

DEMAND AND SUPPLY OF AGRICULTURAL CREDIT -A CASE STUDY OF MADAKATHARA PANCHAYATH

By
RENUKA. S. MENON

THESIS

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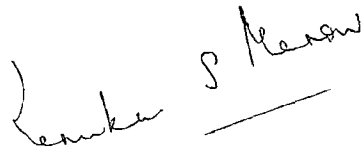
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DECLARATION

I hereby declare that this thesis entitled 'Demand and Supply of Agricultural Credit - A case study of Madakathara Panchayath is a bonafide record of research work done by me during the course of research and that the thesis has not previously formed the basis for the award to me of any degree, diploma associate-ship, fellowship, or other similar title of any other University or Society

Mannuthy

16 11 89




RENUKA S MENON

CERTIFICATE

Certified that this thesis, entitled "Demand and Supply of Agricultural credit - A case study of Madakathara Panchayath" is a record of research work done independently by Renuka S. Menon under my guidance and supervision and that it has not previously formed the basis for the award of any degree, fellowship or associateship to her.

Mannuthy,
8.3.1990


Dr. U. RAMACHANDRAN
Assistant Professor

Approved by

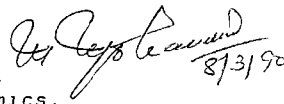
Chairman

Dr U Ramachandran,
Assistant Professor,
Department of Economics,
College of Co-operation & Banking,
Mannuthy

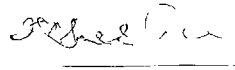


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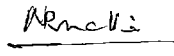
1 M Mohan as,
Associate Professor,
Department of Economics,
College of Co-operation & Banking,
Mannuthy


8/31/90

2 Dr K A Suresh,
Assistant Professor,
Department of Economics,
College of Co-operation & Banking,
Mannuthy




3 N Ravindranathan
Associate Professor,
Department of Statistics,
College of Co-operation & Banking,
Mannuthy



External Examiner

Dr K RAMACHANDRAN NAIR
PROFESSOR,
DEPT OF ECONOMICS,
UNIVERSITY OF KERALA
KARIAVATTOM


8/31/90

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Introduction

CHAPTER - I

INTRODUCTION

India's economy is primarily agro-based Agriculture forms the backbone of the economy It is the source of livelihood for more than 70 percent of its population (685 million) and contributes about 38 percent of its net national product (1981 Census) It also provides food, supplies raw materials to industry, earns foreign exchange and generates purchasing power and demand for consumer goods in rural areas The significance of Indian agriculture further arises from the fact that it is the source of supply of raw materials to our leading industries such as cotton and jute, textile industries, sugar, tea, food products etc all of which depend on agriculture directly Many of our cottage and small scale industries like handloom, rice hulling etc depend on agriculture for their raw materials In the sphere of country's trade and commerce, too, agriculture plays a vital role, as about 40 per cent of our exports are agro-based Thus, for the development of national economy, development of agriculture is an essential condition

In traditional agriculture, credit plays a relatively less important role than do land and labour Finance in traditional agriculture is thus, largely used for maintenance as distinct from expansion of agricultural activities Typically, it is provided by the traditional money lenders, village traders, friends and relatives and

used for storage, marketing and processing In addition to these trading needs agricultural credit plays an important role in meeting the cash needs of the farmer In subsistence agriculture these needs are often largely relative to income Because of the close relationship of the household with farm enterprise, it is often difficult to distinguish between production and consumption needs of the farmers. Credit needs fluctuate considerably from one year to another because of seasonality in agricultural production.

Modern agriculture is capital intensive and farmers like industrialists need to borrow especially for capital inputs such as farm machinery The more highly developed the agricultural sector, the greater the amount of credit needed. Frederick Nicholson (1897) has observed that 'The History of rural economy alike in Europe, America and India has no lesson more distinct than this, that agriculturists must and will borrow This necessity is due to the fact that an agriculturist's capital is locked up in his land and stock must be temporarily mobilised Hence credit is not necessarily objectionable nor is borrowing necessarily a sign of weakness' The multiplier effects of a transforming agriculture increases profitability of agro based industries, thus increasing demand for capital Since saving in traditional agriculture tends to be relatively small at initial stages of development, increased demand for working and fixed capital must largely come from increased supply of credit

Modernising agriculture requires co-ordination of a number of activities such as extension, proper estimation of credit needs, timely and adequate supply of inputs, repayment arrangements suited to the ability and convenience of the farmers, effective machinery for the recovery of loans and adequate marketing. Traditional credit systems are often unable to meet the requirements of a co-ordinated approach in modernizing agriculture and therefore, necessitate introduction of institutional channels of credit. If credit is to make a significant impact on agriculture, it is necessary that credit needs be expanded much more rapidly than would be feasible through non-institutional means alone.

The pattern of credit has been undergoing a major change in recent years. The demand for credit has been defined as the amount of money required by the farmers to meet the cost of inputs and in modernising the equipment during a given period of time. The main parameters determining credit requirement includes, the financial position of the farmers, type of technology used, repayment capacity, cropping pattern, institutional infrastructure, scale of finance, capacity to self finance and refinance facility. With stagnant agriculture, where the farmer's motivation are scattered by low income prospects and risky situation, the demand for credit remains low. When agricultural development coupled with new technique of production is initiated other determinants of demand becomes meaningful, and the demand shifts

History of Rural Credit

Right from the period of pre-independence, vast majority of agriculturists in India, were groaning under the heavy weight of indebtedness. The country, was, as Sir Daniel Hamilton (1956) had put it "in the grip of Mahajans". It was the bond of debt, which was largely responsible for the deteriorating stage of agriculture and the poverty of the masses. Many of the farmers literally born in debt, lived in debt and died in debt, passing on the burden to those who followed. The advent of the British rule in India marked further deterioration in the economic condition of the farmer.

The Land Improvement Loans Act (1883) and the Agriculturists Loan Act (1884) were the first relief measures introduced to cope up with the complex problem of rural indebtedness. Under the Land Improvements Loans Act (1883) long-term loans for improvement were granted, whereas under the Agriculturists Loan Act (1884), short-term loans were given for current agricultural needs.

Various objections were raised against such loans. Firstly it was held that the vast business of financing agriculture in general, puts too great a strain upon the Government finance. Secondly, they only furnished cheap capital and made no provision for cultivating thrift and self help. The borrower had no interest in the welfare of his fellow borrowers, no participation in the profits and no control over management. Thirdly loans could not be

used for the redemption of old debts or the consolidation of holdings. Fourthly, there had been widespread ignorance about the facilities for credit and the procedure necessary to secure taccavi loans which was positively unpopular. This was attributed partly to the delay and uncertainty in getting the loan and partly to the strictness of the enquiries, the administrative officials were required to make and partly to the rigidity of the system of collection (Memoria, C B. 1983). It was very correctly stated by Calvert (1953) "In short the taccavi system is claimed to have failed in its primary purpose of stimulating agriculture". The Government could not supply credit adequately because of the paucity of funds and ill-suited methods. Hence co-operatives were considered as the suitable agencies to provide credit.

The co-operative movement in India, which owes its origin to the Co-operative Credit Societies Act (1904) initially aimed at helping the farming community in getting out of the clutches of money lenders and later by purveying production credit and for acquisition of farm assets. The Co-operative credit structure which evolved in the next decades comprises of two wings, one for supplying short-term and medium-term credit and the other for long-term credit. The three-tier short-term co-operative credit structure consists of State co-operative Banks at the apex level, central co-operative banks at the intermediate level and primary agricultural credit societies at the village level. In the long-term credit

structure there are state land development banks at the State level and usually primary land development banks at the taluk level. In a few States having unitary structure, state co-operative land development bank, finance ultimate borrowers through their branches.

At the end of June 1984, there were about 92,000 societies with a membership of 67 crores having an average membership of 720 per society. The borrowing members stood at 23 crores, constituting 33.7 per cent of total membership. The 92,000 Primary Agricultural Credit Societies were affiliated to 349 Central Co-operative Banks which in turn were further affiliated to 28 State Co-operative Banks (Co-operator, 1987).

The Co-operatives provided short-term, medium term and long-term credit totalling to Rs 2995.94 crores as against the target of Rs 3295 crores in 1984-85 and Rs 3206.06 crores against Rs 3767 crores in 1985-86. The per hectare investment of short-term co-operative credit in the country has been Rs 158/- in 1983-84 and Rs 165/- in 1984-85. During 1985-86 the per hectare investment had increased marginally to Rs 170/- (Panj, 1985).

The main defects noted in the supply of credit by co-operatives was inadequate supply, uneven distribution in favour of large farmers and regional imbalances. The credit supplied by co-operatives was estimated at one-third of the requirements for agriculture and the per acre credit available to small farmers was significantly lower.

when compared with the large farmers. Wide regional variations in the supply of co-operative credit was also noticed during the late sixties. The All-India Rural Credit Review Committee (Reserve Bank of India, 1969) found that while co-operative loans issued per head of rural population was varying in the range of Rs 1 29 to Rs 4 95 in Assam, Bihar, West Bengal, Rajasthan, Jammu and Kashmir and Orissa, the corresponding variation was between the range of Rs 12 64 to Rs 30 25 in Mysore, Tamil Nadu, Punjab and Maharashtra during the year 1966-67.

Co-operators advocated the continuation of the co-operatives as the single agency to deal with the problem of agricultural credit while others lost confidence in it. The establishment of Agricultural Credit Corporations in the co-operatively backward States was suggested as an alternative. Views were also expressed to allow commercial banks to enter into this field as a matter of social obligation and economic necessity. However the whole controversy came to an end with the nationalisation of 14 major commercial banks on the 19th of July 1969. The objective of nationalisation was closely linked with the commercial bank's responsibility with the development of credit to agriculture, the hitherto neglected/priority sector of the economy, for changing direction of credit towards small farmers and for removal of regional disparity in the supply of agricultural credit in the country. Thus the bank nationalisation led to the introduction of a new approach viz the Multi-Agency Approach, to

provide adequate credit to cultivators In addition to commercial banks, other institutions too have sprung up at the village levels to distribute credit and other inputs These include the Farmers Service Societies, Regional Rural Banks and LAMPS During 1980, six more commercial banks were nationalised and the National Bank for Agriculture and Rural Development was established in 1982

Co-operative Credit under Five Year Plans

(Rs in Crores)

Plan period	Short term	Medium term	Long term
1	100 00	25 00	10 00
2	150 00	50 00	25 00
3	400 00	160 00 **	115 00 **
4	-	750 00 *	700 00
5	1300 00	325 00	1500 00
6	2500 00	240 00	555 00***
7	5540 00	500 00	1030 00

Source Five Year Plan Documents

Notes - * Inclusive of short-term and medium-term

** Loans outstanding

*** Total cumulative target for medium and long term loans during the period 1980-85 was Rs 3,100 crores

The Sixth Five Year Plan expressed concern over the slow down in the rates of growth of short, medium and long term credit The reason for the stagnation in this credit flow was the mounting overdues which clogged the process

of credit re-cycling The Seventh Five Year Plan specified that the major thrust would be to ensure adequate flow of credit to the weaker sections of the population and to the less developed areas For the first time it was spelt out in the plans that steps would be taken for the integration of the two credit wings in a phased manner and provide credit through a single window The existing policy of separate watertight compartmentisation for the two credit structures would be given up

The commercial banks as a group form a preponderant part of the organised banking system in the country There are 28 banks in the public sector, accounting for over 90 per cent of banking business and 52 private sector banks including 21 foreign banks The commercial banks provide both short-term and long-term loans to farmers, and also finance allied activities like marketing, processing, storage etc, Since nationalisation of major commercial banks, considerable progress has been made in the coverage of rural areas through their branch net work and also in the matter of extending rural credit The total number of bank branches increased from 8262 before nationalisation, to 51385 by June 1985 The number of rural branches rose from 1832 or 22 percent of the total branches at the time of nationalisation to 30177 or 59 per cent of the total by June 1985 (Ojha, P D 1986)

In Kerala there were 2761 commercial bank offices as on June 1988 Of this 611 were Rural offices, 1716 Semi-

urban, 284 Urban and 150 Metropolitan bank offices The total number of commercial bank offices in India was 55015 Of this 30781 were rural branches

(Source RBI Report on Currency and Finance 1987-88, Vol II)

The average population covered by a branch office came down from 65000 in 1969 to 15400 in June 1985 The priority sector advances of scheduled commercial banks comprises of agriculture, small scale industries, export credit etc These advances increased from Rs 659 crores in December, 1969 to Rs 19208 crores in September, 1985 The total agricultural advances of scheduled commercial banks increased from a mere Rs 258 crores in December, 1969 to Rs 8174 crores in September, 1985 Direct finance to agriculture which includes short-term production loans, medium/long-term loans for development loans for allied activities constituted 83 per cent of the total agricultural advances at the end of September, 1985 The indirect finance comprises loans to farmers through societies, loans for financing distribution of fertilizers and pesticides, loans for construction of godowns etc, and they constituted 17 per cent of the total agricultural advances The share of commercial banks in the total outstanding credit for agriculture by all the primary institutions was around 53 per cent in September, 1985

(RBI Bulletin, 1986)

Regional Rural Banks are akin to commercial banks in their organisational set up and methods of operation How

ever the area of operation of each RRB is limited to specified districts (usually one or two districts) and their assistance is intended mainly for target groups of weaker section The new institutional arrangement was established in 1975 following the realisation that the ethos, attitudes and the high cost profiles of the commercial banks were not conducive to meeting the credit needs of the rural population especially the weaker sections to the required extent These banks combine the local feel and familiarity with rural problems which co-operatives possess and the degree of business organisation, ability to mobilise deposits and a modernised outlook which the commercial bank possess RPBs are sponsored by specified commercial banks and the share capital of each RRB is provided by the Government of India concerned, State Government and sponsoring bank in the ratio 50 15 35 Since 2nd October, 1975, when the first five RRBs were set up there has been a substantial expansion in the number of RRBs and at the end of December 1985 there were 187 RRBs covering 332 districts in the country having a total number of about 12000 branches Their advances stood at Rs 1333 crores at the end of December, 1985 The share of RRBs in the total outstanding credit for agriculture is approximately 5 per cent The target groups comprising of small and marginal farmers, artisans, village and cottage industries and other small borrowers accounted for more than 90 per cent of their lending (RBI Bulletin 1986)

The credit extended for agriculture by all the institutions in 1984-85 can be summed up as follows

(in crores of rupees)

Agency	Short term loan	Term loans	Total
Co-operatives	2500 (76 92) (96 25)	750 (23 08) (34 09)	3250(100) (55 94)
Commercial banks & Regional Rural banks	1110(43 36) (30 75)	1450(56 64) (65 91)	4560(100) (44 06)
Total	3610 (62 13) (100)	2200 (100)	5810(100) (100)

(Figures in brackets refers to percentages)

Direct finance disbursed for agriculture and allied activities by institutional agencies viz co-operatives, scheduled commercial banks, regional rural banks and State Governments together aggregated to Rs 7921 crores in 1986-87 as against Rs 7159 crores in 1985-86 Co-operatives continued to account for a major portion of the credit disbursed during 1986-87 (Rs 3902 crores), followed by scheduled commercial banks, Rs 3332 crores RRBs - Rs 477 crores and State Governments Rs 210 crores As per provisional figures credit disbursed by co-operatives is estimated to have increased to Rs 4328 crores in 1987-88

(Source RBI Report of the currency and finance
Vol I, 1987-88, P 198)

A Planning Commission working group has estimated agricultural credit requirements at Rs 30100 crores during

the Seventh Plan period This include Rs 11000 crores for disbursement through co-operative credit agencies, Rs 3600 crores through Regional Rural Banks and about Rs 15500 crores through commercial banks

