts, cultivation are mainly towards non-food crops. Another feature is the inter-district variation in the percentage of area under high yielding variety of paddy and consumption of fertilisers across the districts has reduced compared to 1974-75.

Ranking of districts according to the composite index of agriculture variables depicted in Table 5.5, reveals that Palghat, Trichur, Alleppey are `developed' districts because their area under irrigation and area under food crops are high for both the periods. But if you are taking the other dimension as development, i.e., places where non-food crops are cultivated more as developed areas, districts like Idikki, Kozhikode, Wynad, Kottayam and Pathanamthitta will come first. But since our objective is to find out districts which need credit most. We have taken areas where food crops are cultivated more as `developed areas', because for cultivation of food crops, more irrigation, more fertilisers etc are needed, which naturally lead to the necessity for more credit.

Table 5.5

Composite Index of Agriculture Variables

| Sl.no: | Districts | 1974-75 | | 1985-86 | |
|---|---|---|---|---|---|
| | | Scores | Rank | Scores | Rank |
| 1. | Trivandrum | -1.79215 | 7 | 0.09515 | 5 |
| 2. | Quilon | -2.84509 | 9 | -0.38981 | 8 |
| 3. | Pathanamthitta | 0 | 0 | -2.27051 | 13 |
| 4. | Alleppey | 4.08243 | 2 | 2.96716 | 3 |
| 5. | Kottayam | -0.97589 | 6 | -1.99114 | 12 |
| 6. | Idikki | -4.37268 | 11 | -1.39455 | 10 |
| 7. | Ernakulam | 2.35730 | 4 | 1.51078 | 4 |
| 8. | Trichur | 4.29925 | 1 | 3.29795 | 2 |
| 9. | Palghat | 3.97391 | 3 | 4.19915 | 1 |
| 10. | Malappuram | 0.15304 | 5 | -0.18549 | 6 |
| 11. | Kozhikode | -2.92369 | 10 | -3.04463 | 14 |
| 12. | Wynad | 0 | 0 | -1.58862 | 11 |
| 13. | Cannanore | -1.95642 | 8 | -0.98225 | 9 |
| 14. | Kasargod | 0 | 0 | -0.22321 | 7 |

For agricultural variables also rank correlation of districts between two periods shows very high correlation (0.8364; significant at 1 per cent).

## 3. Stock Variables or Asset Creation Variables (V11 to V18)

The Principal Component Analysis of eight indicators coming under this group (Table 5.1), brought out three important factors out of which the first factor explained 38.7 per cent in 1974-75 and 35.9 per cent of the variation 1985-86. Here also the indicators having high weights or high factor loadings have changed between the period 1974-75 and 1985-86.

Table 5.6

Factor Matrix of Asset Creation Variables

| Sl. No. | Indicators | 1974-75 Factor Loading F1 | F2 | F3 | 1985-86 Factor Loading F1 | F2 | F3 |
|---|---|---|---|---|---|---|---|
| 1. | No. of tractors per'000 hect. | 0.31747 | 0.01512 | 0.82748 | 0.75754 | -0.21535 | -0.05649 |
| 2. | No: of Power tillers ,, ,, | 0.70472 | 0.41525 | 0.07419 | 0.75459 | 0.15986 | 0.19353 |
| 3. | No: of Pumpsets (Diesel) ,, | 0.83895 | -0.15545 | -0.11174 | 0.44152 | -0.19511 | 0.66753 |
| 4. | No: of Pumpsets (Electric),, | 0.83597 | 0.36186 | 0.15971 | 0.25666 | 0.30184 | 0.73810 |
| 5. | No: of Wooden Plough per ,, | 0.81742 | -0.24272 | 0.35690 | 0.84945 | -0.34727 | 0.11047 |
| 6. | No: of Steel Plough per ,, | -0.08428 | 0.09448 | 0.89886 | 0.36871 | 0.22468 | -0.70208 |
| 7. | Live stock density | -0.01191 | 0.95042 | 0.07639 | -0.13702 | 0.94392 | -0.09886 |
| 8. | Poultry density | 0.07568 | 0.94704 | 0.02026 | -0.12569 | 0.94864 | 0.03680 |
| | Total Variance Explained | 38.7 % | 25.5 % | 17.6 % | 35.9 % | 22.5 % | 16.7 % |

Source: Table 5.1, variable 3.

For both the periods, number of power tillers and number of wooden ploughs per 1000 hectare have high factor loadings in the first factor. The number of tractors to 1000 hectares which was not much varying across the districts in 1974-75 has come under the first factor for the period 1985-86 (as it has high weight in the first factor for 1985-86). And we found for both the periods there is positive correlation between districts which are good in stock variables and those which are good in agriculture variables (Tables 5.5 and 5.7). That is, those districts where food grains are cultivated, power tillers,

pumpsets and number of wooden ploughs are more used in 1974-75. (0.6273; significant at 5 per cent) and in 1985-86, districts where tractors, power tillers and wooden ploughs are more used food grains are more cultivated (0.7000; significant at 5 per cent).

Table 5.7

Composite Index of Asset Creation Variable

| Sl.No. | Districts | 1974-75 Scores | 1974-75 Rank | 1985-86 Scores | 1985-86 Rank |
|---|---|---|---|---|---|
| 1. | Trivandrum | -2.73950 | 10 | -2.60578 | 14 |
| 2. | Quilon | -3.02866 | 11 | -0.90975 | 7 |
| 3. | Pathanamthitta | 0 | 0 | -2.04094 | 10 |
| 4. | Alleppey | -0.58628 | 6 | -1.10698 | 8 |
| 5. | Kottayam | -2.37485 | 9 | -2.46313 | 13 |
| 6. | Idikki | -1.95196 | 8 | -1.86350 | 9 |
| 7. | Ernakulam | 6.58146 | 1 | 1.84630 | 4 |
| 8. | Trichur | 2.19392 | 2 | 1.82745 | 5 |
| 9. | Palghat | 2.09156 | 3 | 3.61293 | 2 |
| 10. | Malappuram | 0.42974 | 5 | 0.85501 | 6 |
| 11. | Kozhikode | -1.80307 | 7 | -2.34080 | 12 |
| 12. | Wynad | 0 | 0 | 3.57851 | 3 |
| 13. | Cannanore | 1.18764 | 4 | -2.14595 | 11 |
| 14. | Kasargod | 0 | 0 | 3.75663 | 1 |

For stock variables, rank correlation of districts between 1974-75 and 1985-86 is correlated considerably (0.7000; significant at 5 per cent).

## IV. Land Holding variables (V19 to V21)

Principal Component Analysis has extracted only one factor under this group (Table 5.8). But the extent of variation it explained for both the periods is comparatively very high. Among the three variables, the percentage of non-marginal farmers to total have very high factor loading, which depicts its variation across the districts.

Table 5.8

Factor Matrix of Land Holding Variable

| Sl. No: | Indicators | 1974-75 Factor Loading F1 | 1985-86 Factor loading F1 |
|---|---|---|---|
| 1. | Average size of holding of Marginal Farmers | 0.91011 | 0.82478 |
| 2. | Average size of holding of Non-Marg.Farmers | 0.88826 | 0.83741 |
| 3. | Percentage of Non-Marginal Farmers to total | 0.96497 | 0.99212 |
| | Total Variance Explained | 84.9 % | 78.9% |

Source: Table 5.1, variable 4.

As far as the ranking of districts with respect to Land holding variables, the first position is shifted from Idikki to Wynad during the period 1974-75 and 1985-86. Wynad have more average size of holding and more number of non-marginal farmers.

Table 5.9

Composite Index of Land Holding Variables

| Sl.no: | Districts | 1975-76 Scores | 1975-76 Rank | 1985-86 Scores | 1985-86 Rank |
|---|---|---|---|---|---|
| 1. | Trivandrum | -2.87734 | 11 | -2.96309 | 14 |
| 2. | Quilon | -1.78497 | 7 | -2.72409 | 13 |
| 3. | Pathanamthitta | 0 | 0 | -1.06796 | 8 |
| 4. | Alleppey | -2.55698 | 10 | -2.12064 | 12 |
| 5. | Kottayam | 1.26161 | 4 | 0.95783 | 6 |
| 6. | Idikki | 5.85881 | 1 | 2.92420 | 2 |
| 7. | Ernakulam | -2.08040 | 8 | -1.75090 | 10 |
| 8. | Trichur | -2.20429 | 9 | -1.97268 | 11 |
| 9. | Palghat | 1.93038 | 3 | 1.20993 | 5 |
| 10 | Malappuram | 0.35994 | 5 | -0.60811 | 7 |
| 11. | Kozhikode | -0.02196 | 6 | -1.35974 | 9 |
| 12. | Wynad | 0 | 0 | 5.13862 | 1 |
| 13. | Cannanore | 2.11519 | 2 | 1.61839 | 4 |
| 14. | Kasargod | 0 | 0 | 2.71825 | 3 |

But on the whole as far this variable also there is high rank correlation between the two periods (0.9455; significant at 1 per cent). For both the periods the least performing district as far as these variables are concerned is Trivandrum. Its composite index score has reduced from -2.87734

in 1974-75 to -2.96309 in 1985-86 (Table 5.9). Which implies a further division of land holding in this district in a greater proportion.

Second stage of analysis

In this section we test the degree of variation of commercial banks and co-operative banks agriculture credit per hectare of net sown area, for the end periods, 1974-75 and 1985-86 along with the selected indices of banking, agriculture, stock and Land holding variables.

Commercial bank credit per hectare and its relation with the four selected indices

From Table 5.10, it is observed that commercial banks agricultural credit per hectare did not come under the first factor in 1974-75. But in 1985-86 it came under the first factor. In 1985-86, the first factor accounted for 35.8 per cent of the variation. The other dominant variables in the first factor for the period 1985-86 is banking variables and land holding variables. In 1974-75 the second factor and in 1985-86 the first factor have negative correlation with land holding variables.

Table 5.10

Factor Matrix of Commercial bank credit per hectare and the four selected indices

| Sl. No: | Variables | 1974-75 Factor Loading F1 | F2 | 1985-86 Factor Loading F1 | F2 |
|---|---|---|---|---|---|
| 1. | Comm. banks agri. credit/hectare | -0.21699 | 0.89433 | 0.53816 | 0.02789 |
| 2. | Banking Variables | 0.54902 | 0.66693 | 0.72420 | 0.05748 |
| 3. | Agricultural Variables | 0.85764 | 0.11862 | 0.32067 | 0.84751 |
| 4. | Stock Variables | 0.91320 | 0.03120 | -0.31213 | 0.87952 |
| 5. | Land Holding Variables | -0.29819 | -0.74344 | -0.87833 | 0.10973 |
| | Total Variance Explained | 48.9 % | 27.5 % | 35.8 % | 30.0 % |

Source: Table 1, variable 1,2,3,4 and 5.