Co-operative Credit in Kerala

In Kerala like other States, the co-operative credit movement consists of two structures One for short-term and medium-term credit, while the other for long-term credit The short-term credit structure functions with the Kerala State Co-operative Bank Limited, Trivandrum, at the apex level There are 14 District Co-operative Banks at the intermediate level affiliated to the State Co-operative Bank The Primary Agricultural Credit Societies (PACs) are the base level organisations having direct contact with the agriculturists They are popularly known as Service Co-operative Banks in Kerala The number of Primary Agricultural Credit Societies came down from 2397 in 1960-61 to 1570 in 1986-87, as a result of the process of re-organisation

The total membership of the PACs in Kerala as on 30 6 1987 was 68 18 lakhs, out of which 6 84 lakhs belonged to the scheduled caste and scheduled tribe The membership of the weaker section was 48 95 lakhs forming 71 79 per cent of the total membership The number of borrowing members was 25 66 lakhs constituting 37 63 per cent of the total membership The short and medium-term credit provided by Primary Agricultural Credit Societies

increased from Rs 6 48 crores in 1960-61 to Rs 598 06 crores in 1986-87 (Government of Kerala 1986-87)

In the sphere of long-term credit, the Kerala State Co-operative Agricultural Development Bank operates at the State Level The Primary Co-operative Agricultural Development Banks, are affiliated to the Apex Bank The area of operation of Primary Co-operative Agricultural Development Bank is extended to 2 or 3 taluks in a district The long-term credit issued by Primary Agricultural Development Bank increased from 0 19 crores in 1960-61 to Rs 30 43 crores in 1986-87

The present study can be justified on the basis of the following ground The programmes that are to be implemented under the Eighth Five Year Plan stresses upon decentralised planning, starting from the grass root level Hence a study which concentrates on giving a concrete idea about the extent of credit gap at the panchayat level is relevant in the present context The objectives of the study are as follows

Objectives

- 1 To assess the total credit requirements for paddy and other seasonal crops in a selected village
- 2 To assess the extent of credit supplied by different credit agencies and to estimate the credit gap
- 3 To suggest a strategy for meeting the credit gap
- 4 To develop a methodology under technical programme-sampling as given is stratified random sampling

Scope

The scope of the study includes assessment of credit requirements for seasonal crops such as paddy, banana and tapioca grown by farmers in the Madakkathara Panchayat of Ollukkara Block, Trichur. By assessing the credit provided for the said crop by co-operative and commercial banks, functioning in the panchayat, the study attempts to bring out the extent of credit gap at the panchayat level.

Practical Utility

The study will help to have a better understanding about the own investment and credit required from outside agencies by the farmer. It will also help to have a clear idea about the existing credit gap and the share of co-operatives and commercial banks in meeting it.

Limitation

Apart from investment credit requirements for minor irrigation the study has not taken into account other development purpose like levelling bunding etc. of sample respondents. The data pertaining to the cost of cultivation and other particulars is purely from the memory of the respondents as they are not in the habit of maintaining accounts relating to agricultural operations. The fourth objective which relates to developing a new methodology under technical programme, could not be pursued due to paucity of time.

Due to lack of data pertaining to area under cultivation of each crop coming under each size-class, it was not possible to find out the requirement of credit for individual size-classes. Hence the requirement of the panchayath as a whole is worked out. Though an attempt was made to collect data on non-institutional agencies, the respondents were reluctant to furnish the information and hence it could not be analysed.

Plan of the Study

The chapterisation scheme of the thesis is as follows. The first chapter describes the importance of credit in modernized agriculture and the key role to be performed by the credit institutions with the introduction of multi-agency approach. The second chapter critically reviews the past works relating to the problem and justifies the present study. The third chapter gives a brief description about the materials and methods employed to analyse the data pertaining to the study. The fourth chapter viz. 'Results and discussion' analyses the primary data collected during field survey to find out the extent of credit gap if any, for three seasonal crops viz. paddy banana and tapioca. The final chapter brings out the findings and concludes the study.

Review of Literature

CHAPTER - II
REVIEW OF LITERATURE

The increasing importance of Institutional credit has prompted many studies on various aspects, such as its demand, supply, utilisation, overdue, distribution and operational efficiency. To justify the present study, a critical review of related literature will be of great use.

The literature is revised broadly at three levels such as studies pertaining to i) the credit demand, ii) credit supply, and iii) Credit gap. These studies include those conducted at the All-India level, state level, district and village level.

It is not possible to arrive at an exact figure with regard to the demand for agricultural credit under the circumstances prevailing in India and the estimation of credit is a difficult task. The large number of fragmented holdings makes it all the more difficult to collect data in accordance with the size of holdings and crops cultivated. Since the cropping pattern changes during different periods, estimation of credit needs becomes difficult and as majority of cultivators combine their household expenses with farm expenses, distinguishing the latter is not easy.

Demand for Credit

At the All-India level, the All-India Rural Credit Survey Committee (1954) worked out the demand on the basis of intensive enquiries conducted in respect of about 9000 selected families of cultivators. According to the Committee in 1951-52, the annual borrowings of the farmer were Rs 750 crores. The committee placed the total agricultural credit requirement at Rs 2000 crores. Of this amount Rs 800 crores was to be self financed and the remaining Rs 1200 crores were to be supplied by the agencies extending credit.

The Rural Debt and Investment Survey (1961-62) conducted by RBI estimated the need for agricultural credit at Rs 1034 crores.

The All-India Rural Credit Review Committee (1969) while estimating the demand for production credit for the Fourth Plan stressed that what is important from the point of view of policy is not a global estimate of all types of credit requirements for all type of cultivators but rather an estimate which is reliable to agricultural production in general and modern inputs and improved practices in particular. It has been estimated by the committee that short-term credit requirements of the farmer during the last year of the fourth plan was likely to be to the tune of Rs 2000 crores while the medium term needs were put at Rs 500 crores. The long term credit

required was estimated by the committee at Rs 1500 crores for the Fourth Plan

The Fertilizer Credit Committee (1969) has found the credit needs of the farmer for fertilizers alone at Rs 520 crores in 1970-71

The study group of the National Credit Council (NCC) (1969) on organisational frame work for the implementation of social objectives, headed by Gadgil, made a rough assessment of the credit requirement of the major sectors of the economy. On the basis of the methods adopted by the Panel of Economists headed by M L Dantwala, the study group of the NCC worked out three estimates for 1967-68 which ranged from Rs 1115 crores to Rs 1275 crores. Based on these three estimates the credit requirement for current farm expenses in 1967-68 was roughly placed at Rs 1200 crores by the study group of the National Credit Council (See Appendix 1)

A study was conducted by Desai, B M et al (1969) in Gujarat to investigate into the use and demand for additional farm production credit by the farmers in relation to the institutional credit sources available to them. The study revealed that per farmer as well as per acre credit use increased continuously as changes were made in agriculture. The findings also contradicted the notion that short-term credit was not adequate and that profitability increased with the use of additional credit.

Bansil, P C (1971) made an estimate of short-term borrowings during the Fourth Five Year Plan for farm and non-farm business operations

The requirement for farm business was based on 50 percent of input value and estimated credit needs for purposes, other than inputs. From this amount the credit for double cropped area was deducted at 17 percent and thus the net credit needs, for farm business during 1973-74 was estimated at Rs 819 crores. For non-farm business operations the total borrowings of cultivators for household expenditure in 1973-74 was estimated at Rs 1085 crores. It was assumed that the capacity of the cultivators for self financing improved by 21 percent. This percentage was deducted from the estimated figure. Thus the estimated figure for non-farm business in 1973-74 was placed at Rs 858 crores. On the whole the credit requirements for farm and non-farm business was Rs 1677 crores (See Appendix-2)

Desai, M D et al (1971) studied the prospect for demand for short-term Institutional credit for high yielding varieties in Gujarat. A large portion of the class of relatively small farmers did not adopt high yielding varieties due to the higher cash outlays involved in cultivation of high yielding varieties from their own resources. They were also not able to obtain credit,

because they were not members of credit co-operatives It was found that, only 26 percent of the small farmers in a large part of Gujarat were members of credit co-operatives, while it was as high as 61 percent in the case of relatively large farmers

The study conducted by Sharma, J S and Prasad, R (1971) in Nainital and Rampur districts¹ of the North-Western regions of Uttar Pradesh aims at estimating the credit needs by farm size and by regions at different stages of technological development in agriculture It was observed that in Nainital which was relatively advanced, the per acre production requirement on an average, was Rs 113 and Rs 332 at the existing and improved levels of technology, respectively. Credit needs are more on the irrigated farms than on the unirrigated farms In Rampur the per acre credit needs are on an average, Rs 156 and Rs 341 at the current and improved levels of technology, respectively, Which indicated that in absolute terms, the per acre credit needs are little higher in relatively less progressive area than in the progressive regions

A study by Gill, S S and Chowla, J S (1971) attempted to assess the short-term credit requirements of small farmers in three general farming areas of Amritsar district and to suggest guidelines to the Institutional lending agencies in the matter of providing loans to these farm situations The study revealed that capital or credit

requirements differed markedly from area to area Capital requirement per acre was Rs 220, Rs 129 and Rs 90 respectively, While credit requirement per acre was Rs 108, Rs 50 and Rs 44 respectively for three different areas Thus the study established that the uniform scales of finance for different crops as envisaged under the crop loan system designed specifically to meet the short-term credit needs can not be justified

One of the objectives of the study conducted by Singh, U S and Jha, D (1971) was to estimate the short-term production credit requirements and it's impact on farm income in three selected villages in the Union Territory of Delhi The analysis brought out that under the current technology capital rationing was evident on all farms, though in varying degree - and the requirement of capital ranged between 9.5 to 103.8 percent, of the existing capital Requirements are comparatively higher on the high income farms, but the requirements of the low income farms are generally much higher due to the adoption of superior technology on the farm

Another study conducted to the District of Birbhum West Bengal by Bhanja, P K (1971) aimed at assessing the requirement of credit for the cultivation of high yielding varieties of paddy It was observed that, under the then prevailing situation, an additional cash expenditure of Rs 339 per acre was required on an average in the process

of switch over from ordinary to HYV of paddy cultivation. Although the cash expenditure for HYV paddy was higher in the larger farms, than that in the smaller farms, the farmer being financially stronger, required smaller amounts of loans.

One of the objectives of the study earned out by Subramanian, K V and Patel R k (1973) was to estimate the short-term credit needs on different farm situations. Linear programming was done for the following two situations: Situation I - Optimum plan with limited available capital; Situation II - Optimum plan with unlimited capital availability through borrowing activity. The optimum plan developed under situation II revealed that capital was needed by all the farmers irrespective of their size groups. Since the credit provided was of short-term nature and mainly used for purchasing goods and services required for raising the crops. The small farmers borrowing was to the extent of 33.96 to 201.07 percent of the available capital, while it ranged from 9.11 to 73.05 percent by large farmers.

The National Commission on Agriculture (1976) which has carefully examined the needs of agricultural sector estimated that the demand for credit would be of the order of Rs 16548 crores by the end of 1985. The NCA, while projecting the credit requirements up till 2000 AD, recommended that 43 percent of 1985 level of graduated

requirements of short-term loans and 40 percent of the medium and long term loans should be met by the Fifth Five Year Plan itself. During 1975-85 the co-operatives will have to almost double their short-term, medium-term and long-term credit and the banking system should work towards increasing their agricultural loans from Rs 1450 crores in 1978-79 to Rs 4050 crores in 1984-85.

The sub-group on agricultural credit appointed by the working group on co-operation for the Fifth Plan (1978-79) estimated the production credit needs at Rs 3000 crores.

A study conducted by Kumar D and Kahlon A S (1978) in Ludhiana District, revealed that the average amount borrowed by larger farmers was significantly higher than that of small and medium farmers. It was Rs 2681, Rs 4584 and Rs 17844 for small, medium and large farmers respectively.

Ghosh R (1978) while attempting to estimate the demand for agricultural credit in West Bengal found that the general tendency which emerges from the nature of the distribution of loans by both the commercial banks and primary credit societies was an unequal availability of credit and other facilities related to production in favour of the farmers owning larger sizes of holdings. In effect, the small and marginal farmers, including agricultural labourers and artisans had to depend on the non-institutional sources for about 90 percent of their credit.

requirements The demand for agricultural credit in the next five years was estimated about Rs 300 crores in West Bengal, out of which a sum of Rs 283 crores was required for filling up, the present credit gap, Rs 15 crores for the newly irrigated areas and Rs 4 5 crores for meeting the credit needs of the beneficiaries who have been given land due to the implementation of ceiling laws

Gandhi Prasad N S , Sapat B G, (1977) found that the Vidharbha region of Maharashtra would require a minimum of Rs 781 crores, if it is proposed to assist the farmers to the extent of 25 percent of total farm expenses for the next five years, whereas it would amount to Rs 1561 crores and Rs 2497 crores if the farming community is financed to the extent of 50 percent and 80 percent of the total farm expenses, respectively

Kewal Kumar (1987) made use of farm production plan to estimate the cost of cultivation of major crops to assess the agricultural credit requirements in Nainital The credit requirements for HYV worked out to Rs 21 1589 crores (with the area 1,80,076 hectares, cost of cultivation Rs 2350 per hectare and 0 5 as proportion of credit requirements to capital inputs) for improved and other varieties the credit worked out to Rs 4 7323 crores (with the area 92970 hectares, cost of cultivation Rs 1275 per hectare and 0 4 as proportion of credit requirements to capital inputs) The total short-term

agricultural credit required amounted to Rs 25.89 crores for main crops. The area under subsidiary crops was found out by deducting the area under main crops from the total cropped area. The credit required for subsidiary crops comes to Rs 3.39 crores. Thus the total demand for Nainital District worked out to Rs 29.28 crores. The second method used to estimate the short-term credit requirement of the district was on the basis of the guidelines issued by the RBI, taking into account irrigated and unirrigated area. As per this method, the credit required worked out to Rs 21.19 crores for the district.

Demand for Credit - Parameters affecting demand

The type of technology adopted by the farmer is one of the main determinants of credit demanded. Many studies have been made to assess the demand for credit, on the basis of the type of technology used.

Gard J S et al (1971) attempted to find out the seasonal or short-term credit requirement of traditional farms for crop production to fall in line with adoption of modern technology in Kanpur. The study revealed that the value of total input per hectare for the progressive farms was Rs 1349 as against Rs 1013 for the traditional farms. The study showed that traditional farms could not follow modern technology due to lack of additional cash inputs required for adopting high yielding crops. The credit needs per hectare of the traditional farms showed that traditional farms could not follow modern technology due to lack of additional cash input required for adopting

high yielding crops The credit needs per hectare of the traditional farms showed an increasing tendency with the increase in the size of the farms The co-efficient of correlation between size group and credit needs and co-efficient of correlation between the percentage area under HYV and credit need per farm worked out to 0.9773 and 0.9765 respectively and both were found significant at 5 percent level

Rai S N and Singh R I (1971) made an attempt to estimate the actual performance of credit, as has been generated due to the adoption of high yielding variety of crops in Kanpur The estimate found that the per hectare requirement of production expenses of modern inputs came to Rs 422 excluding the requirements for wages and hired labour on farms which amounted for Rs 112 It was also observed that the requirements of amount for wages showed a higher disparity among different size groups of holdings Unlike the farmers in the smaller size groups farmers in the higher size groups of holding have relatively less family labour available for work on their farms on the one hand and they handle comparatively greater volume of business on the other The average per hectare requirement of money for investment purposes was placed at Rs 581 The study also revealed that the farmers in the higher size groups require more money for investment purposes whereas farmers in the smaller size groups demanded more for investment in the traditional manner

like purchase of livestock

Subramanyan K V (1975) assessed the quantum of credit requirements that would enable the small farmers to adopt the high yielding technology of paddy cultivation in Tamil Nadu. It was observed that the provision of additional capital results in 12 percent of the total cropped area being brought under high yielding variety of paddy in the deltaic zone and as much as 100 percent in the case of upland, the respective credit requirements for these two zones being 67 percent and 200 percent over the existing capital used on the farm.