Thus from the above table it is clear that the variation in the commercial bank agricultural credit across the districts may be explained in terms of banking variables and land holding variables, but not at all with the agricultural and stock variables.

But to know, to what extent it is correlated, we have done rank correlation of commercial bank agricultural credit per hectare and the banking, agricultural, stock and land holding variables across the districts. This also helps us to find the factors influencing agricultural credit.

From the Table 5.10 (a), one can observe that the only variable which is significantly correlated with commercial bank agricultural credit is banking variable. Which implies the districts which are developed in banking variables are the districts getting more agricultural credit and vice versa.

Table 5.10 (a)

Rank Correlation between Commercial Bank Agricultural credit per Hectare and the four selected indices

| Variables | Comm. Bank Agri. Credit/hectare | |
|---|---|---|
| | 1974-75 | 1985-86 |
| Banking variables | .6182* | .1429 |
| Agricultural | -.0091 | .1165 |
| Stock | -.1273 | -.2132 |
| Land Holding | -.5182 | -.4549 |

Note: * refers significant at 5 % level; Two tail test.

But even this variable is not correlated with commercial bank agricultural credit per hectare in 1985-86. So the reduction of disparity of commercial bank agricultural credit per hectare of NSA over 1974-75 to 1985-86 can be due to the

insignificant correlation with the banking variables in 1985-86 (Table 5.10 (a) or due to the reduction in the variation of commercial banks number of branches per 10 lakh population, per capita deposit and per capita credit (Table 5.2).

Co-operative credit per hectare and its relation with the four selected indices

From the Table 5.11, it is clear that in 1974-75 the first principal component or factor which explained 54.6 per cent variation is correlated with all the variables.

Table 5.11
Factor Matrix of Co-operative credit per hectare and the four selected indices

| Sl. No. | Variables | 1974-75 Factor Loading F1 | 1985-86 Factor Loading F1 | F2 |
|---|---|---|---|---|
| 1. | Co-op. banks agri. credit/hectare | 0.70374 | 0.76576 | 0.08224 |
| 2. | Banking Variables | 0.81312 | 0.76826 | 0.05054 |
| 3. | Agricultural Variables | 0.80987 | 0.37243 | 0.84556 |
| 4. | Stock Variables | 0.74958 | -0.36107 | 0.87669 |
| 5. | Land Holding Variables | -0.59697 | -0.77278 | 0.14248 |
| | Total Variance Explained | 54.6 % | 40.9 % | 30.3 % |

Source: Table 5.1, variable 1,2,3,4 and 6.

In 1985-86 the first factor has high bearings on co-operative credit per hectare, banking variables and land holding variables. This implies that the covariance which the co-operative credit had with agricultural and stock variables in 1974-75 is absent in 1985-86.

To know the level of significance of correlation between co-operative credit per hectare and banking, agriculture, stock and land holding variables or to find out the factors influencing co-operative agricultural credit, we have analysed the rank correlation between these variables across the districts for the two periods.

Table 5.11(a)

Rank Correlation between Co-operative credit per hectare and the four selected indices

| Variables | Co-op. bank agri. credit/hectare | |
|---|---|---|
| | 1974-75 | 1985-86 |
| Banking variables | 0.6364* | 0.6308* |
| Agricultural | 0.5727** | 0.3934 |
| Stock | 0.4091 | -0.2440 |
| Land Holding | -0.0273 | -0.4154 |

Note: 1. ' * ' refers significant at 5 % level; two tail test.
2. ' ** 'refers significant at 10 % level.

In 1974-75, there was correlation between co-operative banks agriculture credit per hectare and banking and agricultural variables (Table 5.11(a)). It implies while lending agricultural credit it has taken into consideration the areas where credit is more needed for agricultural purposes. That is, where food-crops are cultivated more. But when it came to 1985-86, the correlation which the co-operative banks agriculture credit per hectare had with agriculture variables is absent. And it shows correlation only with banking variables in 1985-86.

Therefore, from the above analysis, it is clear that the reason for the increase in inter-district disparity of co-operative banks agriculture credit per hectare is the absence of correlation with agricultural variables in 1985-86. It appears that instead of places where agricultural credit is needed, the co-operative banks are giving agricultural credit to those places which are more developed as far as banking variables are concerned.

## Conclusion

Therefore, what we can infer from all the above analysis is that, the only factor which is influencing commercial bank agricultural credit in 1974-75 is banking variable and which is influencing co-operative bank agricultural credit in 1974-75 is agricultural and banking variables. In that only banking variable is influencing co-operative agricultural credit in 1985-86. So if a district is only agriculturally developed at the same time underdeveloped in banking variables, its per hectare credit availability will be low. At the same time in some cases we found that due to its development in banking variables, agricultural credit is going to districts which are comparatively less developed in agricultural variables, so we can also infer that to some extent the credit is going for non-agricultural purposes, i.e., possible misutilisation of agricultural credit. Because these districts which are developed in banking variables have to achieve the target set by the RBI. So they may advance credit for non-agricultural purposes in the name of agricultural purposes.

This insignificant correlation between agricultural credit per hectare and agricultural variables in 1985-86, can also be a reason for the mismatch between increasing agricultural credit and stagnant agricultural performance in Kerala.

Also it is clear from the analysis that the volume of supply of funds from the banking sector is determined by its capacity to mobilise the deposits, as demand for funds is reflected by the volume of bank advances. Therefore the

correlation between deposits and credit with agriculture credit is also worth noting. As it is seen that where the overall credit or advance to all sectors and deposits is high, agriculture credit is also high. All this is made possible because of the existence of bank branches in these areas.

So in order to reduce the disparity in the disbursement of agricultural credit per hectare, the measures to be taken are
1) regional variations as per banking variables has to be made minimum as it has the highest correlation with agricultural credit per hectare. For that all the districts have to be equitably developed in banking activities;
2) agriculture credit is to be given in those places where the need for agriculture credit is high;
3) new bank branches are to be opened in those places which are underdeveloped or lacking in banking variables;
4) necessary steps are to be taken for reducing misutilisation of credit.

Basu (1979:142.145), also pinpoints that in seventies the overall credit of commercial banks throughout the country has gone into areas of high concentration of non-agricultural activities. This means a flow of agricultural credit also to the same regions, higher the overall level of credit as measured by the quantum of credit per head of population, the higher has been the absolute levels of credit received by the agricultural sector also. And per capita credit are also highly influenced by per capita deposit creating the problem of multiplied flow of funds in regions of higher economic development. This is further

aggravated by the concentration of Central Co-operative Banks rural credit also in the regions where overall bank credit is high. The sum total of the flow indicates high concentration of institutional credit to agriculture and also to other sectors in areas of high economic development, which is likely to perpetuate the vicious circle of under development.

But he points out that a simple expansion of bank offices will definitely lead to an increase in aggregate credit in a district, whether it would lead to a simultaneous increase in agricultural credit also depends on the existing level of overall credit in the district. It can be safely said that in the middle range of districts with medium level of per capita credit, a simple expansion of bank offices will lead to an increase in agricultural credit and a considerable economy may be achieved by such expansion of bank offices instead of opening of the specialised financial institutions for rural credit. On the other hand, for the districts in the top range of per capita credit it would possibly require a little amount of caution to adopt a strategy of opening new bank offices for the purpose of expanding bank credit to agriculture. In these districts, either particular stress must be laid on the orientation of bank offices on their adopting a bias in favour of the agricultural sector, or the institution of specialised financial agencies should be more effective in catering to the credit needs of the agriculturist community. On the other hand, while selecting districts for opening rural banks, the authorities should concentrate on those districts where the overall credit level is very low because in this group of districts the mere expansion of existing commercial

banks' branches is less likely to achieve the goal of expansion of agricultural credit than in those districts where the overall credit level per capita is in the middle range (Basu 1979:161.162).

By the newly formulated Service Area Approach (proposed by Reserve Bank of India and formalised by the Union Finance Minister in his budget speech of 29, Feb. 1988), the commercial banks to a great extent can achieve linkages between agricultural credit and agriculture production and productivity. Because in this approach there is

1) the identification of the service area for each bank branch;
2) survey of the service area for assessing the potential for lending for different activities and selection or identification of beneficiaries;
3) preparation of credit plans on an annual basis;
4) co-ordination between credit institutions on the one hand and the field level development agencies on the other on an ongoing basis for the effective implementation of credit plans and
5) continuous system of monitoring the progress in the implementation of the credit plans (RBI 1989:108).

But under the purview of Service Area Approach also, co-operative banks are not coming, which is a serious limitation of this approach and also the functioning of the co-operatives.

# Chapter 6

## Summary and Conclusions

### Summary and Findings

Adequate supply of institutional credit is a necessary but not a sufficient condition for agricultural development. The main institutional agencies who provide credit for agriculture are Government, Co-operatives and Commercial Banks. Till 1969, co-operative institutions were the main source of agricultural credit. But since it was increasingly realised that the co-operatives alone cannot fulfill all the credit requirements, multi-agency approach was suggested by various committees like All-India Rural Credit Review Committee, the Study Group of the National Credit Council, etc. Thus along with co-operatives, commercial banks including regional rural banks (regional rural banks started from 1975 onwards) started lending agricultural credit on an increased scale. The increasing emphasis on the provision of institutional finance reduced the influence of professional money lenders, traders, etc., and thereby the role of informal credit diminished considerably. But regional disparity still exists in the disbursement of agricultural credit. Among the states, Kerala has the highest per hectare credit availability of agricultural credit of all the institutional agencies. In Kerala one may observe significant increase in the disbursement of agricultural credit by the institutional agencies. But despite the increasing trend in credit support for the various agriculture and allied activities, the result in terms of production and productivity in Kerala is not commensurate with the investment except in the case of rubber.