Deol C D et al (1977) found that the working capital needs of the farmers, in the Nanded District of Maharashtra State, for meeting the day to day farm expenses at the existing level of technology amounted to Rs 841 and Rs 2075, in the case of rainfed and irrigated holdings respectively. The requirement of working capital with the improved methods of cultivation was estimated at Rs 1785 and Rs 3982 in both these categories of holdings, respectively indicating an increase of 119 percent and 65 percent over the existing level of technology. Thus the small farmers under both the categories required substantially more credit to reach a viable level.

A study conducted by Kadian R. S (1983) found that small and medium farmers required more credit at improved

level of technology as their own capital would not supplement the credit needs to adopt better technology. The short-term capital requirement at improved level of technology was highest on medium farms, followed by large and small farms. However, the short-term capital requirements at existing level of technology was highest on large farms, followed by medium and small farms. The reason was that medium farms had more intensive crop plans at improved levels of technology. The same intensity could not be maintained as irrigation became a limiting factor in the case of large farms and compulsory allocation of minimum acreage for raising the crops for consumption, reduced the capital requirement at small farms. The short-term credit requirement was highest on medium farms due to more intensive crop plan and non-availability of adequate capital, followed by large and small farms. Capital availability per hectare was also highest on medium farms at improved levels of technology. There was demand for additional agricultural credit on all types of farms to adopt advanced agricultural techniques. The share of owned funds in total capital requirement was relatively higher on large farms compared to medium and small farms.

Supply of Credit

The study group of the National Credit Council (NCC) (1969) on organisational framework for the implementation of social objectives headed by Gadgil observed that bank

credit was unevenly distributed as between different sectors and different states and was virtually unavailable to small borrowers and weaker sections of the community it was estimated by the group that about 39 percent of the total credit requirements of agriculture were met by institutional credit agencies in 1967-68 In the case of Scheduled commercial banks for instance 81 percent of the total borrowing accounts are for amounts upto Rs 10,000, but they account for only 3.7 percent of the bank credit. The coverage of co-operatives as well as commercial banks, were highly uneven as between different states. Eventhough co-operatives catered mostly to the requirements of the agricultural sector, they could meet only one third of the requirement of the sector. The sectoral distribution, of credit by commercial banks weighed in favour of industry trade and commerce rather than agriculture whose share remained 2.1 percent in 1951 and 1967.

Banja P K (1971) while conducting a micro level study in the District of Birbhum, West Bengal, observed that, the proportion of cash expenditure met by the Government varied between 8 percent in the highest size group and 14.7 percent in the lowest size group. Over supply of credit to the lowest size group of farms was due to the fact that some farmers were able to circumvent the provision of advancing credit of Rs 150 per acre, for cultivating HYV of paddy, than that was intended and actually cultivated.

The Banking Commission (1972) estimated that credit provided by the co-operatives was about 25 percent of the total credit needs in agriculture by June 1970, as compared with 3 percent in 1961-62. The coverage of rural population by primary credit societies, was considerable only in States such as Punjab, Tamil Nadu and Himachal Pradesh, where it exceeds 50 percent. In most of the remaining states, it is much less than 30 percent. However, effective coverage expressed as a proportion of borrowing households to total rural house-holds was as high as 50 percent in Punjab followed by Himachal Pradesh. It was less than 20 percent in all but four states, in some of them the proportion being less than 10 percent, these include Assam, Bihar, Orissa, Uttar Pradesh and West Bengal. In Kerala, the study team appointed by the Reserve Bank of India in December, 1972 at the instance of the State Government to examine, the role of the intermediate level credit institutions in Kerala, made an assessment of the credit requirements in the co-operative sector. The team assumed that 75 percent of the outlay on agricultural crop production will have to be borrowed by the cultivators, in which the share of co-operative credit institutions was assumed at 60 percent. The total outlay was worked out on the basis of the gross cropped area (2923804 hectares) and the scale of finance. The total outlay was Rs 456.82 crores. The credit requirements of the farmer was Rs 342.61 crores (i.e. 75 percent of the total

outlay) of which the share of co-operatives amounted to Rs 205.56 crores (i e 60 percent of the total credit requirements) The short-term and medium-term credit disbursed by co-operatives for agricultural purposes amounted to Rs 64 18 crores in 1977-78 leaving a credit gap of Rs 141 38 crores i e 68 77 percent (Government of Kerala, 1980)

Ramamoorthy K et al (1972) observed that 40 percent of the farm expenses wer met by borrowings in a study in two firkas of Madurai district It was observed that requirement and supply were highest for small farms and the supply camemostly from the money lenders It was also observed that co-operative societies were serving only large farmers

Deol C D (1977) found that the share of co-operative agencies in the total loans advanced by all agencies was as high as 77 percent in Nanded district of Maharashtra State.

Gandhi Prasad N S and Sapate, B G (1977) observed that the District Co-operative Banks of Wardha and Bhandra Districts could advance only 23 20 percent of the actual requirement which revealed the existence of a wide gap between the requirment and supply of credit

Joshi P L (1978) conducted a study to investigate into the role and working of financial institutions in

Garshwal Division with special reference to provision of credit and the multi-agency approach. The study revealed the following facts: Government has been giving credit to the farmers by way of taccavi loans which suffered from defects such as delay in disbursements and persistent corrupt practices by the Government while granting loans to the farmers. Multiagency approach posed problem of dual financing. Hence, a single institution with strong financial base was suggested to cater to the needs of the farmers.

The target fixed in the Fifth Five Year Plan for dispensation of short-term and medium-term credit by co-operatives in Kerala was Rs 82.50 crores by the end of 1978-79. The target for short-term co-operative credit for each state was however raised, in the wake of steep increase in the price of chemical fertilizers and other agricultural inputs, by the study group appointed by the Government of India. Accordingly the original target of Rs 75 crores for short-term credit under the co-operative sector by the end of 1978-79 was enhanced to Rs 85 crores of which Rs 40 crores was taken to be the 'B' component.

The task force on Agricultural Finance and Co-operation (1979) constituted by the State Government for the Sixth Plan period fixed a target of Rs 100 crores under short-term agricultural credit and Rs 35 crores under medium-term credit, to be disbursed by co-operative during

the last year of the plan period

Jain H.C (1980) examined the functioning of Regional Rural Bank, in Hoshingabad and observed that the per farm crop loans are more for the small farmers as compared to the marginal farmers This was because the holding size varied between small and marginal farmers In the case of small farmers, the size of holding is large and therefore, the crop loan requirements are also large The amount required per acre is near about the same for both the categories and variation is not large The demand and supply of loans showed that there existed a credit gap of 90.16 percent in the case of marginal farmers and 84.78 percent in the case of small farmers

The Committee to Review Arrangements for Institutional Credit for Agriculture and Rural Development (CRAFICARD) appointed by the Reserve Bank of India (1981) found that the aggregate loans issued by the three agencies viz commercial banks co-operatives and regional rural banks in 1979-80 amounted to Rs 2889 crores Based on the rate of increase in credit disbursement during the last five years an attempt was made to project the level of credit likely to be reached by co-operatives and commercial banks in 1989-90, on a linear basis With regard to RRBs the estimates were based on informed judgement on the progress of RRBs that were already in the field and the banks that were likely to be organised in

the next five years and the viability norms evolved for them

Arunrao, K Ramachandra Bhatta (1985) observed that the flow of co-operative credit for agriculture has not changed even with notable changes in the structure of agriculture. Though the cash requirement for the farmer for other than seasonal agricultural operation and minor irrigation is steeply rising, there was no re-organisation of the credit policy of the PACs, to cater to purposes like marketing, processing and other subsidiary occupations. One of the main reasons was that the farmers are more and more depending on other institutions to meet their credit requirements other than crop loans.

Estimates of Agricultural Credit Disbursal in 1989-90

Rs in Crores

	Short Term Credit		Medium Term Credit		Total	
	1979-80	1989-90 (Projection)	1979-80	1989-90 (Projection)	1979-80	1989-90 (Projection)
Co-operatives	1288	2100	526	960	1744	3060
Commercial banks	470	1050	575	1370	1045	2420
Regional Rural Banks	44	350	56	350	100	700
Total	1732	3500	1157	2680	2889	6180

Source Reserve Bank of India (1981) Report of the Committee to Review arrangements for Institutional Credit for Agriculture and Rural Development, Bombay

Credit Gap

The Banking Commission (1972) observed that credit gaps are very large in areas where neither co-operative nor commercial banks have virtually any organisation at the grass root level. Even in areas where the organisation exists it was not capable of satisfying all the needs of those who were eligible for credit and needed it. In particular, there was a significant gap in institutional arrangements in respect of small, marginal and sub-marginal farmers and other rural producers of this category which called for a different approach. The Commission stated that there was a major credit gap in respect of small farmers, by agreeing with the view of the All India Rural Credit Review Committee (RBI 1969) that a substantial proportion of small cultivators did not obtain co-operative credit at all and those who did, received too little of it in relation to their needs.

Suryavansi S D et al (1980) examined the availability and requirements of credit and assessed the existing gap of agricultural finance in an assured irrigated tract of Maharashtra. The study indicated that even in the assured irrigated area there exists a substantial gap in the credit requirements of the farmers and the credit supplied by the existing financial institutions. Small farmers were depending on the money lenders as a major source of credit. The credit gap was large in the case of

small farmers when compared with large farmers

Balister & Roshan Singh (1986) undertook a study of institutional finance in Agriculture in U P One of the objectives was to examine the gap existing between the requirement of farm credit and availability of farm credit from the financing institution in the case of different categories of farmers On the whole the gap between the total requirement of credit required and credit available per farmer was 30 percent The percentage credit gap in the case of marginal, small, medium and large farmers was about 22, 29, 27 and 45 percent respectively

The above literature brings out that studies were undertaken at the micro and macro levels But they were of an isolated nature, concentrating either at the State, District or the borrowers level The present study seeks to combine the demand and supply aspects of three specific crops so as to assess the credit gap in short-term financing, at the borrowers, as well as at the panchayat level

Materials and Methods

CHAPTER - III

MATERIALS AND METHODS

On the basis of a micro-level farm-survey the present study examines the demand and supply of short-term agricultural credit at the Panchayat level for three specific crops such as paddy, banana and tapioca that are mainly grown in the study area

Definitions

The important terms and concepts employed in the analysis of the data are defined as follows

Demand

The term 'demand' means the short-term financial requirement of the farmer to meet the cost incurred in cultivating crops. Net demand is calculated by deducting the own funds of the farmer from the total expenditure

Supply

The term 'supply' means the short-term credit supplied to the farmers by institutional agencies such as Service Co-operative Banks and Commercial banks

Agricultural Credit

Agricultural Credit refers to the short-term credit provided by institutional agencies for agriculture

Credit Gap

This term refers to that part of demand for short-term agricultural credit which is not met by institutional

agencies. In other words it means the difference between the demand and supply of agricultural credit.

Cropping Pattern

This refers to the type of crops and the area under cultivation with respect to each crop.

Cost of Cultivation

Cost of cultivation refers to the total expenses incurred in cultivating one hectare of land for three crops viz. paddy, banana and tapioca. Cost of cultivation inputwise, operation-wise and their percentages were worked out separately. The various cost incurred are grouped into three categories viz. material costs, labour cost and cost of finance.

Material Costs

Seeds: Purchased seeds are valued at the actual price paid. Farm produced seeds are imputed at the market price at the time of sowing.

Manures and Fertilizers: Farm produced manures are imputed at the rate prevalent in the study areas. Purchased manures and fertilizers are valued at their respective cost prices.

Support cost: The cost of support required to propagate (Support) banana is calculated at the rate prevalent in the study areas.

Irrigation Expenses

These include the maintenance cost of owned irrigation equipments, cost of fuels and lubricants. The actual payment for purchased water from other sources including Government canal is also included.

Labour Cost

Labour cost is calculated operation-wise taking into account the hired as well as family labour. The labour cost incurred for each agricultural operation was ascertained from the respondents in terms of the number of mandays and wages paid. The number of mandays put in by the family members were imputed at the prevalent wage rate.

Income Measurement

The annual income of the sample respondents is calculated on the basis of the gross annual income derived from agricultural and non-agricultural sources. Agricultural sources include income from the cultivation of paddy, banana, tapioca and other crops. Non-agricultural sources include salary self employment, casual labour and income from livestock.

Project Site

The study is carried out at the Madakkathara Panchayat of Trichur District which is the adopted Panchayat of the College of Co-operation and Banking. The

Panchayat comprises of three villages viz Madakkathara, Kurchikara and Vellanikkara and it comes under the Ollukkara Block

Study Period

The study pertains to the year 1986-87

Sampling Procedure

Stratified random sampling technique was adopted to select the sample respondents on a proportionate basis. Total number of farmers were listed out from the loan records of the financing institutions and 10 percent of the population was selected. Thus the total number of sample respondents interviewed were 100. Of this 52 respondents borrowed from co-operative credit societies, 33 from commercial banks and 15 were non-borrowers. The non-borrowers were selected purely on the basis of proximity. On the basis of land holdings, those having less than 1.5 acres of land is termed as marginal farmers, 1.5 to 2.5 acres as small, 2.5 to 5.0 as medium and above 5.0 as large.

Collection of Data

The study was carried out, using secondary as well as primary data. The secondary data relating to the credit supplied for paddy, banana and tapioca covering a period of 10 years was collected from the records such as general ledger, crop loan register etc of the Trichur District Co-operative Bank. The list of borrowers, amount borrowed

and purpose of borrowal was collected from the Bank of Baroda, and State Bank of Travancore, Trichur Details were collected from these two banks because it was these two commercial banks that were financing the farmers in the study area ie Madakathara Panchayat Apart from the particulars collected from the Trichur District Co-operative Bank and the commercial banks, information was also collected from the Vellanikkara Service Co-operative Bank and Ambalappad Service Co-operative Bank, covering aspects such as membership borrowing members, purpose-wise loan, rate of interest and overdues

The primary data were collected with the help of a structured schedule (Appendix - 3) The field survey was carried out during the month of March-April, 1988 The schedule covered details like socio-economic characteristics, cropping pattern, cost of cultivation, investment in irrigation and credit supplied for different purposes by different agencies

Techniques Employed

Percentage analysis is used to analyse the cost of cultivation and also the supply of credit from institutional agencies

Results & Discussion

Chapter IV

Results and Discussion

The growth and predominance of cash crops in Kerala has been responsible for the rapid commercialisation of the states economy. Owing to the commercialisation and consequent monetisation there arose fairly early in Kerala, indigenous credit institutions locally known as 'Kuries' and 'Chitties'. The growth of these institutions paved the way for the rapid development of commercial banking and together they had a very significant impact on the further growth of the economy of Kerala. The indigenous institutions were run on a small scale and worked mainly as agencies for making credit available for consumption purposes. They did not perform the function of providing credit to any significant extent for the expansion of economic activity. However when commercial banking developed in the region and began to cater to the credit requirements, for productive purposes, one of the main activities of commercial banks in Kerala continued to be running of 'Kuries' and 'Chitties' for purposes of mobilising savings and attracting deposits.