Thus Kerala attracts particular attention from its explicit mismatch between agricultural credit and agricultural performance. This is clear from the upward trends in the disbursement of agriculture credit compared to a slow growth in the agriculture performance in the state especially after 1974-75. The review of literature given in the first chapter indicates that compared to few regional studies on agricultural finance, a detailed research on the agricultural credit performance of the State as a whole is clearly lacking. And in recent times, the growing importance of the role of agricultural credit as a stimulant for agricultural production is widely disseminated. All this demands a detailed enquiry into the structure, pattern, growth of agricultural credit and the factors influencing institutional agricultural credit in Kerala.

In the examination of the socio-economic background of the development of banking in Kerala, we found that the possible factors which favoured the development of banking activities in Kerala were the large scale sub-division of holdings due to the changing property right regulations, the large scale reclamation of land, commercialisation of agriculture and the sporadic development of agro-processing and trading activities with the help of sound transport facilities. It can be seen that in the fifties itself the banking sector in Kerala gave much importance towards agriculture and its allied activities. With the nationalisation, in the deployment of credit, particularly agricultural credit, they have adopted improved techniques, new methods and multifarious novel schemes. Through comprehensive branch expansion programmes and introduction of lead bank scheme

and service area approach, they were able to develop an extremely well banking infra-structure both in urban and rural areas. Both in terms of per capita deposits and per capita credit Kerala is better placed compared to the all-India position. But compared to commercial banks, there is a reduction in the number of societies of Primary Agricultural Credit Societies (PACSs). This reduction has been due to the policy of revitalisation and reorganisation of PACSs by weeding out dormant and non viable units through Government policies.

The analysis of the growth rate of total institutional agricultural credit shows that the quantum of credit disbursed by them has increased manifold during the period of analysis in the state as a whole (1961-62 to 1985-86) and also in the districts/group of districts (1964-65 to 1985-86). The significant increase in the total institutional credit for agriculture in the state and across the districts may be due to the increase in the number of marginal and small land holders. Considering the fact that they are low income land holders, there will be an increase in the demand for agricultural credit.
The increase may also be due to the increase in the area under non-food crops, and the implementation of the 'Kerala Chitties Act' in August 25, 1975, which led to the reduction of Kuries and there by to an increase in the need for institutional credit. The institutional-wise agricultural credit growth rate shows accelerated growth rates in the credit expansion especially in the second period. From the inter-institutional comparison, it is observed that commercial banks are performing better than co-operative institutions. However, co-operatives still dominate in

agricultural credit in almost all places in Kerala, except Trivandrum, which is against the all-India pattern. But it is interesting to note that in the northern parts of Kerala (i.e., from Trichur to Kasargod), the commercial banks share in the total agricultural credit is showing a rising trend. The increase in the number of branches of commercial banks in almost all the regions along with the Reserve Bank of India (RBI) target stipulation, must have influenced the high positive growth rate and increase in the share of commercial bank agricultural credit. In the inter-district analysis we found that Trivandrum is performing better as far as the disbursement of any type of agricultural credit is concerned, be it co-operative or commercial bank. This may be mainly because of the opening up of more new branches all over the district, the increase in the number of operational holdings and also in the increase of the area under non-food crops. In the term-wise analysis, it is revealed that in the state as a whole and across districts the short-term loans occupy a high proportionate share in the total credit. Finally in the use-wise analysis, it can be seen that total non-agricultural credit of PACSs has recorded the highest growth rate during this period. This is mainly because of the increase in the short-term non-agricultural loans in these districts. It may be observed that this increase in short-term non-agricultural loans in the state and in almost all the districts/group of districts may be one among the reasons behind the increased number of agro-processing industries, especially rubber processing. The share of short-term agricultural loans has decreased tremendously over the period of analysis. Recovery performance of total agricultural credit shows that there is more

than 50 per cent recovery across the districts for all the institutions during the period 1987-89. Among the institutions the recovery position of PACSs is the best, followed by Primary Agricultural Development Banks (PADBs). Their performance is relatively better than that of the commercial banks. It is mainly because for co-operative societies there are employed staff for collection of dues, which is absent in commercial banks. The commercial banks field officers will only remind the borrowers about their dues.

The analysis of size-class variations in the agricultural credit disbursement shows that during the two periods, 1980-81 and 1985-86, the highest share of direct agricultural credit by commercial banks and co-operatives is for the marginal and small farmers (i.e., weaker sections). But the share is comparatively high in commercial bank agricultural credit (87 per cent). The greater commercial bank support for marginal and small farmers is possibly due to their emphasis in the policy target, i.e., achieving the target of 50 per cent of total direct agricultural lending towards weaker sections. The commercial banks and PADBs per hectare credit is also high for small and marginal farmers. But it is less in the case of PACSs. This is because the PACS's share of assistance to small and marginal farmers compared to other institutions is less for both the periods (65 per cent). Though the commercial banks are serving the marginal and small farmers in a greater proportion, in quantitative terms they are much below than PACs and PADBs. In the state as a whole hardly less than 6 per cent of small and marginal farm holders have taken commercial banks short-term and term-loans and PADBs agricultural credit. Whereas 25.44 per cent

of marginal and small farm holders are members of PACSs. But even this is low compared to other size classes in 1980-81. By 1985-86 the situation has improved especially in the number of small farmers served by commercial banks and also the marginal and small farmers served by PACS. The possible reasons for the lower proportion of operational holders served by institutional agencies could be the people's lack of awareness of the credit facilities, because of the formalities they have to undergo while taking a loan, because of the large number of marginal and small farm holders in the state. At the same time the percentage of medium and large farmers served by the PACSs is more than their actual number. So the same farmers must be taking loans from different banks. Our analysis of inter-district variations in agricultural credit showed that only in Ernakulam and Trichur the co-operative credit per hectare and commercial credit per hectare were above the state average in 1974-75 and 1985-86. From the very early period onwards these two districts were developed as far as banking activities are concerned. At the same time Palghat's position in co-operative and commercial bank credit availability per hectare is declining over the years. Palghat being the most important rice producing district, availability of credit per hectare is declining and is low compared to other districts. Similarly in the northern districts of Kerala, the co-operative credit per hectare is very low compared to other districts. It can be also seen that while the inter-district disparity of commercial banks agricultural credit per hectare decreased between the end periods 1974-75 and 1985-86, the co-operative banks agricultural credit per hectare disparity across the districts increased over the period of analysis.

From the principal component analysis we found that the inter-district variation in the commercial bank agricultural credit per hectare could be explained by the variability in the banking and land holding variables. As these variables (commercial bank agricultural credit per hectare, banking and land holding variables) have a similar pattern of variation or co-variation, which is revealed from their high factor loadings. But when we examined the extent of their correlation we found that only the banking variable is significantly correlated with commercial bank agricultural credit. This implies that the districts which are developed in banking variables are the districts getting more agricultural credit and vice versa. But even this variable is not correlated with commercial bank agricultural credit per hectare in 1985-86. So the reduction of disparity of commercial bank agricultural credit per hectare of Net Sown Area (NSA) over 1974-75 to 1985-86 could be due to the insignificant correlation with the banking variables in 1985-86 or due to the reduction in the variation of banking variables (commercial banks number of branches per 10 lakh population, per capita deposit and per capita credit). At the same time the inter-district variation in the co-operative agricultural credit per hectare for the period 1974-75 can be explained by the variation in the banking, agriculture, stock and land holding variables. But in 1985-86 only banking and land holding variables have a similar pattern of variance or have co-variance along with co-operative agriculture credit per hectare. However, out of this only banking and agricultural variables have significant correlation with co-operative agricultural credit per hectare in

1974-75. In 1985-86 only banking variables and co-operative credit per hectare have significant correlation. It implies, in 1974-75, the co-operatives while lending agricultural credit, took into consideration the areas where credit is more needed for agricultural (food crops) purposes. But when it came to 1985-86, instead of places where agricultural credit is needed, the co-operative banks are giving agricultural credit to those places which are more developed as far as banking variables are concerned. Also the reasons for the increase in inter-district disparity of co-operative agricultural credit per hectare is the absence of correlation between co-operative agricultural credit per hectare and agricultural variables in 1985-86. Thus the factor which is influencing commercial bank agricultural credit in 1974-75 is banking variable. The factors which influences co-operative bank agricultural credit in 1974-75 are agricultural and banking variables. But in 1985-86 only banking variables influence co-operative agricultural credit.

## Conclusions

The present study concludes that though the agricultural growth is stagnant in the second period the agricultural credit disbursed by all the institutions are showing significant growth. The reasons for this mismatch could be:

1) due to the shift in the PACSs advances from agricultural purposes to non-agricultural purposes in a larger proportion;

2) the decrease in the share of short-term agricultural loans must have led to insufficiency of credit for directly productive or current agricultural purposes;

3) even though greater proportion of institutional credit is advanced for weaker sections (small and marginal farmers), the proportion of the number of holders out of the total holders, served by commercial and PADBs is very low. Therefore, a great number of small and marginal farmers will be still facing paucity of credit, which will indirectly affect the agricultural performance;

4) the decrease in the position of Palghat in the per hectare availability of agricultural credit, which is one of the most important rice producing district in the state, must have also affected the agricultural performance; and

5) the insignificant correlation between agricultural credit per hectare and agricultural variables in 1985-86, can also be a reason for the mismatch between rising agricultural credit and declining agricultural performance.

The per hectare credit availability of a district, which is developed in agricultural variable at the same time underdeveloped in banking variable will be low. At the same time in some cases agricultural credit will be going to districts which are comparatively less developed in agricultural variable, due to its development in banking variable. So we can also infer that to some extent the credit is going for non-agricultural purposes, i.e., possible misutilisation of agricultural credit. Because these districts which are developed in banking variables have to achieve the target set by the RBI, they may advance credit for non-agricultural purposes in the name of agricultural purposes.

Limitations

Inter-institutional comparison would have been more meaningful if the district-wise short-term, medium-term and long-term credit and also district-wise size-class distribution of agricultural credit for the period of analysis (i.e., 1961-62 to 1985-86) were available from the commercial banks. Moreover, due to the data limitations we were not able to substantiate that the differences in the recovery performance of agricultural credit as a reason for the differences in the growth rate of agricultural credit of institutional agencies. Detailed disaggregated data is therefore essential for bringing about the intricate relations between different variables. The mismatch between upward trend of agricultural credit and stagnant agricultural performance in Kerala was not analysed at a very detailed micro-level in this study due to time limitation.