The Travancore-Cochin Banking Enquiry Commission (1956) has stated It is true that we have no figures for the Cochin-State, but considering that the number of banks in Cochin State in 1929 was 64, it may be assumed that there was also simultaneously, considerable banking

activity is Cochin State Most of the banks largely centred in Trichur, a commercial town with extensive rural areas lying all round which had their own banks

Since the passing of the co-operative societies regulations in 1913, the co-operative department was placed under a special officer in 1914 As the number of co-operatives increased and demands grow, the co-operators in the State met for the first time, in a conference and resolved to organise the Cochin Central Co-operative Bank It started functioning on 19-11-1918 The constitution of the bank underwent a substantial change in 1951, when the Travancore Cochin Co-operative Societies Act came into force According to the provisions of the Act, the Cochin Co-operative Bank became a district bank, thereby losing the status of an apex bank

The Trichur District Co-operative Bank is the apex banking institution in the co-operative sector in the district having 26 branches spread over the entire district The bank makes credit available through the constituent primary Agricultural Credit Societies The membership of the bank during 1985-85 stood at 409, deposits at Rs 3452.7 lakhs borrowing at Rs 349.46 lakhs and loans issued at Rs 1602.38 lakhs It has been observed that 'a major share of the bank credit went for non-food crops and that the share of pod crops was declining [Appendix 4]

The Madakkathara Panchayat is served by three primary

Service Co-operative Banks viz Vellanikkara Service Co-operative Bank, the Vilvattom Service Co-operative Bank and Ambalappad Service Co-operative Bank, which are affiliated to the Trichur District Co-operative Bank. They provide short-term as well as medium-term loans to their members and also collect deposits from members as well as non-members. Eventhough the Vilvattom Service Co-operative Bank is located near the Panchayat boundary most of their transaction are with the farmers of the neighbouring panchayat and their loaning activities in the study area is negligible. Hence the analysis in this section does not include Vilvattom Service Co-operative Bank.

The Vellanikkara Service Co-operative Bank (hereafter referred to as VSCB) was registered in the year 1946 and the Ambalappad Service Co-operative Bank (hereafter referred to as ASCB) was registered in the year 1949. The area of operation of VSCB comprises of two villages viz Vellanikkara and Madakkathara and that ASCB includes Pullamkandam, Kattilapoovan and Karuvankadu villages of the Madakkathara Panchayat. The VSCB had a membership of 4037 as on 30-6-86 whereas the membership of ASCB stood at 4796, as on the same date.

Area and Land Use Pattern

The Madakkathara Panchayat which lies in the north-eastern part of the district headquarters had a population of 17940 as per 1981 census. Of the total geographical

area in the panchayat, wet sown area was only 23.51 per cent. While 39.38 per cent of the area was under different crops like banana, topioca, rubber, coconut and arecanut. 30.92 per cent of the area was not available for agricultural purposes. Cultivable waste and current fallow together constituted 3.58 per cent of the area, forests occupied 2.16 per cent.

Religion & Caste

The predominant community in this area is the ezhava community, followed by the christians. The respondents of the ezhava community belonged to this area itself, whereas the christians were settlers who migrated around 40 years ago.

Table 4.1 Religion/Caste of sample respondents

Religion/Caste	Hindu	Muslim	Christian
Forward Caste	9	-	30
Backward Caste	56	1	-
Scheduled Caste	4	-	-
Total	69	1	30

Annual Income

Table 4.2 shows the annual income of the respondent

Table 4 2 Gross Annual Income of Sample Respondents in Madakathara Panchayath

Income	Agencies					No of borrowers from co-operative societies					No of borrowers from commercial banks					No of non borrowers																			
	0	1	5	1	5	2	5	2	5	0	Above 5	Total	0	1	5	1	5	2	5	2	5	0	Above 5	Total	0-1	5	1	5	2	5	0	Above 5	Total		
Below 1000	5	-	-	-	-	-	-	-	-	-	5	(9 61)	-	-	-	1	(3 03)	-	-	-	-	-	1	(3 03)	1	(6 67)	-	-	-	-	-	1	(6 67)		
1000-2000	2	2	1	-	-	-	-	-	-	-	5	(9 61)	1	(3 03)	-	-	-	-	-	-	-	-	1	(3 03)	2	(13 33)	-	-	-	-	-	2	(13 33)		
2000-3000	7	2	2	-	-	-	-	-	-	-	11	(21 16)	2	(6 06)	-	-	-	1	(3 03)	-	-	-	-	-	3	(9 09)	3	(20 00)	-	-	-	-	-	3	(20 00)
3000-4000	2	1	1	1	1	1	1	1	1	1	5	(9 61)	1	(3 03)	-	-	-	-	-	-	-	-	1	(3 03)	1	(6 67)	1	(6 67)	-	-	-	2	(13 13)		
4000-5000	2	1	1	1	1	1	1	1	1	1	5	(1 92)	1	(3 03)	1	(3 03)	-	-	-	-	-	-	-	2	(6 06)	-	-	-	-	-	-	-	-	-	
Above 5000	7	4	5	5	5	5	5	5	5	5	21	(40 37)	7	(21 21)	6	(18 18)	5	(15 15)	7	(21 21)	7	(21 21)	7	(21 21)	25	(75 76)	2	(13 33)	3	(20 00)	2	(13 33)	7	(46 67)	
Total	25	10	10	7	7	7	7	7	7	7	52	(100 00)	12	(36 37)	7	(21 21)	7	(21 21)	7	(21 21)	7	(21 21)	33	(100 00)	7	(46 67)	3	(20 00)	3	(20 00)	2	(13 33)	15	(100 00)	

Note: Figures in brackets refers to percentages

households Eventhough determination of ones gross income is a very delicate and tricky issue attempt has been made to estimate the farmers annual income from agricultural and non-agricultural sources across size-classes A perusal of the table reveals that majority of the borrowers had an annual income of more than Rs 25,000 irrespective of the category The borrowers from the co-operative societies and non-borrowers belonging mainly to the size clase of less than 1 5 acres earned an income ranging from Rs 10001 to Rs 15000 The percentage of borrowers earning less than Rs 5000 was very negligible and that was predominantly from the size class of below 1 5 acres The borrowers from the c-operative societies and commercial banks earning an income ranging from ^{to Rs 25000} Rs 20001_A was 9 61 per cent and 6 06 per cent respectively

Cropping pattern of the sample borrowers

On the basis of the main crops that are being cultivated the cropping pattern of the sample borrowers and non-borrowers are shown in Table 4 3, 4 4 and 4 5 It was found that paddy, banana, tapioca, rubber, cashew and other crops were cultivated in the study area Other crops include coconut, arecanut, pepper, turmeric, cotton and vegetables

The cropping pattern of the borrowers from co-operatives is brought out in Table 4 3 In the case of borrowers in the size-class below 1 5 acres, tapioca and

Table 4 3 Cropping pattern of borrowers from co-operatives

(Area in acres)

Size-class	Paddy	Banana	Tapoica	Cashew	Rubber	Other crops	Total
Below 1 5	2 03 (8 46)	2 90 (12 01)	9 44 (39 07)	5 90 (24 42)	30 (1 24)	3 59 (14 85)	24 16 (100 00)
1 5 - 2 5	5 69 (30 64)	1 43 (7 70)	2 96 (15 93)	3 00 (16 16)	3 00 (16 15)	2 49 (13 41)	18 57 (100 00)
2 5 - 5 0	0 86 (2 71)	1 17 (3 68)	4 57 (14 38)	12 88 (40 54)	5 00 (15 74)	7 29 (22 95)	31 77 (100 00)
5 0 & above	4 50 (29 62)	3 10 (20 41)	0 84 (5 53)	1 50 (9 87)	1 45 (9 55)	3 80 (25 02)	15 19 (100 00)
Total	13 08 (14 58)	8 60 (9 59)	17 81 (19 86)	23 28 (25 96)	9 75 (19 87)	17 17 (19 14)	89 69 (100 00)

Note Figures in brackets denote percentages

Table 4 4 Cropping pattern of borrowers from commercial banks

(Area in acres)

Size-class	Paddy	Banana	Tapoica	Cashew	Rubber	Other crops	Total
Below 1 5	1 62 (24 47)	4 75 (71 75)	0 10 (1 51)	-	-	0 15 (2 27)	6 62 (100 00)
1 5 - 2 5	4 50 (29 62)	3 10 (20 41)	0 84 (5 53)	1 50 (9 87)	1 45 (9 55)	3 80 (25 02)	15 19 (100 00)
2 5 - 5 0	7 75 (30 83)	2 20 (8 75)	4 60 (18 31)	4 00 (15 92)	2 00 (7 96)	4 58 (18 23)	25 13 (100 00)
5 0 & above	7 48 (12 70)	3 50 (5 94)	3 65 (6 20)	19 50 (33 11)	15 00 (25 47)	9 76 (16 58)	58 89 (100 00)
Total	21 35 (20 17)	13 55 (12 81)	9 19 (8 68)	23 00 (23 63)	18 45 (17 43)	18 29 (17 20)	105 83 (100 00)

Note Figures in brackets denote percentages

Table 4 5 Cropping pattern of non-borrowers

(Area in acres)

Size-class	Paddy	Banana	Tapoica	Cashew	Other crops	Total
Below 1 5	2 73 (51 41)	0 95 (17 89)	0 15 (2 83)	-	1 48 (27 87)	5 31 (100 00)
1 5 - 2 5	2 20 (33 90)	0 60 (9 24)	0 65 (10 02)	-	3 04 (46 84)	6 49 (100 00)
2 5 -> 0	5 00 (55 87)	0 65 (7 26)	0 25 (2 79)	-	3 05 (34 08)	8 95 (100 00)
5 0 & above	2 20 (21 13)	0 26 (2 50)	1 04 (9 99)	3 00 (28 82)	3 91 (37 56)	10 41 (100 00)
Total	12 13 (38 93)	2 46 (7 90)	2 09 (6 70)	3 00 (9 63)	11 48 (36 84)	31 16 (100 00)

Note Figures in brackets refer to percentages

cashew, occupy a higher percentage (39 and 24 per cent respectively) followed by other crops and banana In the case of borrowers in the size-class of 1.5 to 2.5 acres, 30 per cent of the area is under paddy while for tapioca, cashew, rubber and other crops, it ranges from 13.40 per cent to 16.15 per cent Cashew, mixed crops, tapioca and rubber are the major crops cultivated by the borrowers belonging to the size class 2.5 to 5.0 acres It is worth noticing that borrowers in the size-class of above 5.0 acres mainly grow paddy, banana and other crops Putting all the size-classes together we find cashew, tapioca and other crops occupying a major portion of the area followed by paddy, rubber and banana

Table 4.4 furnishes the cropping pattern of the borrowers from commercial banks Banana occupies 71.75 percentage, followed by paddy and other crops for the size class below 1.5 acres It is to be noted here that the borrowers of this size class do not cultivate rubber and cashew Paddy and other crops occupy a major percentage for the size class upto 2.5 acres followed by banana The area under tapioca cashew and rubber is below 10 percent each 33.03 per cent of the area is under paddy cultivation for the size class 2.5 to 5.0 acres The percentage of area under tapioca, cashew and other crops is 18.31, 15.92 and 18.23 respectively In the case of borrowers holding land above 5.0 acres, 33.13 per cent is under cashew followed by rubber and other crops When we analyse

the cropping pattern of the borrowers from commercial banks, clubbing all the size classes together, we find that cashew occupies a major percentage followed by paddy, rubber other crops and banana

Table 4 5 shows the cropping pattern of non-borrowers Paddy occupies 51 41 per cent followed by other crops 27 87 per cent, for the size class below 1 5 acres In the case of size class 1 5 to 2 5 acres mixed crops and paddy occupies 46 84 and 33 90 per cent respectively 55 85 per cent of the area is accounted by paddy, followed by 34 08 of other crops for the size class 2 5 to 5 0 acres In the case of farmers holding more than 5 0 acres of land, other crops accounts for 37 56 per cent followed by cashew 28 82 per cent

It is worth noting that non-borrowers do not cultivate rubber Similarly those belonging to various size classes below 5 0 do not have cashew plantations, while paddy and other crops are mainly grown by them

Distribution of land (owned and operated)

The land distribution (owned and operated) of sample ^{house} holds across size-classes of different categories are given in Table 4 6 The operated area of borrowers from co-operatives for the size-classes upto 2 5 acres is low while for the size-classes above 2 5 acres there is an increase A similar trend is observed in the case of

Table 4 6 Distribution of land (Owned and operated)

Size class	Area in Acres											
	Borrowers from co-operatives		Borrowers from commercial banks				non borrowers					
	No of house holds	Total area owned	No of house holds	Total area owned	No of house holds	Total area owned	No of house holds	Total area owned	No of house holds	Total area owned	No of house holds	Total area owned
Below 1 5	24 (57 14)	22 16 (28 96)	25 (48 08)	23 09 (18 99)	12 (38 72)	6 67 (7 31)	12 (36 37)	8 49 (8 22)	6 (46 15)	4 45 (17 92)	7 (46 67)	5 73 (18 29)
1 5 2 5	8 (19 05)	14 86 (17 45)	10 (19 23)	18 89 (15 53)	7 (22 58)	14 13 (15 48)	7 (21 21)	13 61 (13 17)	3 (23 08)	6 30 (25 36)	3 (20 00)	6 19 (19 76)
2 5 5 0	6 (14 29)	21 04 (24 95)	10 (19 23)	32 15 (26 43)	6 (19 35)	21 21 (23 24)	7 (21 21)	23 24 (22 49)	3 (23 08)	9 04 (36 39)	3 (20 00)	8 95 (28 57)
5 0 & above	4 (9 52)	27 26 (31 94)	7 (13 45)	47 50 (39 05)	6 (19 35)	49 25 (53 97)	7 (21 21)	57 99 (56 12)	1 (7 69)	5 05 (20 33)	2 (13 33)	10 46 (33 39)

Note Figures in brackets refer to percentage

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borrowers from commercial banks

— In the case of non-borrowers the operated area is high for the size-classes below 1.5 acres and above 5.0 acres. The main reason for a higher operated area for the size classes 2.5 to 5.0 acres and above 5.0 acres is that many of the respondents are settlers who do not possess title deeds.

Loaning activities of the Service Co-operative Banks

The percentage of borrowing members for agricultural purpose to total membership is brought out in Table 4.7. The data pertaining to Ambalapad Service Co-operative Bank was not available and hence it is not included. The percentage of borrowing members to total members show a declining trend. During the period we find a steady decline from 33.42 per cent in 1977-78 to 6.50 per cent in 1985-86. Though there is a sharp increase in the membership in 1984-85 and in 1985-86, the percentage of short-term agricultural borrowers has not increased. It may be stated that the bank has not taken any positive effort to increase the percentage of agricultural borrowers. The decline in the percentage of borrowing members to total members may be due to many reasons. While analysing the gross annual income it was found that, income derived from non-agricultural sources such as salary, self employment casual labour etc was much higher than income from agricultural sources. Another source of funds to the farmers were income from cash crops. Usage of income from

these sources for cultivation of seasonal crops, might be one of the factors accounting for the decline in the percentage of borrowing members to total member. This results in poor off-take of crop loans. Another reason could be due to the risk aversion policy of cultivators, following a subsistence agriculture.