## Appendix 1.1

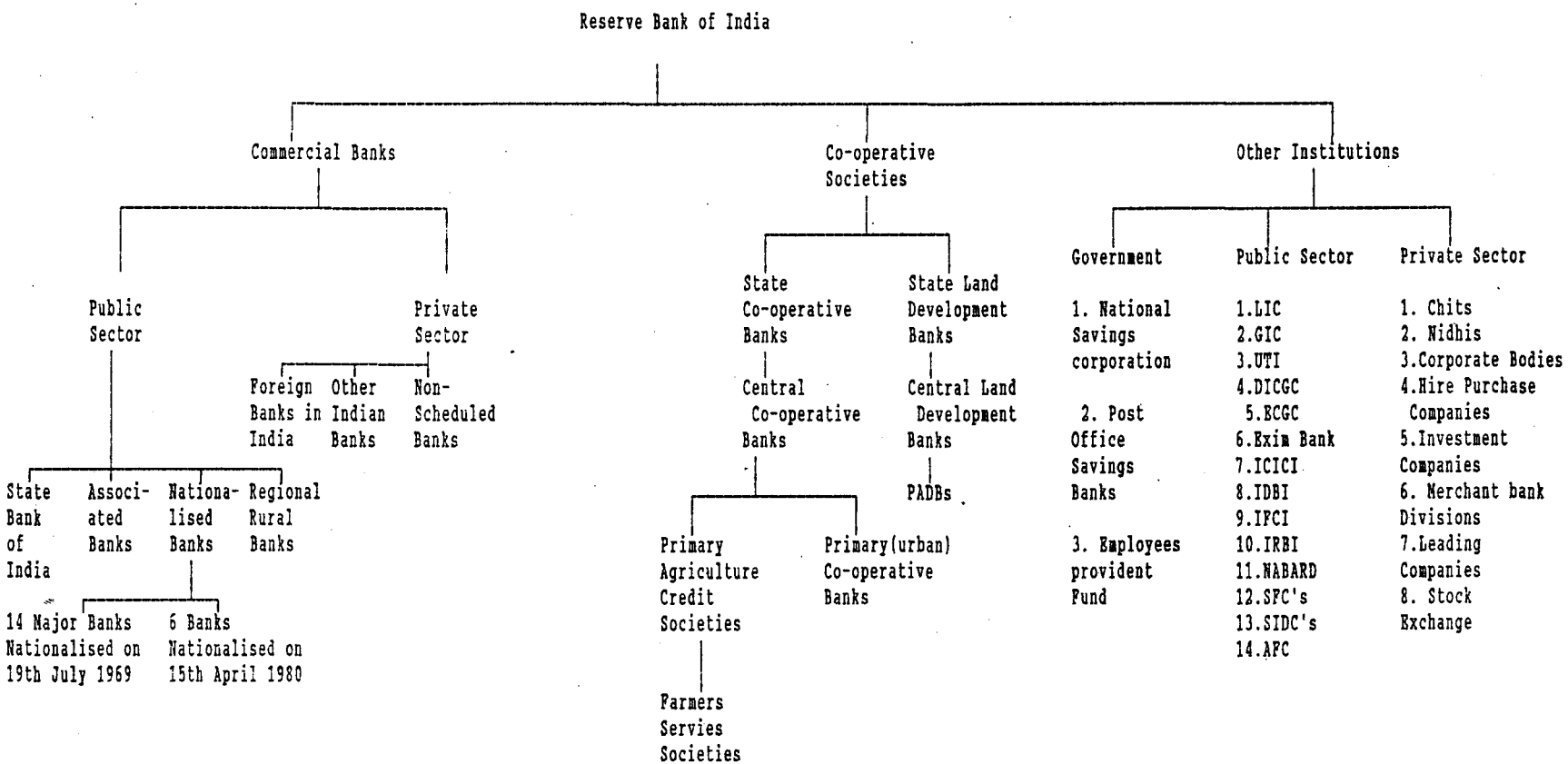
Percentage Shares of the Formal Credit Agencies in the Aggregate Cash Debt Outstanding All Rural households

| States | 1962 | 1972 | 1982 |
|---|---|---|---|
| Andrapradesh | 9.5 | 13.7 | 40.9 |
| Assam | 23.8 | 34.7 | 30.6 |
| Bihar | 5.1 | 10.7 | 47.2 |
| Gujarat | 23.7 | 46.9 | 70.0 |
| Haryana | 100 | 26.4 | 75.8 |
| Himachal pradesh | 100 | 23.9 | 74.5 |
| Jammu & Kashmir | 9.6 | 20.4 | 43.5 |
| Karnataka | 16.1 | 29.7 | 78.2 |
| Kerala | 17.5 | 44.4 | 78.6 |
| Madhya pradesh | 15.7 | 31.6 | 66.3 |
| Maharashtra | 46.4 | 67.4 | 86.4 |
| Orissa | 26.4 | 30.0 | 81.9 |
| Punjab | 10.7 | 35.4 | 74.2 |
| Rajasthan | 4.6 | 9.4 | 40.9 |
| Tamilnadu | 13.5 | 22.1 | 44.3 |
| Uttarpradesh | 10.9 | 23.4 | 55.1 |
| WestBengal | 23.3 | 30.6 | 65.5 |
| All India | 14.8 | 29.2 | 61.2 |

Source: Paniker et.al. (1988:29, Table 2.11).

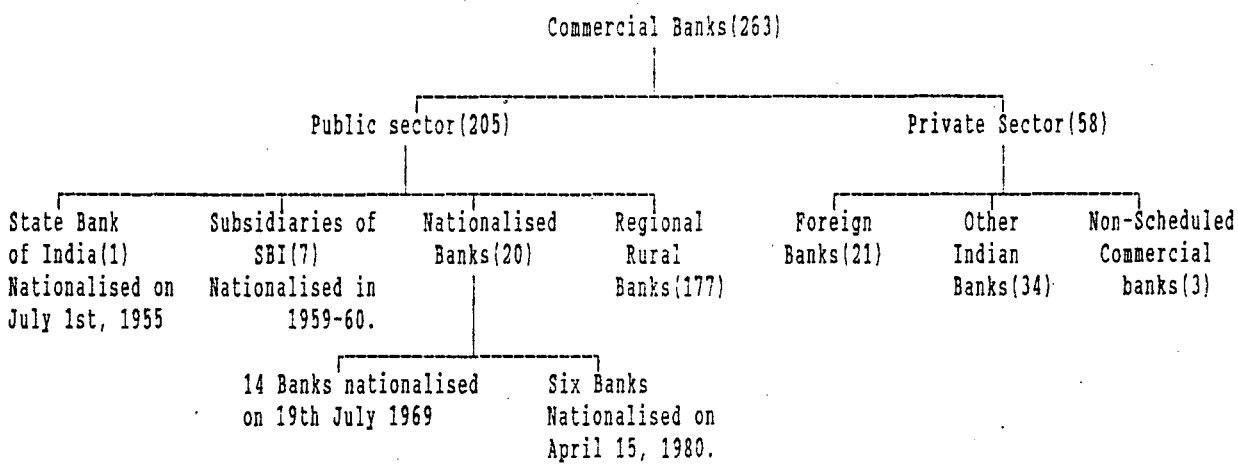
Appendix 1.2 - Chart 1.1

Structure of Financial Institutions in India



Appendix 1.3 - Chart 1.2

Structure of Commercial Banking System in India
As in March 1985

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Source: 1. RBI, Report on trend and progress of banking in India (1960:102.103, 1979-80:49, and 1984-85:97).
2. RBI, Organisational framework for the Implementation of Social Objectives (1969:101).
Note: Figures in parantheses indicate the number of banks

1.4) Sivanandan's (1985) study on Agriculture performance in Kerala reveals that between 1960-61 to 1982-83, production of all crops in Kerala increases at an annual compound rate of 1.71 per cent. When this period was divided into two sub-periods (1960-61 to 1974-75 and 1975-76 to 1982-83), during the first sub-period the growth rate was 3.22 and during the second sub-period it was -0.39. In Kerala cropped area grew at the rate of 1.06 per cent for the entire period and at 2.18 per cent and -0.69 per cent for the two sub-periods. The growth rate in yield in Kerala showed a declining trend. The rate of growth of yield was 0.63 for the entire period, it was 0.78 for the first sub-period and 0.50 for the second period. In Kerala the growth in production is mainly influenced by the growth of area, and to a lesser extent by the changes in yield and cropping pattern. During the first sub-period, growth rate in area contributed to more than two third and yield to a little less than one fourth of the growth rate in production of all crops. During the second period the growth rate in production became negative, mainly by the sharp decline in the growth rate of area and a mild decline in yield. Food grains and non-food grains sectors showed widely differing growth trends. During the first sub-period the production of non-food grains sector showed a growth rate almost double that of food grains (3.60 per cent and 1.99 per cent respectively). In the second sub-period there was sharp fall in the growth rates of production under both the sectors, but the fall was sharper under non-food grain sectors. Under both sectors, area and cropping pattern showed negative growth rates. Yield showed positive growth rates under both sectors, but under food grains sector the growth rate in yield showed a substantial improvement from 0.94 to 2.09 per cent.

1.5) Pillai (1982) analysed the pattern and magnitude of agricultural growth in Kerala during the period 1952-53 to 1978-79. His findings are 1) till the early sixties the agricultural sector dominated the state economy in the sense that it had a larger share in the total SDP. Since the mid-sixties the share of agriculture began to decline from 53.4 percent in 1960-61 it came down to 47.8 per cent in 1970-71 and further to 41.8 per cent in 1976-77. 2) The state domestic product from agriculture grew at a compound rate of 2.3 per cent per annum,

while that from non-agricultural sector at the rate of 4.6 per cent and the total SDP at 3.5 per cent. Thus the rate of growth of agricultural sector was just half of that of non agricultural sector. Further agricultural growth was not sufficient enough to out strip the growth of population. The per worker contribution to SDP of the primary sector was on the decline and of the secondary sector on the increase over the period 1961 to 1971. It appears that the extensive phase of agricultural growth (in the sense of extension of net sown area) in Kerala is probably over by the sixties. At the same time the rate of increase in the intensity of cropping decelerated since 1970-71. A clear shift in the cropping pattern, a shift in favour of cash crops and plantation crops, possibly at the expense of some foodgrain crops is indicated. The area under plantations (cardamom,tea,coffee and rubber) has increased from 145.71 thousand hectares in 1952-53 to 340.17 thousand hectares in 1975-76, forming about 7 per cent and 11 per cent respectively of the gross cropped area in these two years. The area under coconut, the major oil seed-crop in the state, has increased from 430.4 thousand hectares (20.6 per cent of gross cropped area) in 1952-53 to 629.95 thousand hectares (23.21 per cent) in 1975-76. Rice, sugarcane,betel-nut, banana and other plantains, cashewnut, coconut and tea production indicated almost smooth and gradual increase without much periodic ups and downs during the entire period. The position with regard to production of food improved mainly because of the spectacular increase in the production of tapioca. The yield of pulses, pepper, cashewnut and coconut declined and the yield of coffee, remained stagnant. There was moderate increase in the yield of sugarcane and banana; fairly impressive increase in that of rice and remarkable rise in that of tapioca, rubber and tea during the period under reference. During the entire period from 1952-53 to 1978-79, agricultural output grew at a rate of 2.79 per cent per annum, between 1952-53 to 1960-61 at a rate of 2.76 per annum, between 1960-61 to 1970-71 at 4.37 per cent per annum and from 1970-71 to 1974-75 at 1.866 per cent. After 1974-75 there was steep decline in the growth of output at the rate of 2.992 per cent per annum. Thus it seems that agricultural growth started decelerating with 1975-76.