Table 4.7 Percentage of borrowing to total members of VSCB

Year	Total number of members	Total number of Agricultural borrowers	Percentage of borrowing members to total members
1977-78	1855	620	33.42
1978-79	2122	504	23.75
1979-80	2054	455	22.15
1980-81	2140	328	15.32
1981-82	3221	431	13.41
1982-83	2920	453	15.51
1983-84	3252	350	10.76
1984-85	4894	722	6.78
1985-86	4117	633	6.50

Source: Records of Vella nikkara Service Co-operative Bank

Table 4 8 Average amount of short-term agricultural credit
in VSCB

Year.	Total number of borrowers of short- term loans	Total short term agricul- tural credit disbursed in Rs	Credit supplied per borrow- ing member
1977-78	620	137511	221 79
1978-79	504	N A	NA
1979-80	455		'
1980-81	325	35149	107 16
1981-82	431	182592	423 65
1982-83	453	147055	325 00
1983-84	350	372307	1063 73
1984-85	722	398928	552 53
1985-86	633	323772	511 00

Source Records of the Vellanikkara Service Co-operative Bank

The agricultural credit supplied by VSCB per borrowing member is given in Table 4 8 (since data pertaining to ASCB was not available it could not be included) The Table reveals wide fluctuations in the credit supplied

Table 4 9 analysis the purposewise loans given by VSCB and ASCB for the period 1977-78 to 1985-86 Over these years the percentage of short-term agricultural

Table 4 9 Purpose-wise loans of VSCB & ASCB (1977 78 to 1985-86)

(in Rupees)

	Short-term agricul loans	Medium-term agricul loans	MT BFDA/ IRDF	Gold loans	Depo- sit loans	Produce & proces sing loans	Ordina- ry loans	Housing loans	CMT (conver sion)	Total
1977-78	1493338 (58 83)	6112 (0 2+)	10000 (0 39)	866230 (34 13)	102652 (4 04)	625 (0 03)	59650 (2 34)	-	-	2538607 (100)
1978-79	37 ⁰ 528 (9 83)	712773 (18 90)	1106923 (29 36)	1393960 (36 98)	27812 (0 73)	24195 (0 64)	134150 (3 56)	-	-	3770341 (100)
1979 80	350596 (29 48)	850 (0 07)	96478 (8 12)	650749 (54 73)		52002 (4 38)	21350 (1 79)	16960 (1 43)		1188985 (100)
1980-81	1744919 (36 95)	49206 (1 04)		2559540 (54 21)	186044 (3 94)	58525 (1 23)	110885 (2 36)	12640 (0 27)	-	4721759 (100)
1981-82	1841112 (43 68)	34300 (0 8+)	-	2055530 (48 76)	151318 (3 59)	-	132950 (3 16)	-	-	4215210 (100)
1982-83	1554900 (37 26)	4000 (0 10)	17459 (0 42)	2304795 (55 24)	141072 (3 38)	10000 (0 24)	119475 (2 86)	20800 (0 50)	-	4172501 (100)
1983 84	2200142 (41 08)	-	95094 (1 77)	2522206 (47 09)	261530 (4 88)	14000 (0 26)	1000 (0 02)	18320 (0 34)	244085 (4 56)	5356377 (100)
1984 85	2711843 (41 97)	-	-	3398760 (52 60)	278920 (4 32)	-	14000 (0 22)	57280 (0 89)	-	6460803 (100)
1985 86	2879772 (36 07)	-	-	4379385 (54 86)	535082 (6 70)	-	107975 (1 35)	55933 (0 70)	25930 (0 32)	7984077 (100)

Note Figures in bracket refer to percentages
Source Records of VSCB & ASCB

loans shows a declining trend, eventhough we find exceptions in between from 1977-78 to 1980-81, there is a steady decline from 58 per cent to 36 95 per cent Even- though it increased to 45 per cent in 1981-82 and 41 per cent in 1983-84 and 1984-85, the proportion of agricultural advances came down to 32 per cent in 1985-86

Gold loans constitute the major head under which loans are given by the service co-operative banks The share of gold loans maintained steady percentage throughout the period ranging from 33 per cent to 55 per cent It was observed from the discussions with the bank officials that they are keen to sanction gold loans because it fetches them a higher rate of interest and recovering the loans is not at all a problem

Table 4 10 Credit supplied per acre in nominal terms in Madakathara Panchayat

(1977-78 - 1985-86)

Year	Total agricultural credit supplied (Rs in lakhs)	Per hectare credit (in Rs)
1977-78	14 93	1656 60
1978-79	3 70	411 03
1979-80	3 51	388 93
1980-81	17 45	1931 54
1981-82	18 41	2042 69
1982-83	15 55	1724 06
1983-84	22 00	2440 36
1984-85	27 11	3008 46
1985-86	28 83	3198 30

Note 1 The gross cropped area of the panchayat is 2226 55 acres, remained the same for the entire period

2 The per acre credit supplied was calculated by using the actual figures, and not in lakhs

Source Records of VSCB & ASCB

Table 4 10 provides credit supplied per hectare to farmers on the basis of the gross cropped area and the total agricultural credit, disbursed by the two service co-operative banks functioning in the Panchayat. It was Rs 1697 60 in 1977-78. During the next two years ie 1978-79 and 1979-80, the credit per hectare decreased to Rs 411 03 and Rs 388 93 respectively. Thereafter the credit per hectare supplied the panchayat increased and it ranged from Rs 1724 to Rs 3198/-

The following analysis is confined to short-term credit mainly, since the objective of the study is to examine the demand and supply of crop loans. As pointed out in the materials and methods, 85 borrowers of crop loans from co-operatives and commercial banks and 15 non-borrowers were selected randomly and interviewed with the help of a structured schedule, in Madakkathara Panchayat.

Cost of Cultivation

The cost of cultivation of paddy, banana and tapioca is assessed by splitting up the total cost into different cost components such as cost of finance, labour cost and material costs. Transportation costs involved in reaching

the fertilizer and manures to the farms have been included while calculating the cost of the said item. Irrigation expenditure incurred in paddy cultivation was found to be almost nil, since paddy cultivation is predominantly rainfed. The classification of sample respondents into three groups such as those borrowing from co-operatives, commercial banks and non-borrowers is done because of variations in these three groups and the difference in the scale of finance offered by commercial banks and co-operatives.

Labour cost in the case of paddy cultivation is divided into hired labour and family labour employed for operations such as land preparation, sowing, transplanting, irrigation and weed control. The wages for harvesting is paid in kind, and the value of the kind component is imputed at the prevailing market rate. Labour cost for banana cultivation is incurred on operation such as land preparation, planting, ridge making, propping and irrigation. Land preparation, planting, weed control and harvest are the major operations on which labour is employed in banana cultivation.

Material cost comprises of expenses incurred on fuel, tractor, bullock, fertilizer and manure and seeds, in the case of paddy cultivation. Material cost is incurred on rent, fuel, repairs, fertilizer, manures, props and suckers in the case of banana cultivation. Planting

material, fertilizers and manures, are the cost items included in the material cost for tapioca cultivation

Cost of cultivation per hectare for paddy

The cost of cultivation of paddy is split into cost of finance, labour cost and material cost Table 4 11 reveals that the maximum cost of finance per hectare is incurred by the borrowers from co-operatives coming under the size-class 2 5 to 5 0 acres (12 63 per cent) and lowest by those in the size class of above 5 0 acres (1.00 per cent) Total expenditure per hectare is maximum for the size - class 2 5 - 5 0 in the case of borrowers from co-operatives and commercial banks (Rs 12533/- and Rs 9604/- per hectare, respectively) For non-borrowers too, the maximum expenditure is incurred by the same size class It is Rs 7307/- per hectare

Table 4 12 shows the labour cost per hectare for paddy cultivation for borrowers from co-operatives The maximum labour cost per hectare is incurred by the size-class 2 5 - 5 0 acres, which is Rs 5733/- per hectare Wages on account of weed control and wages for harvest in kind, accounts for a major share in the total labour cost Except for the farmers in the size - class 1 5 - 2 5, we find that only hired labour is employed for transplanting operation Irrigation expenditure is almost nil for all the size-classes because paddy cultivation is predominantly rainfed

Table 4 11 Cost of finance labour cost and material cost per hectare in paddy cultivation (in Rupees)

Size class	Cost of finance		Total labour Cost			Total material Cost			Total expenditure		
	Borrowers of co op	Comm banks	Borrowers of co op	Comm banks	N B	Co Op	Com	N B	Co op	Com	NB
Below 1 5	570 (8 88)		3355 (52 30)	3005 (39 07)	3377 (69 24)	2490 (38 82)	4686 (60 93)	1500 (30 76)	6415 (100 00)	7691 (100 00)	4877 (100 00)
1 5 - 2 5	281 (4 90)		3246 (56 61)	5366 (60 68)	3881 (56 55)	2207 (38 49)	3477 (39 32)	2982 (43 45)	5734 (100 00)	8843 (100 00)	6863 (100 00)
2 5 - 5 0	1583 (12 63)		5733 (45 74)	6594 (68 66)	4083 (55 88)	5217 (41 63)	3010 (31 34)	3224 (44 12)	12533 (100 00)	9604 (100 00)	7307 (100 00)
5 0 & above	52 (1 00)		2911 (56 02)	5509 (60 51)	2903 (51 39)	2233 (42 98)	3586 (39 49)	2746 (48 61)	5196 (100 00)	9095 (100 00)	5649 (100 00)

Table 4 12 Labour cost per hectare of paddy cultivation for borrowers from co-operatives

(in Rupees)

Size class	Wage for land preparation		Wage for sowing		Wage for trans-planting		Wage for weed control		Wage for irrigation		Wage for harvest	Total labour cost
	Hired labour	Family labour	Hired labour	Family labour	Hired labour	Family labour	Hired labour	Family labour	Hired labour	Family labour	Hired labour	
Below 1 5	414 (12 34)	43 (1 28)	37 (1 10)	128 (3 81)	652 (19 43)	-	536 (15 99)	-	91 (2 71)	1454 (43 33)		3355 (100 00)
1 5 - 2 5	238 (7 33)	39 (1 20)	46 (1 41)	55 (1 69)	705 (21 72)	50 (1 54)	1120 (34 50)	298 (9 18)	-	695 (21 43)		3246 (100 00)
2 5 - 5 0	174 (3 03)	174 (3 03)	87 (1 51)	87 (1 51)	1217 (21 23)	-	2348 (40 95)			1646 (28 74)		5733 (100 00)
5 0 & above	354 (12 16)	146 (5 01)	36 (1 23)	80 (2 75)	336 (11 54)	-	758 (26 04)	45 (1 56)		1156 (39 71)		2911 (100 00)

Labour cost per hectare for paddy cultivation for borrowers from commercial banks is brought out in Table 4 13 Maximum expenditure on labour per hectare is incurred by the size-class 2 5 - 5 0, Rs 6594/- The percentage of family labour is found to be less than 2 percent for all the size-classes except for the size-class below 1 5 acres

In the case of non-borrowers too the maximum labour cost per hectare is incurred by the size - class 2 5 to 5 0 acres, Rs 4083 per hectare Family labour is employed only for land preparation and sowing, to an extent of less than 6 percent (^{Table} 4 14)

Table 4 15 shows that material cost per hectare is maximum for the size - class 2 5 to 5 00, for paddy cultivation in the case of borrowers from co-operative societies (Rs 5217/-) Irrigation equipment is rented only by the size-class below 1 5 acres A balanced application of fertilizers and manures is noticed in the case of all the size-classes Seeds for cultivation is provided fully by the farm for all the size-classes

Table 4 16 reveals that material cost ranges between Rs 4686/- per hectare to Rs 3010/- for borrowers from commercial banks Irrigation expenditure is less than 13 per cent for the first three size - classes.40 to 60 per cent of the total material cost was accounted by manure cost

Table 4 13 Labour cost per hectare of paddy cultivation for borrowers from commercial banks

(in Rupees)

Size class	Wage for land preparation		Wage for sowing		Wage for trans-planting		Wage for weed control		Wage for irrigation		Wage for harvest in kind	Total labour cost
	Hired labour	Family labour	Hired labour	Family labour	Hired labour	Family labour	Hired labour	Family labour	Hired labour	Family labour	Family labour	
Below 1 5	155 (5 16)	544 (18 10)	39 (1 30)	78 (2 59)	289 (9 63)	356 (11 85)	155 (5 16)	311 (10 34)	-	-	1078 (35 87)	3005 (100 00)
1 5 2 5	561 (10 45)	69 (1 28)	36 (69)	58 (1 08)	1220 (22 73)		2110 (39 32)	-	-	-	312 (24 45)	5366 (100 00)
2 5 5 0	1603 (24 31)	49 (74)	95 (1 44)	38 (57)	2753 (41 75)		783 (11 89)	-	-	-	1273 (19 30)	6594 (100 00)
5 0 & above	974 (17 68)	84 (1 52)	54 (98)	91 (1 65)	1203 (21 83)	24	1432 (25 99)		85 (2 00)		1562 (28 35)	5509 (100 00)

Note Figures in brackets refer to percentages

Table 4 14 Labour cost per hectare of paddy cultivation for non-borrowers

(in rupees)

Size class	Wage for land preparation		Wage for sowing		Wage for trans-planting		Wage for weed control		Wage for irrigation		Wage for harvest	Total labour cost
	Hired labour	Family labour	Hired labour	Family labour	Hired labour	Family labour	Hired labour	Family labour	Hired labour	Family labour	Family labour	
Below 1 5	293 (8 67)	225 (6 66)	24 (71)	133 (3 93)	687 (20 34)	48 (1 42)	934 (27 65)	48 (1 42)	-	-	985 (29 20)	3377 (100 00)
1 5 - 2 5	285 (7 34)	217 (5 49)	27 (69)	77 (1 98)	726 (18 70)		801 (20 63)	-	-	-	1748 (45 07)	3881 (100 00)
2 5 - 5 0	284 (6 95)	160 (3 91)	20 (0 48)	104 (2 55)	1246 (30 51)		963 (23 58)		52 (1 27)	-	1254 (30 75)	4083 (100 00)
5 0 & above	354 (12 19)		39 (1 34)	78 (2 68)	487 (16 77)		459 (15 81)		196 (7 75)	197 (6 78)	1093 (37 68)	2903 (100 00)

Note Figures in brackets refer to percentages

(in Rupees)

Table 4 15 Material cost per hectare of paddy cultivation for borrowers from co-operatives

	Cost of Rent	Cost of Fuel	Cost of Tractor	Cost of bullock	Ferti- lizer cost	Purcha sed	Manure Farm prod	Seeds Purcha sed	Farm Prod	Total Material Cost
Below 1 5	729 (29 27)	-			265 (10 64)	436 (17 51)	864 (34 70)	-	196 (7 88)	2490 (100 00)
1 5 2 5	-	-	483 (21 88)	-	341 (15 46)	408 (18 48)	571 (25 88)	-	404 (18 30)	2207 (100 00)
2 5 -5 0				1594 (30 55)	1942 (37 23)	-	1159 (22 21)		522 (10 00)	5217 (100 00)
5 0 & above			300 (13 43)	45 (2 01)	7 3 34 61)	267 (11 68)	444 (19 88)		404 (18 09)	2233 (100 00)

Note Figures in brackets refer to percentages

Table 4 16 Material cost per hectare of paddy cultivation for borrowers from Commercial banks

	Cost of Rent	Cost of Fuel	Cost of Tractor	Cost of bullock	Ferti- lizer cost	Purcha sed	Manure Farm prod	Seeds Purcha sed	Farm Prod	Total Material Cost
Below 1 5	-	-	419 (8 94)	-	817 (17 43)	1250 (26 88)	1533 (32 72)	-	667 (14 23)	4686 (100 00)
1 5-2 5	-	-	467 (13 4)	-	553 (15 90)	1607 (46 21)	385 (11 09)	-	465 (13 37)	3477 (100 00)
2 5-5 0	4 (1)	39 (1 29)	158 (5 28)	168 (5 58)	608 (20 20)	1137 (37 77)	315 (10 46)	61 (2 02)	520 (17 27)	3010 (100 00)
5 0 & above				885 (24 69)	738 (20 58)	589 (16 42)	889 (24 79)		485 (13 52)	3586 (100 00)

Note Figures in brickets refer to percentage

Table 4 17 Material cost per hectare of paddy cultivation for non-borrowers

(in Rupees)

	Cost of Rent	Cost of Fuel	Cost of Tractor	Cost of bullock	Ferti lizer cost	Purcha sed	Manure Farm prod	Seeds Purcha sed	Farm Prod	Total Material Cost
Below 1 5	-	-	483 (32 20)	80 (5 33)	371 (24 71)	-	157 (10 00)	-	409 (27 76)	1500 (100 00)
1 5-2 5	-	-	713	-	946	727 (24 38)	252 (8 46)	-	344 (11 53)	2982 (100 00)
2 5-5 0	25 (77)	-	407 (12 62)	296 (9 18)	600 (18 61)	148 (4 59)	1333 (41 36)	-	415 (12 87)	3224 (100 00)
5 0 & above	7 (28)	-	292 (10 63)	-	447 (16 27)	1124 (40 93)	543 (19 77)	-	333 (12 12)	2746 (100 00)

Note Figures in brackets refer to percentage

Material cost is maximum for the size class 2.5 to 5.0 acres, in the case of non-borrowers, Rs 3224/- per hectare. It is minimum for the size-class below 1.5 acres, Rs 1500/- per hectare (Table 4.17).

Cost of cultivation per hectare for banana

Table 4.18 brings out the cost of cultivation of banana for the sample respondents. It is noticed that borrowers in the size class below 1.5 acres incur a pattern of expenditure to the extent of 4 to 13 per cent. Borrowers from commercial bank and non-borrowers incur 13 per cent of their total expenses on the said items. The cost incurred on finance or the rate of interest ranges between 8 to 19 per cent. Material cost accounts for more than 60 per cent of the total cost. Total cost of cultivation per hectare is maximum for the size-class above 5 acres in the case of borrowers from co-operatives (Rs 87689/- per hectare).

Table 4.19 shows that labour cost of borrowers from co-operative societies ranges from Rs 4144/- per hectare to Rs 15196/- per hectare and is maximum for the size class above 5 acres. All size classes employ family labour for irrigation. Hired labour is used mostly for land preparation.

In the case of commercial bank borrowers labour cost varies from Rs 6393/- to Rs 16030/- per hectare and the maximum is for the size class above 5 acres. Cost of land preparation accounts for a major share in the total labour

Table 4 18 Cost of finance labour cost and material cost per hectare of banana cultivation

(in Rupees)

Size class	Pattam Expenditure (Rent)			Cost of finance		Total Labour cost			Total Material Cost			Total expenditure		
	Co-op	Com	NB	Co op	Com	Co-op	Com	NB	Co op	Com	NB	Co-op	Com	NB
Below 1 5	2250 (4 47)	6182 (13 00)	1453 (12 93)	2565 (5 09)	3978 (8 36)	8410 (16 71)	6393 (13 44)	8197 (23 80)	37116 (73 73)	31011 (65 20)	21794 (63 27)	50341 (100 00)	47564 (100 00)	34444 (100 00)
1 5 2 5				1560 (6 27)	6270 (11 34)	4144 (16 66)	7383 (13 35)	19430 (25 57)	19163 (77 06)	41661 (75 32)	56560 (74 43)	24867 (100 00)	55314 (100 00)	75990 (100 00)
2 5 5 0				4182 (11 49)	5749 (16 81)	6784 (18 64)	6869 (20 08)	14451 (16 69)	25425 (69 87)	21590 (63 11)	72128 83 31)	36391 (100 00)	34208 (100 00)	86 579 (100 00)
3 0- & above				523 (60)	5879 (11 04)	15196 (17 33)	16030 (30 10)	11812 (34 64)	71970 (82 07)	31330 (58 86)	22281 (65 36)	87689 (100 00)	53239 (100 00)	34093 (100 00)

Table 4 19 Labour cost per hectare of banana cultivation for borrowers from co-operatives (in Rupees)

Size class	Cost of land preparation		Cost of planting		Cost in ridge making		Cost of fix support		Cost of irrigation		Total labour cost
	Hired labour	Family labour	Hired labour	Family labour	Hired labour	Family labour	Hired labour	Family labour	Hired labour	Family labour	
Below 1 5	2162 (25 71)	262 (3 11)	625 (7 43)	175 (2 08)	1375 (16 35)	262 (3 12)	362 (4 30)	262 (3 12)	-	2925 (34 78)	8410 (100 00)
1 5 - 2 5	1518 (36 63)	250 (6 03)	269 (6 49)	803 (19 37)	-	536 (12 93)	125 (3 01)	286 (6 90)	-	357 (8 04)	4144 (100 00)
2 5 5 0	3467 (51 12)	-	318 (4 68)	159 (2 34)	477 (7 03)	159 (2 34)	318 (4 69)	159 (2 34)	-	1727 (25 46)	6784 (100 00)
5 0 & above	1489 (9 80)	5966 (39 26)	2045 (13 46)	-	1943 (12 78)	-	341 (2 24)	239 (1 58)	-	3173 (20 88)	15196 (100 00)

Note Figures in brackets refer to percentages

Table 4 20 Labour cost per hectare of banana cultivation for borrowers from commercial bank (in Rupees)

Size class	Cost of land preparation		Cost of planting		Cost in ridge making		Cost of fix props		Cost of irrigation		Total labour cost
	Hired labour	Family labour	Hired labour	Family labour	Hired labour	Family labour	Hired labour	Family labour	Hired labour	Family labour	
Below 1 5	2890 (45 20)	20 (0 31)	230 (3 59)	1286 (4 47)	510 (7 98)	285 (4 45)	93 (1 45)	283 (4 42)	1439 (22 56)	356 (5 57)	6393 (100 00)
1 5 2 5	3773 (91 10)		162 (2 19)	452 (6 12)	895 (12 12)	614 (870)	129 (1 74)	395 (5 00)		962 (13 03)	7383 (100 00)
2 5 5 0	5253 (76 47)	39 (0 57)	258 (3 75)	152 (2 24)	225 (3 27))	78 (1 13)	224 (3 26)	78 (1 13)	-	562 (8 18)	6869 (100 00)
5 0 & above	3500 (21 83)	-	1640 (10 23)	223 (1 39)	2157 (13 46)	170 (1 06)	120 (0 76)	380 (2 37)	7533 (46 99)	30773 (1 91)	16030 (100 00)

Note Figures in brackets refer to percentages

Table 4 21 Labour cost per hectare of banana cultivation for non-borrowers

(in Rupees)

Size class	Cost of land preparation		Cost of planting		Cost in ridge making		Cost of fix props		Cost of irrigation		Total labour cost
	Hired labour	Family labour	Hired labour	Family labour	Hired labour	Family labour	Hired labour	Family labour	Hired labour	Family labour	
Below 1 5	1797 (21 92)	-	116 (1 41)	546 (6 66)	562 (6 87)	438 (5 34)		438 (5 34)		4300 (52 46)	8197 (100 00)
1 5 - 2 5	6700 (34 49)	700 (3 60)	800 (4 12)	650 (3 34)	1600 (8 23)	650 (3 34)	1200 (6 19)	650 (3 34)	-	6480 (33 35)	19430 (100 00)
2 5 5 0	5900 (40 82)	-	750 (5 19)	250 (1 73)		2000 (13 84)		750 (5 19)	-	4800 (33 23)	14451 (100 00)
5 0 & above	3125 (26 45)	-	4687 (39 68)		750 (6 35)		250 (2 13)	-	3000 (25 39)		11812 (100 00)

Note Figures in brackets refer to percentages

Table 4 22 Material cost per hectare for banana cultivation for borrowers from co-operatives

Size class	Cost of Suckers		Rent	Fuel	Repair & Maint	Fert cost	Cost of props	Manure		Total Material cost
	Purchas- ed	Farm produced						Purchased	Farm produced	
Below 1 5	2500 (6 73)	1162 (3 13)	5850 (15 76)	1085 (2 92)	-	9610 (29 89)	8287 (22 32)	7752 (20 88)	870 (2 37)	37116 (100 00)
1 5 2 5	-	2643 (13 79)	536 (2 80)	571 (2 98)	1250 (6 54)	1971 (10 28)	7525 (39 26)	4310 (22 49)	357 (1 86)	19163 (100 00)
2 5 5 0	-	4182 (16 46)	680 (2 67)	77 (0 30)	3636 (14 30)	3350 (13 18)	3727 (14 66)	5773 (22 70)	4000 (15 73)	25425 (100 00)
5 0 & above	964 (1 34)	6818 (9 47)	636 (0 88)	2859 (3 99)	568 (0 79)	30102 (41 82)	13068 (18 16)	1023 (1 42)	15932 (22 13)	71970 (100 00)

Note Figures in brackets refer to percentages

Table 4 23 Material cost per hectare for banana cultivation for borrowers from commercial banks

Size class	Cost of Suckers		Rent	Fuel	Repair & Maint	Fert cost	Cost of props	Manure		Total Material cost
	Purchased	Farm produced						Purchased	Farm produced	
Below 1 5	808 (2 60)	3277 (10 40)	3886 (12 40)	1446 (4 66)	253 (0 85)	4128 (13 31)	8541 (27 54)	6217 (20 04)	2505 (8 07)	31011 (100 00)
1 5 - 2 5	-	5429 (13 03)	1093 (2 63)	2389 (5 73)	1619 (3 89)	6750 (16 20)	12786 (30 69)	9286 (22 29)	2309 (5 54)	41661 (100 00)
2 5 - 5 0	337 (1 56)	3539 (16 39)	730 (3 39)	345 (1 60)	562 (2 60)	3627 (16 80)	5579 (25 84)	6309 (29 22)	562 (2 60)	21590 (100 00)
5 0 & above	-	4533 (14 47)	1531 (4 88)	1793 (5 72)	567 (1 81)	4264 (13 61)	9900 (31 60)	5475 (17 48)	3267 (10 43)	31330 (100 00)

Note Figures in brackets refer to percentages

Table 4 24 Material cost per hectare for banana cultivation for non-borrowers

Size class	Cost of Suckers		Rent	Fuel	Repair & Maint	Fert cost	Cost of props	Manure		Total Material cost
	Purcha-sed	Farm produced						Purchased	Farm produced	
Below 1 5	703 (3 22)	2188 (10 04)	2837 (13 02)	900 (4 13)	-	4753 (21 82)	5653 (25 81)	9926 (18 02)	859 (3 94)	21794 (100 00)
1 5 - 2 5	-	9200 (16 26)	1920 (3 39)	-	8500 (15 02)	8920 (15 06)	16750 (29 61)	9150 (17 17)	2520 (4 49)	56560 (100 00)
2 5 - 5 0	-	8929 (12 38)	964 (1 34)	1897 (2 57)	-	9571 (13 27)	18129 (25 13)	15000 (20 79)	17678 (24 52)	72128 (100 00)
5 0 & above	3750 (16 83)	-	136 (0 70)	-	626 (2 81)	2125 (9 54)	6250 (28 06)	4687 (21 03)	4687 (21 03)	22281 (100 00)

Note Figures in brackets refer to percentages

cost except for the size-class of above 5 0 acres (Table 4 20).

Table 4 21 shows that labour cost was comparatively higher for the size class 1 5 to 2 5 acres (Rs 19430/- per hectare) for non-borrowers. Hired labour is employed to an extent of more than 20 per cent for land preparation 25 to 32 per cent of the total labour cost is expended on irrigation.

Table 4 22 brings out the material cost per hectare for banana cultivation for borrowers from co-operatives. It is maximum for the size class 5 0 acres and above Rs 71970 per hectare. 30 to 40% of the material cost is accounted by fertilizers and manures.

Material cost per hectare was higher for commercial bank borrowers in the size class 1 5 to 2 5 acres, while for the remaining size-classes it ranged from Rs 21590/- to Rs 31330/- per hectare (Table 4 23).

Table 4 24 reveals that as far as non-borrowers are concerned the cost was highest for the size class 2 5 to 5 0 acres (Rs 72128/- per hectare) and lowest for the size class above 5 0 acres (Rs 22281/- per hectare).

Cost of Cultivation per hectare for tapioca

Table 4 25 brings out that only co-operatives finance tapioca cultivation. The maximum cost of finance per hectare, 14 12 per cent, is incurred by the size class 5 0 and above. The maximum cost of cultivation per hectare is

Table 4 25 Cost of Finance Labour cost and material cost per hectare of tapaoica cultivation

Size Class	Total labour cost			Total material cost			Total expenditure			
	Cost of fin for borrowers from co-op	For Borr- owers from co op	For borr owners from com	For non borrowers	For Borr owers from co op	For Borr owers from com	For non borrowers	For borr owers from co op	For Borr owers from com	For non borrowers
Below 1 5	1000 (11 97)	3935 (47 09)	14000 (99 07)	4666 (96 88)	3418 (40 90)	131 (0 93)	150 (3 12)	8356 (100 00)	14131 (100 00)	4816 (100 00)
1 5 2 5	420 (5 27)	3103 (38 97)	12514 (80 89)	5834 (97 77)	4431 (55 64)	2956 (19 11)	133 (2 23)	7963 (100 00)	15470 (100 00)	5967 (100 00)
2 5- 5 0	309 (4 57)	2164 (31 98)	5774 (63 45)	4083 (94 23)	4293 (63 45)	3326 (36 55)	250 (5 77)	6766 (100 00)	9100 (100 00)	4333 (100 00)
5 0- & above	472 (14 13)	2156 (64 51)	4179 (73 82)	13334 (78 66)	714 (21 36)	1482 (26 18)	3616 (21 34)	3342 (100 00)	5661 (100 00)	16950 (100 00)

(Figures in brackets refers to percentages)

Table 4 26 Labour cost per hectare of tapioca cultivation for borrowers from cooperatives

Size Class	Cost of land preparation		Planting cost		Cost of weed		Harvesting cost		Total labour cost
	Hired labour	Family labour	Hired labour	Family labour	Hired labour	Family labour	Hired labour	Family labour	
Below 1 5	994 (25 26)	397 (10 09)	186 (4 22)	452 (11 48)	930 (23 63)	462 (11 74)	240 (6 10)	294 (7 48)	3935 (100 00)
1 5- 2 5	1313 (42 31)	85 (2 74)	598 (17 98)	241 (7 77)	460 (14 82)	85 (2 71)	223 (7 18)	138 (4 46)	3103 (100 00)
2 5- 5 0	551 (25 46)	295 (13 63)	96 (4 44)	325 (15 01)	283 (13 06)	303 (14 00)	126 (5 82)	185 (8 58)	2164 (100 00)
5 0- & above	280 (12 99)	224 (10 39)	56 (2 60)	224 (10 39)	476 (22 08)	420 (19 48)	252 (11 69)	224 (10 38)	2156 (100 00)

(Figures in brackets refers to percentages)

Table 4 27 Labour cost per hectare of tapioca cultivation for borrowers from commercial banks

Size Class	Cost of land preparation		Planting cost		Cost of weed control		Harvesting cost		Irrigation cost		Total labour cost
	Hired labour	Family labour	Hired labour	Family labour	Hired labour	Family labour	Hired labour	Family labour	Hired labour	family labour	
Below 1 5	7000 (50 00)	875 (6 25)		1750 (12 50)		2625 (18 75)		1750 (12 50)	-	-	14000 (100 0)
1 5 2 5	1588 (12 69)	3456 (27 61)	1176 (9 40)	1588 (12 69)		3750 (29 96)		603 (4 82)	-	353 (2 82)	12514 (100 0)
2 5- 5 0	1618 (28 02)	1263 (21 87)	304 (5 26)	433 (7 50)	845 (14 68)	974 (16 87)	263 (4 55)			72 (1 25)	5774 (100 0)
5 0 & above	1100 (26 32)	326 (7 80)	326 (7 80)	117 (2 79)	1352 (32 35)	83 (1 95)	356 (8 83)	396 (8 53)	87 (2 08)	63 (1 52)	4179 (100 0)

(Figures in brackets refers to percentages)

Table 4 28 Labour cost per hectare of tapioca cultivation for non-borrowers

Size Class	Cost of land preparation		Planting cost		Cost of weed control		Harvesting cost		Irrigation cost		Total labour cost
	Hired labour	Family labour	Hired labour	Family labour	Hired labour	Family labour	Hired labour	Family labour	Hired labour	family labour	
Below 1 5		1167 (25 02)		583 (12 49)	-	2333 (50 00)		583 (12 49)	-	-	4666 (100 0)
1 5- 2 5	-	2500 (42 86)		389 (6 67)		2167 (37 14)		778 (13 33)			5834 (100 0)
2 5 5 0	2333 (57 16)		583 (14 28)	583 (14 28)		583 (14 28)		-		-	4083 (100 0)
5 0- & above	4000 (30 00)		1334 (10 00)		2666 (20 00)	-	1334 (10 00)		4000 (30 00)		13334 (100 0)

(Figures in brackets refers to percentages)

Table 4.29 Material Cost per hectare of tapioca cultivation for
 borrower; from co-operatives

Size class	Cost of Planting material		Fertiliser cost	Manure		Total material cost
	Purchased	Farm Produced		Purchased	Farm Produced	
Below 1 5	362 (10 59)	865 (25 31)	183 (5 35)	2008 (58 75)	3418 (100 00)	
1.5-2 5	316 (7 13)	1012 (22 84)	670 (15 12)	2433 (54.91)	4431 (100 00)	
2.5-5 0	234 (5 46)	925 (21 54)	945 (22 01)	2189 (50 99)	4293 (100 00)	
5 00 & above	152 (21 29)	562 (78 71)	-	-	714 (100 00)	

Table 4.30 Material Cost per hectare of tapioca cultivation for borrowers from commercial banks.