1.6) George and Mukherjee (1986) study shows that in the first period (1960-61 to 1974-75) all the seven districts had positive growth rates of production associated with positive growth rates of both area and yield in six districts and with positive growth rates of yield and negative growth rates of area for the seventh district (Palghat). In the second period (1975-76 to 1983-84), Palghat was the only district where area, yield and production had positive growth rates simultaneously. All the remaining districts had negative growth rates of area, but positive growth rates of yield in Quilon, Alleppey and Ernakulam were sufficient to provide positive growth rates of production. However, in Trivandrum, Kottayam and Trichur because of the dominant negative growth rates of area, production growth rates were negative.

1.7) Narayana and Nair (1989) study brings out that, Kerala which was the major producer of coconuts accounting for over two thirds of the Indian production during the fifties and sixties now accounts for only half of it. For the purpose of analysing the area under Coconuts in Kerala, the whole period was divided into three sub-periods: the period upto 1968-69, the period between 1968-69 and 1974-75, and the post 1974-75 period. The first sub-period may be called the period of moderate growth, the second that of slow growth and the last, the period of decline. When the area changed are analysed district wise, it is seen that although the southern districts of Trivandrum, Quilon, Alleppey and Kottayam showed some increases in the area under coconuts during 1960-61 to 1968-69, Alleppey and Kottayam showed mild declines during the period 1968-69 to 1974-75 and in the post 1974-75 period, all the southern districts except Trivandrum showed a fall in the area under coconuts. They observed that two factors have been operating to boost the area under rubber at the expense of coconut in the southern districts, especially in Kottayam and Alleppey, depressing the profitability of coconut cultivation. The per palm productivity of coconuts has been declining during the last twenty years. The per palm productivity is sensitive to the age composition of bearing palms. The decline in the yield of coconuts in Kerala attributed to the root-wilt disease and the existence of large proportion of old palms do not seem to be pure effects, they seem to be confronted by other factors such as

cultivation practices and input use. And came to the conclusion that decline in yield which was often associated with a higher proportion of older palms or the incidence of the disease seems to be governed by the pattern of input use, especially irrigation. Irrigation delays the age at which the decline in yield sets in, which under rainfed conditions sets in around the age of 45 or 50 years, thereby effectively lengthening the peak bearing period.

1.8). Commercial banking system in India comprises of the scheduled and non-scheduled commercial banks. Scheduled banks are those banks which are included in the second schedule to the Reserve Bank of India, 1934. The RBI Act lays down the conditions which a bank must fulfill to qualify for inclusion in the second schedule. These are 1) the bank must have a paid-up capital and reserves of an aggregate value of not less than Rs.5 lakhs. 2) It must satisfy the RBI that its affairs are not being conducted in a manner detrimental to the interest of its depositors, and 3) it must be a company as defined in the companies Act, 1956 or a corporation or a company incorporated by or under any law in force in any place outside India, it must not be a partnership or single-owner firm. The scheduled commercial banks are further classified as public sector and private sector bank. At the end of June 1986, of 271 commercial banks, all except 3 were scheduled banks. Of these, only 16 were foreign banks (with head offices outside India) and the rest were all Indian banks. Among the latter, 31 were private sector banks and the rest (221) were public sector banks - 28 nationalised banks including the State Bank of India and its 7 associated banks and 193 Regional rural banks (Gupta 1982:88).

3.1. Combination of districts

Idikki was formed on Jan 26, 1972 by carving out Devikulam, Peerumade and Udumbanchola taluks from Kottayam district and Thodupuzha taluk from Ernakulam district, so these three districts (Kottayam, Idikki and Ernakulam) are grouped in one and termed as KIE group. Palghat, Malappuram, Kozhikode, Wynad, Cannanore and Kasargod are grouped together under PMKWCK group because Kozhikode was bifurcated and certain taluks were

handed over to Malappuram and Wynad districts. Malappuram district came into existence on June 16, 1969 by carving out Ernad taluk and portions of Tirur taluk of Kozhikode district and portions of Perintalmanna and Ponnani taluks of Palghat district. Wynad district was formed in Nov 1, 1980 combining taluks from Kozhikode and Cannanore. When the state of Kerala came into being in 1956 Wynad was part of Cannanore district. Later South Wynad was added to Kozhikode district. In order to fulfil the aspirations of the people of Wynad for development, North Wynad and South Wynad were joined once again to form the present district of Wynad. Kasargode was formed from Cannanore in May 24, 1984. The next group is QPA (Quilon, Pathanamthitta and Alleppey). The district of Pathanamthitta came into existence on November 1, 1982. The district includes portions of the erstwhile Quilon, Alleppey and a few villages of Idikki districts. Pathanamthitta, Adoor, Ranny and Kozhencherry are some of the important areas taken from Quilon district. Whereas Tiruvalla and Mallappally are the major places taken from Alleppey district. Since only a few villages in the surrounding regions of Sabarimala in Peerumede taluks (Idikki district) are gone to form Pathanamthitta, it is not included, assuming no major agricultural credit is given in these villages because it is mainly a forest area and that too the villages are very few, not even taluks. (Source: Concerned District Profiles).

Recently, as a part of changing the official documents and directions in malayalam, the Government of Kerala changed the old names of some of the districts as follows:
Trivandrum as Thiruvananthapuram, Quilon-Kollam, Alleppey-Allapuzha, Trichur-Thrissur, Palghat-Palakkat, Cannanore-Kannoor. But for the sake of convience in the present study we used the old names only.

### 3.2. Primary Agricultural Credit Societies Classification of Loans and Advances Issued - by Purpose

Short-Tern Loans

Agriculture

1) Seasonal agricultural operations (including seeds and fertilisers) both in cash and in kind

2) Purchase of agricultural implements
3) Marketing of crops (including procurement)
4) Processing of agricultural produce
5) Other agricultural purposes (including supply and distribution of inputs).

Non-Agriculture

1) Agro-Industrial purposes
2) Consumption loans
3) Other purposes (including supply of consumer goods).

Medium- Term Loans

Agriculture

1) Sinking of or repairs to wells
2) Purchase of machinery (pumpsets for irrigation)
3) Purchase of cattle (Bullocks and Carts)
4) Animal husbandry activities
   a) Poultry farming, b) Milch Cattle, c) Sheep rearing, d) Goat rearing, e) Pig breeding
5) Minor improvement to lands
6) Other agricultural purposes
7) Conversion/rephasement of rescheduled loans.

Non-Agriculture

1) Purchase of storage bins
2) Setting up of gobar gas plants
3) Purchase of shares in processing and industrial societies
4) Agro-Industrial purposes
5) Others.

Long-Term Loans

1) For sinking of new wells and construction of tanks
2) For boring, deepening and repairs to old wells/tanks
3) For purchase and installation of persian wheels and pumpsets and electrification
4) For purchase of machinery and implements like Tractors and Others
5) For construction of godowns, farm houses and sheds
6) For levelling, bunding, reclamation and fencing of land
7) For soil conservation
8) For preparation of land for orchards and plantations
9) For debt redemption
10) For purchase of land and acquiring ownership rights
11) Other purposes.

3.3. Scheduled Commercial Banks - Classification of Loans and Advances Issued - by Purpose

Short-Term Loans

These loans are issued for a maximum period of 18 months. Agricultural advances are given for the purchase of production inputs such as seeds, fertilisers, pesticides etc.,

and for the cost of cultivation, including labour charges for carrying out agricultural operations, irrigation and power charges. These advances are popularly known as crop loans or production loans. Crop loans are repayable when the crops are harvested and marketed. Banks consider these loans as demand loans. In the case of large farmers having multiple cropping programmes, the cash credit facility is given with a suitable schedule of disbursement and repayment worked out on the basis of the cropping pattern followed in different crop seasons during the year.

Medium-Term Loans

These are for a period of up to 5 years and, in case of small farmers, it can be extended up to 7 years. Medium term advances are granted for development purposes and are, therefore, also referred to as investment loans. The loans for the following purposes may be classified as medium-term loans provided, of course, that their term does not exceed 5 to 7 years.

a) Minor irrigation development through dug-wells or bore wells or tube wells, revitalisation of existing wells, lift irrigation schemes, installation of pump sets etc
b) Purchase of drought animals like bullocks etc
c) Construction of farm houses, such as cattle-sheds, implement sheds, etc.
d) Farm mechanisation by the purchase of tractors and accessories, power-tillers, sprayers, threshers and other agricultural machinery/equipment
e) Land improvement schemes, such as land reclamation levelling, bunding, terracing etc
f) Construction of godowns/silos, etc.
g) Setting up of dairy, poultry, fishery, agriculture, sericulture and other allied activities.

Long-Term Loans

These advances may be for a period extending up to 15 years. Where schemes have a long gestation period, and as a result, repayment is spread over a period of 10 to 15 years (with the requisite moratorium), the advances for such schemes are classified as long term loans. Long term advances are granted for the following purposes.

a) Development of plantations crops, such as coffee, cardamon, tea, rubber etc.
b) Development of horticulture crops, such as coconut, arecanut, cashewnut, mango and other fruit crops
c) Integrated schemes for the development of dairy, poultry, fishery etc.
d) Development of forestry.