Size class	Cost of Planting material		Fertilizer cost	Manure		Total material cost
	Purchased	Farm Produced		Purchased	Farm Produced	
Below 1.5		131 (100 00)	-	-	-	131 (100 00)
1.5 - 2.5		206 (6 98)	2456 (83 08)	294 (9 94)	-	2956 (100 00)
2.5 - 5.0		341 (10 25)	1501 (45 13)	701 (21 07)	783 (23 54)	3326 (100 00)
5.0 & above		130 (8 78)	1352 (91 22)	-	-	1482 (100 00)

Note Figures in brackets refers to percentages

Table 4.31 Material Cost per hectare of tapioca cultivation for non-borrowers

Size class	Cost of Planting material		Fertilizer cost	Total material cost
	Purchased	Farm Produced		
Below 1.5		150 (100 00)	-	150 (100 00)
1.5 - 2.5		133 (100 00)	-	133 (100 00)
2.5 - 5.0		250 (100 00)	-	250 (100 00)
5.0 & above		250 (6 91)	3366 (93 09)	3616 (100 00)

Note Figures in brackets refer to percentage

incurred by non-borrowers in the size class 5 0 and above, Rs 16950/-

Table 4 26 reveals that labour cost per hectare for tapoica cultivation is maximum for the size-class below 1 5 acres, Rs 3,935/- per hectare Except for weed control, the share of family labour remained less than 10% of the total cost Irrigation expenses is found to be nil, for all the size-classes This is because of the lack of irrigation facility.

Labour cost per hectare in the case of borrowers from commercial banks is maximum for the size-class below 1 5 acres Rs 14,000/- of which 50 percent is hired labour employed for land preparation (Table 4 27)

Labour cost per hectare for tapoica cultivation, in the case of non-borrowers is maximum for the size class of above five acres Rs 13,334/- Table 4 28 shows that 100% of this cost is accounted by hired labour Family labour is employed for all operation; in the case of first two size classes

Table 4 29 and Table 4 30 brings out the material cost per hectare for tapoica cultivation, for the borrowers from co-operatives and commercial banks In the case of respondents who spend on fertilizers and manure it is found that borrowers from co-operative society in the size class upto five acres and above spent more, when compared with the borrowers from commercial bank and non borrowers

It can be seen from table 4.31 that non-borrowers of the size-classes upto 50 acres do not incur any expenditure on fertilizers and manures. This is because the crop is planted in the area around the homesteads and in hilly regions and much attention is not given for fertilizer applications.

Demand for credit as per cost of cultivation and the scale of finance

The Trichur District Co-operative Bank provides Rs 2750/- per hectare for paddy cultivation. This includes cash component of Rs 1625 per hectare and kind component of Rs 1125/- per hectare. In the case of high yielding varieties the cash component is Rs 2375/- per hectare and kind component, Rs 1625/- thus providing a total amount of Rs 4000/-. The analysis of primary data reveals that the scale of finance fixed by the bank is not at all sufficient to meet the demand of the cultivators. The minimum cost works out to Rs 4877/- per hectares. The average cost per hectare for borrowers from co-operatives is Rs 7469/-, Rs 8808/- for borrowers from commercial banks and Rs 6174/- for non-borrowers.

In the case of banana cultivation the farmers are eligible for Rs 20,000/- as cash component and Rs 14,000/- as kind component per hectare. A study conducted by Kerala Agricultural University (Indira Devi P 1978) revealed that the average cost per hectare for banana cultivation works

out to Rs 41814/- per hectare The present study shows that the average cost of cultivation for borrowers from co-operatives is Rs 49822/- Rs 47581/- for commercial bank borrowers and Rs 57776/- for non-borrowers

The scale of finance for tapioca includes Rs 225/- per hectare as cash component and Rs 1500/- as kind component The average cost of cultivation for the borrowers from co-operatives in the present study works out to Rs 6607/- Rs 11090/- for commercial bank borrowers and Rs 8016/- for non-borrowers

Credit

Having analysed the cost of cultivation involved in the production of paddy, banana and tapioca, an attempt has been made to analyse the supply of credit by institutional agencies for crop production

Crop-wise loans per hectare of land cultivated

Table 4 32 furnishes the crop-wise borrowings by different size classes for different crops per hectare It is noticed that 56 86 per cent of the loans provided by co-operatives is for banana The loan provided for paddy ranges from 1 41 per cent (for the size class of above 5 acres) to 62 08 per cent (for the size class 1 5 to 2 5 acres) Loan provided for tapioca is below 35 per cent for all the size classes

Table 4 32 Crop wise borrowings of different size-classes from co-operatives per hectare

(in Rs)

Size-class	Paddy	Banana	Tapioca	Total
Below 1 5	(14 91) 6707 31 (20 80)	(63 69) 28637 5 (34 45)	(21 39) 9620 25 (31 20)	(100 00) 44965 06 (30 76)
1 5 - 2 5	(51 27) 20008 73 (62 06)	(34 77) 13571 42 (16 33)	(13 96) 5446 42 (17 66)	(100 00) 39026 57 (26 69)
2 5 - 5 0	(10 86) 5072 46 (15 73)	(77 86) 36363 63 (43 75)	(11 28) 5271 65 (17 09)	(100 00) 46707 74 (31 95)
5 0 above	(2 91) 451 46 (1 41)	(29 34) 4545 45 (5 47)	(67 75) 10496 00 (34 05)	(100 00) 15492 91 (10 60)
Total	(22 05) 32239 96	(56 86) 83118 00	(21 09) 30834 32	(100 00) 146192 28

Note Figures in brackets refers to percentage

Table 4 33 Crop wise borrowings of different size-classes from
commercial banks per hectare

(in Rs)

Size-class	Banana	Tapioca	Total
Below 1 5	(100 00) 34595 96	-	34595 96 (17 13)
1 5 - 2 5	(100 00) 59285 71		59285 71 (29 36)
2 5 - 5 0	50000 00 (93 27)	3668 25 (6 73)	53597 51 (26 54)
5 0 & above	54460 00 (100 00)		54460 00 (26 97)
Total	198341 67 (98 21)	3608 25 (1 79)	201949 92 (60 00)

Note Figures in brackets denote percentage

When we analyse the credit supplied among different size classes, we find that the share of the first three size classes ranges between 26 to 32 per cent and that the shares of the first two size-classes together is 57.45 per cent. Hence it may be said that the credit supplied by co-operatives is directed towards small and marginal farmers among the sample borrowers.

The credit supplied by commercial banks is mainly for banana and to a very negligible extent for tapioca. The analysis in terms of size-class reveals that while the size-class below 1.5 receives 17 per cent credit, the rest of the three size classes accounts for more than 25 per cent. The situation leads us to conclude that the credit supplied by commercial banks is mainly in favour of large farmers. It is to be mentioned that one of the reasons for introducing the 'multi-agency' approach was unevenness in the credit supplied among the farmers in the different size-classes by the co-operatives. Hence it may be stated that the induction of commercial banks had helped only the large farmers in Madakathara Panchayath.

Gross demand per hectare of short-term credit by the sample borrowers

The various sources of expenditure per hectare for cultivating paddy, banana and tapioca are shown in Tables 4.34, 4.35 & 4.36. Out of the total expenditure, own funds includes family labour employed for agricultural operations.

and the value of farm produced planting material and menure

Paddy

In the case of borrowers from Co-operative societies, maximum expenditure per hectare for cultivating paddy is incurred by the size-class 2.5 to 5.0 acres is Rs 12533/- and the minimum Rs 5196/- by the size class 5 acres and above (Table 4.34). The extent of own funds ranges between 15 to 23 per cent, which leaves more than 75 per cent of the cost to be met by institutional agencies. Farmers in the size class below 1.5 acres meet 45 per cent of the cost of cultivation through their own funds. For the remaining size classes, 83 to 90 per cent demand for credit ranged between 83 to 90 per cent. Since commercial banks does not give loans for paddy cultivation, the demand is met out of the personal savings of the farmer as well as by borrowings from non-institutional agencies.

In the case of non-borrowers 13 to 27 percent of the total expenditure is met out of the own funds. The rest as in the case of borrowers from commercial banks, is met through personal savings and other borrowings.

Banana

A general tendency noticed in the case of borrowers from co-operatives and commercial banks is that irrespective of the size-classes own funds accounts only

Table 4 34 Gross demand per hectare of short-term credit by the sample borrowers for paddy cultivation

(in Rs)

Size class	For borrowers from co-operatives			For borrowers from commercial banks			Non-borrowers	
	Total expenditure	Own funds	Gross demand	Total expenditure	Own funds	Gross demand	Total expenditure	Own funds
Below 1 5	6415	1230 (19 17)	5185 (80 83)	7691	3489 (45 36)	4202 (54 64)	4877	991 (20 32)
1 5 2 5	5734	1281 (23 34)	4453 (77 66)	8843	976 (11 04)	7867 (88 96)	6863	894 (13 02)
2 5 5 0	12533	1942 (15 50)	10591 (84 50)	9604	932 (9 70)	8672 (90 30)	7307	1973 (27 00)
5 0 & above	5196	1127 (21 69)	4069 (78 31)	90 95	1562 (17 17)	7533 (82 83)	5649	973 (17 22)
Per acre average	7469	1395	6074	8808	1740	7068	6174	1208

Note figures in brackets denote percentages

Table 4 35 *Gross demand per hectare of short-term credit by the sample borrowers for Banana cultivation*

Size class	For borrowers from co-operatives			For borrowers from commercial banks			Non-borrower	
	Total expenditure	Own funds	Gross demand	Total expenditure	Own funds	Gross demand	Total expenditure	Own funds
Below 1 5	50341	3357 (6 67)	46984 (93 33)	47564	7187 (15 11)	40377 (84 89)	34444	8769 (25 46)
1 5 2 5	24867	2196 (8 83)	22671 (91 67)	55314	10162 (18 37)	45152 (81 63)	75990	20850 (27 44)
2 5 5 0	36391	6591 (18 11)	29800 (81 89)	34208	5017 (14 67)	29191 (85 53)	86579	33907 (39 16)
5 0 & above	7689	29509 (33 65)	58180 (66 35)	53239	8880 (16 68)	44359 (83 32)	34093	4684 (14 74)
Per acre average	9822	10413	39409	47581	7811	39770	57776	17052

Note figures in brackets denote percentages

Table 4 36 *Gross demand per hectare of short-term credit by the sample borrowers for tapioca cultivation*

(in Rupees)

Size class	for borrowers from co-operatives			for borrowers from commercial banks			Non-borrowers		
	Total expen- diture	Own funds	<i>Gross</i> demand	Total expen- diture	Own funds	<i>Gross</i> demand	Total expen- diture	Own funds	<i>Gross</i> demand
Below 1 5	8356	4013 (48 04)	4340 (51 96)	14131	7131 (50 46)	7000 (49 54)	4816	4816	-
1 5-2 5	7963	3744 (47 02)	4219 (52 98)	15470	10103 (65 31)	5367 (34 69)	5967	4967	-
2 5-5 0	6766	3656 (54 03)	3110 (45 97)	9100	3867 (42 49)	5233 (57 51)	4333	1333 (30 76)	3000 (69 24)
Above 5	3342	1244 (37 22)	2098 (62 78)	5661	1087 (19 20)	4574 (80 80)	16950	2917 (17 21)	14033 (82 79)
Per acre average	6607	3164	3442	11090	5547	5543	8016	3758	4258

Note Figures in brackets refer to percentage

below 20 per cent for all the farmers. An exception to this is the borrowers from co-operatives in the size class 5 acres and above who meet 34 per cent of the total cost from their own funds. The maximum expenditure is incurred by the same size-class which is Rs. 87,689 per hectare. The gross expenditure of the non-borrowers ranges between 60 to 86 per cent of the total cost.

Tapioca:

In the case of tapioca cultivation 37 to 65 per cent of the total cost of cultivation is met out of own funds by the borrowers from co-operatives as well as commercial banks. Gross demand for short-term credit ranges between 50 to 80 per cent. The total expenditure is met through own funds by the first two size classes. In the case of non-borrowers, whereas the expenditure for the remaining two size-classes, ranges between 69 to 83 per cent.

Net demand per hectare of short-term credit by the sample borrowers:

Tables 4.37, 4.38 and 4.39 shows the net demand for cultivating paddy, banana and tapioca, by the sample borrowers. Out of the total expenditure own funds in the form of kind component as well as cash from personal savings of the borrower is reduced, to assess the net demand.

4.37 Net demand per hectare, of short-term credit by the sample borrowers for Paddy cultivation

(in Rs.)

Class	For borrowers from co-operatives			For borrowers from Commercial banks			For non-borrowers		
	Total expenditure	Own funds (in kind & cash)	Net demand	Total expenditure	Own funds (in kind & cash)	Net demand	Total expenditure	Own funds (in kind & cash)	Net demand
1.5	6415	3475 (54.00)	2940 (46.00)	7691	6181 (80.36)	1510 (19.64)	4877	2698 (55.32)	2179 (44.68)
2.5	5734	3173 (55.00)	2561 (45.00)	8843	3894 (44.03)	4949 (55.97)	6863	3759 (46.02)	3704 (53.98)
5.0	12533	8960 (71.00)	3573 (29.00)	9604	6310 (65.70)	3294 (34.30)	7307	6065 (83.00)	1242 (17.00)
above	5196	3517 (67.68)	1679 (32.32)	9095	5745 (63.16)	3350 (36.84)	5649	3479 (61.58)	2170 (38.42)
re e	7469	4781	10753	8808	5532	3276	6174	3850	2324

Figures in brackets refer to percentages.

4.38 Net demand per hectare, of short-term credit by the sample borrowers for banana cultivation

(in Rs.)