Indirect Advances

Banks also finance service activities, such as marketing, agro-service units, etc. The following are the types of indirect advances.

a) Loans for working capital requirements of wholesale/retail traders/distributors/co-operative marketing societies for procuring/distributing agricultural inputs, such as fertilisers, pesticides, seeds etc.

b) Loans for setting up a customer service unit/agro-service centre to provide servicing of agricultural machinery to agriculturists on contract/hire basis

c) Loans for setting up cold storage plants for the storage of potatoes, fish etc

d) Loans to Electricity Boards for financing their well energisation programmes

e) Loans to Primary Agricultural Credit Societies for lending to agriculturists. This scheme is applicable only to those places where PACSs are weak. * (In Kerala commercial banks are not lending to PACSs)

f) Loans to Agro-Industries Corporations and other public sector units.

Depending on the period for which they are required, these indirect advances are again classified as short-term, medium-term and long-term. Loans repayable in one year are classified as short-term loans. Those repayable in 5 to 7 years are known as medium-term loans and those for a longer period are long-term loans (Vasant Desai, 1987)

* The scheme of financing of Primary Agricultural credit Societies by Commercial Banks was formulated by RBI in 1970. Under this scheme it was envisaged that in areas where the Central Cooperative Banks are weak, the Commercial Banks will finance the Primary Agricultural Credit Societies. Eighty one districts of the five states of Andra Pradesh, Haryana, Madhya Pradesh, Uttar Pradesh and Karnataka, where the Central Banks were weak have been suggested for this scheme. The Commercial Banks would finance the agriculturists only through the Primary Agricultural Cooperative Societies as far as short-term and medium-term needs are concerned, while they could provide long-term credit directly (Kewal Kumar, 1987:127).

Appendix 3.4

Total Institutional Credit (Amount in '000s).

| Years | Kerala | Trivandrum | KIE | QPA | Trichur | PMKWCK |
|---|---|---|---|---|---|---|
| 1968-69 | 359679 | | | | | |
| 1969-70 | 494693 | | | | | |
| 1970-71 | 596160 | | | | | |
| 1971-72 | 712225 | | | | | |
| 1972-73 | 790786 | 72393 | 204903 | 133120 | 95413 | 284790 |
| 1973-74 | 942240 | 64109 | 243530 | 155321 | 106433 | 372847 |
| 1974-75 | 1094017 | 81209 | 211055 | 186494 | 114415 | 459607 |
| 1975-76 | 1367056 | 87728 | 326597 | 237199 | 143978 | 563293 |
| 1976-77 | 1617509 | 110502 | 428026 | 289861 | 160380 | 617164 |
| 1977-78 | 1992969 | 141342 | 505970 | 355686 | 202575 | 770200 |
| 1978-79 | 2832017 | 206269 | 721172 | 472906 | 260512 | 1146343 |
| 1979-80 | 3607186 | 256644 | 957282 | 646282 | 335228 | 1371198 |
| 1980-81 | 4848146 | 453982 | 1215308 | 812236 | 463135 | 1861089 |
| 1981-82 | 5634478 | 561199 | 1348821 | 971194 | 469122 | 2252000 |
| 1982-83 | 6030368 | 590608 | 1413197 | 1121491 | 489373 | 2412939 |
| 1983-84 | 7765086 | 970770 | 1704081 | 1349114 | 678914 | 3016585 |
| 1984-85 | 9159318 | 1016471 | 2040279 | 1620852 | 824150 | 3614052 |
| 1985-86 | 10979264 | 1109533 | 2366017 | 1923283 | 983460 | 4475071 |

Source: Same as in Table 3.2.

Appendix 3.5

Co-operatives Advances to Agriculture (Amt in '000s)

| Years | Kerala | Trivandrum | QPA | KIE | Trichur | PMKWCK |
|---|---|---|---|---|---|---|
| 1961-62 | 66010 | | | | | |
| 1962-63 | 85020 | | | | | |
| 1963-64 | 105715 | | | | | |
| 1964-65 | 117261 | 6093 | 16221 | 23035 | 12820 | 59093 |
| 1965-66 | 133422 | 3509 | 24651 | 25125 | 13898 | 66238 |
| 1966-67 | 153043 | 2035 | 29746 | 32322 | 20137 | 68803 |
| 1967-68 | 166226 | 1840 | 30683 | 36955 | 29541 | 67207 |
| 1968-69 | 214328 | 3563 | 42787 | 45955 | 34125 | 87898 |
| 1969-70 | 268968 | 6718 | 54715 | 56313 | 42493 | 108730 |
| 1970-71 | 316147 | 13409 | 49930 | 77498 | 46500 | 128801 |
| 1971-72 | 389010 | 16133 | 60155 | 97114 | 60655 | 154954 |
| 1972-73 | 437981 | 20520 | 77080 | 98172 | 62126 | 180083 |
| 1973-74 | 478409 | 22339 | 79333 | 108845 | 39805 | 228087 |
| 1974-75 | 503602 | 27617 | 81055 | 121293 | 37307 | 236330 |
| 1975-76 | 618093 | 22759 | 96280 | 154404 | 63539 | 281112 |
| 1976-77 | 734315 | 41609 | 116664 | 190369 | 71436 | 314238 |
| 1977-78 | 928056 | 45260 | 134439 | 273785 | 97644 | 376928 |
| 1978-79 | 1503771 | 72524 | 190498 | 408312 | 198159 | 634779 |
| 1979-80 | 1871818 | 132587 | 247840 | 529424 | 180259 | 781708 |
| 1980-81 | 2323875 | 127462 | 273654 | 651231 | 242031 | 1029497 |
| 1981-82 | 2595125 | 112935 | 288365 | 776480 | 276322 | 1141023 |
| 1982-83 | 2861809 | 102649 | 289058 | 829602 | 283829 | 1356667 |
| 1983-84 | 3715291 | 173093 | 416442 | 993537 | 374313 | 1757896 |
| 1984-85 | 4633119 | 296360 | 520814 | 1245533 | 455238 | 2115174 |
| 1985-86 | 5677418 | 271353 | 693517 | 1482250 | 590270 | 2640028 |

Source: Same as Table 3.9.

Appendix 3.6

Scheduled Commercial Banks including RRB's advances to Agriculture and allied activities

Amount in Crores

| Year | Kerala | | | India | | |
|---|---|---|---|---|---|---|
| | S.T | M.T & L.T | Total | S.T | M.T & L.T | Total |
| 1973-74 | 8.73 | 3.34 | 12.06 | 147.91 | 208.54 | 356.45 |
| 1974-75 | 15.48 | 7.18 | 22.66 | 146.06 | 128.16 | 274.22 |
| 1975-76 | 25.08 | 11.54 | 36.62 | 212.55 | 192.39 | 404.94 |
| 1976-77 | 29.95 | 10.66 | 40.62 | 253.85 | 253.87 | 507.72 |
| 1977-78 | 29.10 | 10.13 | 39.22 | 288.10 | 281.30 | 569.40 |
| 1978-79 | 40.16 | 15.66 | 55.81 | 365.05 | 434.98 | 800.03 |
| 1979-80 | 43.63 | 18.72 | 62.35 | 454.51 | 520.01 | 974.52 |
| 1980-81 | 67.44 | 38.18 | 105.62 | 573.52 | 812.27 | 1385.79 |
| 1981-82 | 68.22 | 41.67 | 109.89 | 694.11 | 968.98 | 1663.09 |
| 1982-83 | 85.66 | 32.16 | 117.82 | 662.77 | 784.36 | 1447.13 |
| 1983-84 | 97.52 | 40.63 | 138.15 | 992.28 | 1128.74 | 2121.02 |
| 1984-85 | 120.51 | 48.13 | 168.64 | 1166.53 | 1604.47 | 2771.00 |

Source: Same as in Table 3.10.

Appendix 3.7

Scheduled Commercial Banks Outstanding Advances to Agriculture and Allied Activities

| Years | Kerala | Trivandrum | QPA | KIE | Trichur | PMKWCk |
|---|---|---|---|---|---|---|
| | (Amt in '000s). | | | | | |
| 1969 | 81910 | | | | | |
| 1970 | 137360 | | | | | |
| 1971 | 163880 | | | | | |
| 1972 | 187600 | | | | | |
| 1973 | 210411 | 39255 | 21778 | 74996 | 16942 | 57274 |
| 1974 | 270091 | 26847 | 33023 | 99087 | 24243 | 86891 |
| 1975 | 356963 | 37826 | 52651 | 95548 | 28731 | 142207 |
| 1976 | 513918 | 39527 | 90942 | 142686 | 46960 | 193803 |
| 1977 | 595171 | 44921 | 106522 | 191596 | 54092 | 198040 |
| 1978 | 810800 | 57527 | 141054 | 205502 | 88578 | 318139 |
| 1979 | 1139694 | 82740 | 191238 | 298629 | 90981 | 476106 |
| 1980 | 1446061 | 134933 | 271996 | 393483 | 118186 | 527463 |
| 1981 | 1968927 | 197873 | 351095 | 530009 | 204951 | 684999 |
| 1982 | 2393456 | 282221 | 457780 | 608197 | 163835 | 881423 |
| 1983 | 2326917 | 302614 | 366274 | 495695 | 178578 | 983756 |
| 1984 | 3226398 | 615151 | 509425 | 644698 | 286815 | 1170309 |
| 1985 | 3656103 | 551532 | 578966 | 774726 | 338684 | 1412195 |
| 1986 | 4215792 | 559021 | 672596 | 904649 | 403353 | 1676173 |

Source: Same as Table 3.12.

Appendix 3.8

Loans Demanded by Commercial Banks (Amt in '000s)

| Districts | June 1987 Direct finance | Indirect finance | Total Agri. | June 1988 Direct finance | Indirect finance | Total Agri. | June 1989 Direct finance | Indirect finance | Total Agri. |
|---|---|---|---|---|---|---|---|---|---|
| Trivandrum | 424115 | 29667 | 453782 | 398118 | 53778 | 451896 | 672018 | 23491 | 695509 |
| Quilon | 284406 | 426 | 284832 | 305232 | 346 | 305578 | 356039 | 376 | 356415 |
| Alleppey | 137577 | 518 | 138095 | 139301 | 1207 | 140508 | 250140 | 0 | 250140 |
| Pathanamthitta | 99444 | 311 | 99755 | 130846 | 497 | 131343 | 162222 | 5371 | 167593 |
| Kottayam | 343610 | 8853 | 352463 | 443640 | 1645 | 445285 | 426216 | 15525 | 441741 |
| Idikki | 222657 | 3042 | 225699 | 270594 | 50 | 270644 | 88270 | 260 | 88530 |
| Ernakulam | 288668 | 30860 | 319528 | 354445 | 21414 | 375859 | 344598 | 21853 | 366451 |
| Trichur | 372325 | 1641 | 373966 | 406025 | 1046 | 407071 | 452387 | 2522 | 454909 |
| Palghat | 326512 | 2599 | 329111 | 378076 | 3558 | 381634 | 377159 | 2756 | 379915 |
| Malappuram | 371634 | 12682 | 384316 | 416695 | 2910 | 419605 | 451709 | 2760 | 454469 |
| Kozhikode | 426260 | 175 | 426435 | 502598 | 123 | 502721 | 553711 | 127 | 553838 |
| Wynad | 250315 | 86770 | 337085 | 425937 | 615 | 426552 | 451065 | 868 | 451933 |
| Cannanore | 257986 | 1297 | 259283 | 187805 | 852 | 188657 | 378470 | 274 | 378744 |
| Kasargod | 138352 | 139 | 138491 | 204064 | 149 | 204213 | 237259 | 2554 | 239813 |
| Kerala | 3943861 | 178980 | 4122841 | 4563366 | 88190 | 4651566 | 5201263 | 48871 | 5280000 |

Source: Same as in Table 3.16.

Table 3.9

Distribution Of Beneficiaries According To Classification Of Loan

| SL No. | Size Of Land (cents) | No. Of Beneficiaries | Agriculture Amt. (Rs.) | Utilisation Of Loan: Repayment Of Debt | | Medical Treatment | | Education | | House Construction & Mainta. | | Purcahse Of Durable Goods | | Consumption | | Death, Marriage | | Fully Misutilised. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | No. | Amt. (Rs) | No. | Amt. (Rs) | No. | Amt. (Rs) | No. | Amt. (Rs) | NO. | Amt. (Rs) | No. | Amt. (Rs) | No. | Amt. (Rs) | No. | Amt. (Rs) |
| 1. | Below 25 | 124 | 356497 | 5 | 19800 | 1 | 2200 | 0 | 0 | 6 | 6600 | 1 | 1500 | 11 | 16226 | 1 | 1000 | 5 | 20990 |
| 2. | 25-50 | 51 | 168810 | 1 | 4730 | 1 | 4000 | 0 | 0 | 1 | 6750 | 0 | 0 | 2 | 725 | 1 | 3500 | 0 | 0 |
| 3. | 50-100 | 101 | 489893 | 1 | 4000 | 1 | 200 | 1 | 9120 | 0 | 0 | 2 | 5100 | 10 | 8850 | 1 | 10120 | 2 | 6000 |
| 4. | 100-200 | 95 | 517564 | 1 | 1200 | 0 | 0 | 4 | 15510 | 2 | 11500 | 0 | 0 | 5 | 11980 | 0 | 0 | 2 | 5800 |
| 5. | 200-500 | 85 | 701147 | 0 | 0 | 0 | 0 | 2 | 4400 | 1 | 1000 | 1 | 5000 | 6 | 12985 | 2 | 17770 | 1 | 5000 |
| 6. | 500-750 | 22 | 348872 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 4000 |
| 7. | 750-1000 | 9 | 91700 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8. | Above 1000 | 10 | 216800 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Total | 497 | 2891283 | 8 | 29730 | 3 | 6400 | 7 | 29030 | 10 | 25850 | 4 | 11600 | 34 | 50766 | 5 | 32390 | 11 | 41790 |

Source: GoK (1989:57, Table 30).

Appendix 4.1

Area, Number of holdings and Distribution of Commercial Bank Credit by Size-class

| Size-class (Hectares) | No: of Holders | | Number of accounts | | Area (Hectares) | | Credit disbursed (Rs in lakhs) | |
|---|---|---|---|---|---|---|---|---|
| | 1980-81 | 1985-86 | 1980-81 | 1985-86 | 1980-81 | 1985-86 | 1980-81 | 1985-86 |
| upto 1 hectare | 3348634 | 4428300 | 165361 | 355101 | 740453 | 798153 | 3194 | 10370 |
| 1 to 2 hectare | 286944 | 277410 | 18060 | 76130 | 394331 | 372138 | 503 | 2493 |
| Above 2 hectares | 159793 | 128331 | 9121 | 31220 | 577335 | 460288 | 562 | 1914 |
| All sizes | 3795371 | 4834041 | 192542 | 462451 | 1712119 | 1630579 | 4259 | 14777 |

Source: Same as in Table 4.1.
Note: See note 1 of Table 4.1.

Appendix 4.2

Area, Number of holdings and Distribution of Co-operative Credit by Size-class

| Size-class (Hectares) | No: of Holders | | Number of accounts | | Area (Hectares) | | Credit Disbursed (Rs in lakhs) | |
|---|---|---|---|---|---|---|---|---|
| | 1980-81 | 1985-86 | 1980-81 | 1985-86 | 1980-81 | 1985-86 | 1980-81 | 1985-86 |
| Upto 2 hectares | 3635578 | 4705710 | 963797 | 1962263 | 1134784 | 1170291 | 14567 | 33763 |
| Above 2 hectares | 159793 | 128331 | 374056 | 287919 | 577335 | 460288 | 7157 | 16579 |
| All sizes | 3795371 | 4834041 | 1337853 | 2250182 | 1712119 | 1630579 | 21724 | 50342 |

Source: Same as in Table 4.2.
Note: See note 1 of Table 4.1.

Appendix 4.3

Distribution of Commercial Bank Short-Term and Term loan by Size-class

| Size-class (Hectares) | Short-Term Loans | | | | Term-Loans | | | |
|---|---|---|---|---|---|---|---|---|
| | Number of accounts | | Credit disbursed Rs in lakhs | | Number of accounts | | Credit disbursed Rs in lakhs | |
| | 1980-81 | 1985-86 | 1980-81 | 1985-86 | 1980-81 | 1985-86 | 1980-81 | 1985-86 |
| upto 1 hectare | 155161 | 321219 | 2915 | 9164 | 10200 | 33882 | 279 | 1206 |
| 1 to 2 hectare | 15727 | 63750 | 427 | 2044 | 2333 | 12380 | 76 | 449 |
| Above 2 hectares | 7924 | 18703 | 436 | 1016 | 1197 | 12517 | 126 | 898 |
| All sizes | 178812 | 403672 | 3778 | 12224 | 13730 | 58779 | 481 | 2553 |

Source: Same as in Table 4.1.

Appendix 4.4

Distribution of PACSs and PADBs Credit by Size-class

| Size-class (Hectares) | PACSs | | | | PADBs | | | |
|---|---|---|---|---|---|---|---|---|
| | Number of accounts | | Credit disbursed Rs in lakhs | | Number of accounts | | Credit disbursed Rs in lakhs | |
| | 1980-81 | 1985-86 | 1980-81 | 1985-86 | 1980-81 | 1985-86 | 1980-81 | 1985-86 |
| Upto 2 hectares | 925000 | 1926000 | 12561 | 30315 | 38797 | 36263 | 2006 | 3448 |
| Above 2 hectares | 371000 | 285000 | 6879 | 16132 | 3056 | 2919 | 278 | 447 |
| All sizes | 1296000 | 2211000 | 19440 | 46447 | 41853 | 39182 | 2284 | 3895 |

Source: Same as in Table 4.2.

Appendix 5.1(a)

Data for Factor Analysis 1974-75 (Variable 1 to 10)

| Districts | Commercial bank no: of of offices per10lakh population | Commercial Banks per capita Deposits | Commercial Banks per capita Advances | C/D Ratio June 1975 | Co-operative bank no: of of offices per10lakh population | Percentage of GCA to NSA | Percentage Of H.Y.V Paddy to GCA Hectare | % age of area under Non-food crops | Percentage of MIA to NSA | Consumption of NPK/Hectare of GCA |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Trivandrum | 49 | 242 | 111 | 45.89 | 57 | 162.36 | 1.58 | 36.08 | 7.56 | 15.68 |
| Quilon | 38 | 121 | 166 | 137.25 | 79 | 164.46 | 1.07 | 39.63 | 5.69 | 10.84 |
| Alleppey | 46 | 171 | 76 | 44.27 | 112 | 148.87 | 10.72 | 36.59 | 15.72 | 48.18 |
| Kottayam | 66 | 202 | 99 | 48.99 | 112 | 148.63 | 4.67 | 46.78 | 6.14 | 31.69 |
| Idikki | 39 | 53 | 23 | 42.83 | 77 | 101.83 | 2.30 | 50.98 | 1.65 | 7.80 |
| Ernakulam | 84 | 409 | 385 | 94.14 | 76 | 121.99 | 7.90 | 36.50 | 19.69 | 28.98 |
| Trichur | 63 | 203 | 87 | 42.64 | 74 | 176.81 | 9.38 | 29.82 | 26.27 | 28.92 |
| Palghat | 55 | 164 | 64 | 39.35 | 53 | 118.66 | 9.50 | 22.99 | 17.41 | 31.12 |
| Malappuram | 28 | 39 | 28 | 72.44 | 55 | 124.72 | 7.23 | 35.86 | 9.27 | 17.67 |
| Kozhikode | 41 | 115 | 104 | 90.82 | 55 | 168.13 | 3.81 | 50.96 | 4.84 | 15.19 |
| Cannanore | 44 | 107 | 71 | 66.88 | 81 | 111.52 | 3.71 | 35.97 | 3.80 | 12.06 |

Source: 1) Col.1,2,3,4 - Reserve Bank of India, Banking Statistics, Basic Statistical Returns, Vol-6, June 1975.
2) Col. 5 - GoI, The Registrar of Co-operative Societies, 1974-75.
Col. 1,2,3 & 5 is compiled by dividing the data by the estimated population data. Population data for 1974-75 is taken from GoK, Economic Review 1976.
3) Col.6 - GoK, DES, Statistics for Planning - 1974-75. Complied by dividing the data by NSA.
4) Col.7 - GoK, DES, Statistics for Planning 1974-75. Compiled by dividing the data by GCA.
5) Col.8 - GoK, DES, Season and Crop Report of Kerala State - 1974-75.
6) Col.9 - GoK, DES, Statistics for Planning 1977. Because of non-availability of data for 1974-75 the area under irrigation of 1975-76 is taken into consideration for the period 1974-75.
7) Col.10 - GoK, DES, Statistics for Planning in 1977. Compiled by dividing the data by GCA.

Appendix 5.1(b)

Data for Factor Analysis 1985-86 (Variable 1 to 10)

| Districts | Commercial bank no: of of offices per10lakh population | Commercial Banks per capita Deposits | Commercial Banks per capita Advances | C/D Ratio June 1975 | Co-operative bank no: of of offices per10lakh population | Percentage of GCA to NSA | Percentage Of H.Y.V Paddy to GCA Hectare | % age of area under Non-food crops | Percentage of NIA to NSA | Consumption of NPK/Hectare of GCA |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Trivandrum | 104 | 1912 | 1030 | 53.85 | 39 | 152.44 | 2.01 | 42.55 | 6.96 | 34.27 |
| Quilon | 68 | 972 | 1268 | 130.51 | 54 | 156.50 | 5.61 | 50.23 | 2.91 | 35.22 |
| Pathanamthitta | 134 | 3108 | 484 | 15.56 | 81 | 110.15 | 6.35 | 53.60 | 3.33 | 80.83 |
| Alleppey | 95 | 1297 | 674 | 51.94 | 96 | 151.46 | 15.65 | 38.29 | 23.02 | 65.83 |
| Kottayam | 124 | 1514 | 781 | 51.60 | 81 | 130.64 | 8.75 | 60.42 | 3.42 | 78.92 |
| Idikki | 80 | 411 | 374 | 90.95 | 69 | 118.45 | 1.03 | 43.19 | 2.05 | 27.06 |
| Ernakulam | 152 | 2283 | 2224 | 97.42 | 61 | 138.53 | 7.76 | 43.75 | 25.87 | 55.75 |
| Trichur | 114 | 1717 | 710 | 41.34 | 60 | 140.48 | 7.99 | 34.59 | 37.14 | 53.00 |
| Palghat | 96 | 933 | 462 | 49.53 | 40 | 147.39 | 9.88 | 23.51 | 31.14 | 59.20 |
| Malappuram | 66 | 582 | 401 | 68.97 | 44 | 116.85 | 3.16 | 40.31 | 13.41 | 42.10 |
| Kozhikode | 91 | 859 | 621 | 72.31 | 39 | 125.77 | 1.57 | 64.55 | 3.17 | 40.64 |
| Wynad | 90 | 430 | 664 | 154.24 | 50 | 127.30 | 2.40 | 53.02 | 7.76 | 49.57 |
| Cannanore | 90 | 1061 | 514 | 48.48 | 64 | 111.58 | 3.33 | 41.19 | 5.36 | 37.37 |
| Kasargod | 99 | 667 | 538 | 80.67 | 68 | 105.14 | 1.88 | 39.09 | 17.09 | 34.07 |

Source: 1) Col.1,2,3,4 - Reserve Bank of India, Banking Statistics, Basic Statistical Returns, Vol-15, June 1986.
2) Col. 5 - GoI, The Registrar of Co-operative Societies, 1985-86.
Col. 1,2,3 & 5 is compiled by dividing the data by the estimated population data. Population data for 1985-86 is taken from GoK, DES,1990, Report on State Domestic Product of Kerala 1980-81 to 1987-88.
3) Col.6 - GoK, DES, Season and Crop Report of Kerala, 1985-86. Complied by dividing the data by NSA.
4) Col.7 - GoK, DES, Statistics for Planning 1988. Compiled by dividing the data by GCA.
5) Col.8 - GoK, DES, Season and Crop Report of Kerala State - 1985-86.
6) Col.9 - GoK, DES, Season and Crop Report of Kerala State, 1985-86.
7) Col.10 - GOK, DES, Season and Crop Report of Kerala State, 1985-86. Compiled by dividing the data by GCA.

Appendix 5.2(a)

Data for Factor Analysis 1974-75 (Variable 11 to 21)

| Districts | Number of Tractors Per 000 hectares of GCA | Number of Power tiller Per 000 hectares of GCA | Pumpsets Diesel Per000 hectares of Gca | Pumpsets Electric Per000 hectares of Gca | Wooden Plough Per 000 hectares of Gca | Steel Plough Per 000 hectares of Gca | Live Stock Density | Poultry Density | Avg. size of holding of marginal farmers Hectares | Avg. size of hold.of non-marg. farmers Hectares | Percentage of non-marg. farmers in the total |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| Trivandrum | 0.13 | 0.24 | 0.94 | 0.61 | 36.71 | 23.47 | 176 | 513 | 0.20 | 1.87 | 5.82 |
| Quilon | 0.08 | 0.12 | 0.76 | 0.77 | 51.04 | 54.36 | 140 | 295 | 0.26 | 1.79 | 7.42 |
| Alleppey | 0.65 | 0.43 | 8.31 | 4.92 | 61.71 | 26.59 | 267 | 936 | 0.20 | 1.93 | 7.55 |
| Kottayam | 0.24 | 0.27 | 2.82 | 1.50 | 26.68 | 3.24 | 238 | 539 | 0.27 | 2.16 | 20.21 |
| Idikki | 0.16 | 0.64 | 1.42 | 1.01 | 35.98 | 5.07 | 61 | 121 | 0.34 | 2.60 | 33.77 |
| Ernakulam | 0.69 | 1.59 | 17.55 | 48.04 | 200.22 | 29.58 | 215 | 659 | 0.20 | 1.90 | 12.64 |
| Trichur | 0.41 | 0.61 | 15.16 | 28.30 | 112.75 | 16.11 | 148 | 427 | 0.22 | 1.83 | 10.27 |
| Palghat | 1.78 | 0.35 | 11.04 | 10.11 | 206.74 | 48.06 | 120 | 229 | 0.24 | 2.62 | 19.13 |
| Malappuram | 0.06 | 0.07 | 14.36 | 3.51 | 184.83 | 4.00 | 115 | 375 | 0.25 | 2.25 | 13.87 |
| Kozhikode | 0.29 | 0.31 | 3.45 | 1.54 | 67.88 | 11.76 | 119 | 274 | 0.23 | 2.32 | 12.23 |
| Cannanore | 0.13 | 0.23 | 25.13 | 2.90 | 134.42 | 8.22 | 108 | 201 | 0.29 | 2.32 | 19.43 |

Source: 8) Col.11-16 - GoK, DES, Season and Crop Report 1978-79.

9) Col.17 - GoK, DAH, Report on 14th Quinquennial Live Stock Census, 1987.

10) Col.18 - GoK, DES, Season and Crop Report of Kerala State - 1978-79.
Compiled by dividing the data by the area - data from Season and Crop Report of Kerala State 1978-79.
We used the data of 1977 for col. 13-20, because of the non availability of data for the period 1974-75.

11) Col.19,20 & 21 - GOK, DES, Agricultural Census 1977.
Here also we used data of agricultural census 1977 due to non availability of data for the period 1974-75.

Appendix 5.2(b)

Data for Factor Analysis 1985-86 (Variable 11 to 21)

| Districts | Number of Tractors Per 000 hectares of GCA | Number of Power tiller Per 000 hectares of GCA | Pumpsets Diesel PerOOO hectares of Gca | Pumpsets Electric PerOOO hectares of Gca | Wooden Plough Per 000 hectares of Gca | Steel Plough Per 000 hectares of Gca | Live Stock Density | Poultry Density | Avg. size of holding of marginal farmers Hectares | Avg. size of hold.of non-marg. farmers Hectares | Percentage of non-marg. farmers in the total |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| Trivandrum | 0.06 | 0.09 | 0.39 | 10.96 | 15.18 | 22.70 | 237 | 850 | 0.13 | 1.78 | 2.77 |
| Quilon | 0.12 | 0.26 | 0.68 | 25.95 | 32.19 | 48.15 | 202 | 574 | 0.17 | 1.64 | 3.22 |
| Pathanamthitta | 0.13 | 0.22 | 1.73 | 32.39 | 12.71 | 11.32 | 110 | 363 | 0.22 | 1.65 | 7.52 |
| Alleppey | 0.57 | 0.52 | 7.03 | 71.89 | 24.21 | 15.46 | 216 | 948 | 0.15 | 1.88 | 4.53 |
| Kottayam | 0.13 | 0.49 | 2.23 | 37.26 | 6.41 | 2.50 | 206 | 716 | 0.19 | 2.18 | 13.03 |
| Idikki | 0.21 | 0.25 | 2.32 | 9.19 | 14.85 | 5.51 | 64 | 134 | 0.25 | 2.16 | 19.58 |
| Ernakulam | 0.84 | 1.93 | 4.73 | 92.06 | 57.57 | 9.92 | 202 | 786 | 0.15 | 1.87 | 6.32 |
| Trichur | 1.04 | 0.92 | 33.49 | 299.48 | 35.30 | 11.41 | 149 | 576 | 0.17 | 1.76 | 5.77 |
| Palghat | 2.52 | 0.58 | 12.99 | 33.28 | 120.52 | 11.66 | 117 | 292 | 0.18 | 2.33 | 13.12 |
| Malappuram | 0.82 | 0.21 | 34.42 | 61.82 | 91.80 | 7.16 | 125 | 556 | 0.19 | 1.99 | 7.69 |
| Kozhikode | 0.08 | 0.12 | 6.39 | 31.18 | 21.03 | 7.84 | 167 | 574 | 0.16 | 1.97 | 5.64 |
| Wynad | 1.40 | 1.38 | 7.21 | 5.39 | 95.15 | 34.89 | 85 | 201 | 0.25 | 2.68 | 23.11 |
| Cannanore | 0.05 | 0.19 | 9.80 | 48.68 | 17.96 | 1.94 | 132 | 303 | 0.25 | 2.01 | 14.36 |
| Kasargod | 0.31 | 1.18 | 81.97 | 87.19 | 130.46 | 11.81 | 129 | 319 | 0.30 | 1.97 | 15.92 |

Source: 8) Col.11-16 - GoK, DAH, Report on 14th Quinquennial Live Stock Census, 1987.
9) Col.17 - GoK, DAH, Live Stock Census, 1987.
10) Col.18 - GoK, DES, Live Stock Census 1987.
Compiled by dividing the data by the area - data from Live Stock Census 1987.
We used the data of 1987 for col. 13-20, because of the non availability of data for the period 1985-86.
11) Col.19,20 & 21 - GoK, DES, Agricultural Census 1985-86.

Note: Agricultural Census 1985-86 is provisional.

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