Class	For borrowers from co-operatives			For borrowers from commercial banks			For non-borrowers		
	Total expenditure	Own funds (in kind & cash)	Net demand	Total Expenditure	Own funds (in kind & cash)	Net demand	Total Expenditure	Own funds (in kind & cash)	Net demand
1.5	50341	20976 (41.66)	29365 (58.33)	47564	23831 (35.00)	23730 (65.00)	34444	20824 (60.45)	13620 (39.55)
2.5	24867	10651 (42.83)	14216 (57.17)	55314	28969 (34.00)	26345 (66.00)	75990	46687 (61.44)	29303 (38.56)
3.0	36391	24422 (67.11)	11969 (32.89)	34208	21779 (49.00)	12429 (61.00)	86579	76331 (88.16)	10248 (11.84)
Above	87689	55815 (63.65)	31874 (36.35)	53239	24852 (30.00)	28387 (75.00)	34093	14912 (43.74)	19181 (56.26)
Below	49822	27966	21856	47581	24858	22723	57776	39688	18088

Figures in brackets refer to percentages.

4.39 Net demand per hectare of short-term credit by the sample borrowers for tapioca cultivation

(in Rs.)

Class	For borrowers from co-operatives			For borrowers from Commercial banks			For non-borrowers		
	Total expenditure	Own funds (in kind & cash)	Net demand	Total expenditure	Own fund (in kind & cash)	Net demand	Total Expenditure	Own funds (in kind & cash)	Net demand
1.5	8356	6937 (83.01)	1419 (16.99)	14131	12077 (85.46)	2054 (14.54)	4816	4816 (100.00)	Nil
2.5	7963	6331 (79.50)	1432 (20.50)	15470	10103 (65.31)	5367 (34.69)	5967	5967 (100.00)	"
5.0	6766	6497 (96.02)	269 (3.98)	9100	8599 (94.49)	501 (5.51)	4333	3585 (30.76)	784 (69.24)
above	3342	2915 (87.22)	427 (12.78)	5661	3917 (69.20)	1744 (30.80)	16950	11392 (67.21)	5558 (32.79)
re e	6607	5720	887	11090	8674	2416	8016	6440	1576

Figures in brackets refer to percentages.

Levels of demand:

Having analysed the cost of cultivation and the demand for credit by the farmer, an attempt has been made to project the demand for credit for the panchayath as a whole, for paddy, banana and tapioca (Table 4.40 & 4.41) while 720 hectares of land is cultivated under paddy, in the panchayath, 52 hectares is under banana and 65 hectares under tapioca. Data relating to cost of cultivation of tapioca, as per package of practices was not available, hence potential demand for tapioca for the panchayath at two levels could not be worked out.



Table 4 40 Levels of credit demand estimates for paddy banana and tapioca for Madakathara Panchayat

	Average credit per hectare based on the present scale of finance	Requirement for the panchayat	Average credit per hectare based on package of practices	Requirement for the panchayat	Average credit per hectare based on 40 per-cent adoption of package of practices	Requirement for the panchayat	Average credit per hectare based on 75 per-cent cost of cultivation	Requirement for the panchayat	Average credit per hectare based on 100 per cent cost of cultivation	Requirement for the panchayat
Paddy	6036	4345920	6290	4534560	2519	1813680	4000	2880000	5333	3839760
Banana	39967	2078284	20476	1064752	8190	425880	34000	1768000	45333	2357316
Tapioca	4414	286910					3750	243750	5000	325000

Table 4.41 Levels of Net credit demand estimates for Paddy, Banana and Tapioca for Madakathara Panchayath

crop	Average credit per hectare based on cost of cultivation (net)	Net Requirement for the Panchayath	Average credit per hectare based on package of practices	Net requirement for the Panchayath	Average credit for hectare based on 40 per cent adoption of package of practice	Net requirement for the Panchayath
Paddy	2763	1989360	3648	2626560	1462	1052640
Banana	29889	1086228	12900	670800	5160	268320
Tapioca	1626	105690	-	-	-	-

CREDIT REQUIREMENT AND SUPPLY

Paddy

Table 4 ~~42~~ furnishes the particulars of ^{gross} credit required per hectare and credit supplied by co-operatives and commercial banks, for paddy in terms of size-classes. It is found that the credit gap is 54.89 per cent, 52.10 per cent and 88.90 per cent for the size-classes 1.5 to 2.5 acres, 2.5 to 5.0 acres and 5 acres and above respectively, in the case of borrowers from co-operatives, while commercial banks, do not supply loans for any of the size-classes. Such a situation exists because of the scale of finance fixed is very low when compared with the other crops.

In this context it will be apt to point out some of the reasons put forth by the High Level Committee on Co-operative Credit (1980) for the relatively low take-off co-operative credit for paddy cultivation in the districts of Palghat, Alleppey and Trichur

- 1 Availability of Government loans at low rate of interest (5.5%) and on easier terms
- 2 Unremunerative price of paddy which have forced the farmers to utilise the paddy fields for other crops and purpose
- 3 seasonal nature and short duration of loans which leads to default, and
- 4 Partial utilisation of other crop loans for paddy

The present study shows that marginal farms and small farms cultivating paddy incurred a loss of Rs 3800/- on an average per hectare. Except for the farmers in the size-class 2.5 to 5.0 acres and above 5.0 acres, they find it difficult to meet the cost of cultivation from the value of sales proceeds.

Banana

The credit required as well as credit supplied by co-operatives and commercial banks for banana is presented in Table 4.42. As far as borrowers from co-operatives are concerned, it is noticed that there is a large credit gap for the size class, above 5 acres followed by 1.5 to 2.5 acres and below 1.5 acres. It is found that there is over financing to the extent of 22.01 per cent for the borrowers of the size-class 2.5 to 5.0 acres. However when we look into the credit gap of the borrowers from commercial banks the picture is entirely different. The credit gap is just 14.32 per cent for the size-class below 1.5 acres, but what is more surprising is the fact that, there is over financing for the remaining size-classes ranging from 23 per cent to 71 per cent. This could be due to the unrealistic scale of finance fixed by the technical committee of the Trichur District Co-operative Bank.

Tapioca

Table 4.42 reveals that it is only the co-operative institutions which provide finance for tapioca. There is

over financing for all the size-classes the maximum being 400 28 per cent for the size class 5 acres and above and minimum 29 08 per cent for the size class 1 5 to 2 5 acres The secretaries of the Service Co-operative Banks were unable to offer an explanation for such a higher magnitude of over financing It seems the scale of finance is too unrealistic

Juxtaposing the explanations relating to ^{the gross} credit gap for paddy, banana and tapioca, the following inferences may be drawn

- 1 Commercial banks are not keen on giving crop loans for paddy and tapioca
- 2 The percentage of credit gap is higher for paddy
- 3 Over financing takes place in the case of banana and tapioca in the case of borrowers from co operatives

Having seen that there is over financing for crops such as banana and tapioca, we note that there is a paradox since it was found that the credit supplied per hectare was insignificant One plausible explanation that can be offered is that the agricultural credit supplied by the service co-operative banks in the Panchayat as a whole is very low when compared to the requirement and that they have covered only a section of the agricultural population It is surprising that even those covered are over financed

Table 4 ~~42~~ Availability of Credit from Institutional Agencies per hectare of paddy Tapioca and Banana

(in Rs)

Size-class	PADDY						BANANA						TAPIOCA					
	Borrowers from co-operatives			Borrowers from commercial banks			Borrowers from co-operatives			Borrowers from commercial banks			Borrowers from co-operatives			Borrowers from commercial banks		
	Cre-dit given per hectare	Cre-requirement per hectare	Cre-gap over finance	Cre-dit given per hectare	Cre-requirement per hectare	Cre-gap over finance	Cre-dit given per hectare	Cre-requirement per hectare	Cre-gap over finance	Cre-dit given per hectare	Cre-requirement per hectare	Cre-gap over finance	Cre-dit given per hectare	Cre-requirement per hectare	Cre-gap over finance	Cre-dit given per hectare	Cre-requirement per hectare	Cre-gap over finance
Below 1 5	6707 31	5185	+1522 31 (29 35)	Nil	4202	4202	28637 5	46984	-18347 (39 05)	34596	40377	5781 (14 32)	9620 25	4340	+5280 (121 65)	Nil	7000	-7000
1 5 - 2 5	2008 73	4453	-2444 27 (54 89)		7867	-7867	13571 42	22671	- 9100 (-40 14)	59286	45152	+14134 (31 30)	5446 42	4219	+1227 (29 08)		5367	-5367
2 5 - 5 0	5072 46	10591	-5518 54 (52 10)		8672	-8672	36363 63	29800	+ 6563 (22 02)	50000	29191	+20809 (71 28)	5271 65	1110	+2161 (69 48)		5233	- 5233
5 0 & above	451 46	4069	-3617 54 (88 90)		7533	-7533	4545 45	98180	-53635 (92 18)	54460	44359	+10101 (22 77)	10496	2098	+8398 (400 28)		4574	-4574

Note Figures in brackets refer to percentage

Table 4.43 brings out the net credit gap for paddy, banana and tapioca. In this case we can notice that the percentage of credit gap is low for all the size classes, cultivating paddy, banana and tapioca.

Table 4.43 Availability of credit from Institutional Agencies per hectare of paddy, tapioca and banana and net credit gap (in Rs.)

Size - class	Paddy			Banana			Tapioca											
	Borrowers from co-operatives	Borrowers from commercial banks	Borrowers from co-operatives	Borrowers from commercial banks	Borrowers from co-operatives	Borrowers from Commercial banks												
Below																		
1.5	6707.31 (1.28)	2940 (1.28)	3767.31	N.L.	1510	1510	28637.5	29365	725.5 (2.48)	34596	23730	10866 (.45)	9620.25	1419	8201.25 (5.77)	N.L.	2054	2054
1.5-	2008.73	2561	552.27 (21.57)	•	4949	4949	13571.42	14216	644.58 (4.54)	59286	26345	32944 (7.25)	5446.42	1432	4014.42 (2.80)	•	5367	5367
2.5-	5072.46	3573	1499.46 (41.96)	•	3294	3294	36363.63	11969	24394.63 (2.03)	50000	12429	37571 (3.02)	5271.65	269	5002.65 (18.59)	•	501	501
5.0	451.46	1679	1227.54 (73.11)	•	3350	3350	4545.45	31874	37328.55 (85.74)	54460	28387	26073 (.91)	10496	427	10069 (23.58)	•	7744	7744

Notes: Figures in brackets refer to percentages.

Estimates of credit gap for Madakathara Panchayath

Tables 4.44 to 4.51 brings out the estimates of gross and net credit gaps under different levels, for the Panchayath as a whole as well as the credit gap per hectare under each level.

Table 4.44 Estimated credit gap for Madakathara Panchayath based on cost of cultivation - (gross demand) (in Rs.)

<i>op</i>	<i>Average credit required per hectare as per cost of cultivation</i>	<i>Credit required for the Panchayath</i>	<i>Average credit given per hectare</i>	<i>Aggregate credit disbursed in the Panchayath</i>	<i>Credit gap for the Panchayath</i>	<i>Credit gap per hectare</i>
<i>ddy</i>	6036	4345920	3560	2563200	1782720	2476
<i>nana</i>	39967	2078284	35182	1829464	248820	4785
<i>proca</i>	4414	286910	3854	250510	36400	560

Table 4.45 Estimated credit gap for Madakathara Panchayath based on package of practices

(in Rs.)

<i>crop</i>	<i>Average credit required per hectare as per package of practices</i>	<i>Credit required for the Panchayath (gross)</i>	<i>Average credit given per hectare</i>	<i>Aggregate credit disbursed in the Panchayath</i>	<i>Credit gap for the Panchayath</i>	<i>Credit gap per hectare</i>
<i>addy</i>	6298	4534560	3560	2563200	1971360	2738
<i>nana</i>	20474	1064648	35182	1829464	764816	14708
<i>proca</i>			3854	250510		

4.46 Estimated credit gap for Madakathara Panchayath based on 40 percent adoption of package of practices

(in Rs.)

Average credit required per hectare based on 40 percent adoption of package of practices.	Credit required for the Panchayath (gross)	Average credit given per hectare	Aggregate credit disbursed in the Panchayath	Credit gap for the Panchayath	Credit gap per hectare
2519	1813680	3560	2563200	749520	1041
8190	425880	35182	1829464	1403584	26992
		3854	250510		

Table 4.47 Estimated credit gap for Madakathara Panchayath based on scale of finance (75 per cent cost of cultivation)

(in Rs.)

Crop	Average credit required for hectare as per scale of finance	Credit required for the Panchayath	Average credit given per hectare	Aggregate credit disbursed in the Panchayath	Credit gap for the Panchayath	Credit gap per hectare
Paddy	4000	2880000	3560	2563200	316800	440
Banana	34000	1768000	35182	1829464	61468	1182
Tapioca	3750	243750	3854	250510	6760	104

4.48 *Estimated credit gap for Madakathara Panchayath based on 100 percent cost of cultivation, as scale of finance*
(in Rs.)

<i>Average credit required per hectare as per 100 percent cost of cultivation</i>	<i>Credit required as per Panchayath</i>	<i>Average credit given per hectare</i>	<i>Aggregate credit disbursed in the Panchayath</i>	<i>Credit gap for the Panchayath</i>	<i>Credit gap per hectare</i>
5333	3839760	3560	2563200	1276560	1773
45333	2357316	35182	1829464	527852	10151
5000	3250000	3854	250310	74490	1146

4.49 *Estimated credit gap for Madakathara Panchayath based on cost of cultivation (net demand)*

	<i>Average credit required per hectare as per cost of cultivation</i>	<i>Credit required for the Panchayath</i>	<i>Average credit given per hectare</i>	<i>Aggregate credit disbursed in the Panchayath</i>	<i>Credit gap for the Panchayath</i>	<i>Credit gap per hectare</i>
	2763	1989360	3560	2563200	573840	797
a	20889	1086228	35182	1829464	743236	14293
ca	1626	105690	3854	250510	144820	2228

Table 4.50 Estimated net credit gap for Madakathara Panchayath based on 40 percent adoption of package of practices

(in Rs.)

Crop	Average credit required per hectare based on 40 percent adoption of package of practices	Credit required for the Panchayath	Average credit given per hectare	Aggregate credit given in the Panchayath	Credit gap for the Panchayath	Credit gap per hectare
Paddy	1462	1052640	3560	2563200	1510560	2098
Banana	5160	268320	35182	1829464	1561144	30022
Tapioca						

4.51 Estimated net credit gap for Madakathara Panchayath based on package of practices

(in Rs.)

	Average credit required per hectare as per cost of cultivation	Credit required for the Panchayath	Average credit given per hectare	Aggregate credit disbursed in the Panchayath	Credit gap for the Panchayath	Credit gap per hectare
	3648	2626560	3560	2563200	63360	88
a	12900	670800	35182	1829464	1158664	22282
ca						

Dual financing of crop loans for banana

The service Co-operative banks and commercial banks finance the agriculturists in Madakathara Panchayat. Even though there are two institutions it is expected that there should not be any overlapping so that dual financing can be avoided. By dual financing it is meant that borrowers avail credit from two institutional agencies for raising the same crop. Tables 4 52 and 4 53 reveals the extent of dual financing availed by the borrowers from co-operatives and commercial banks. It is found that in the case of borrowers from co-operatives, there are eight members who borrowed twice from the co-operatives out of which the majority belong to the size-class below 1.5 acres. Apart from the co-operatives two more members borrowed from the commercial banks. In the case of borrowers from commercial banks eleven members from different size-classes borrowed from co-operatives and two from commercial banks. Thus it is found that dual financing takes place.

Table 4 52 Dual financing of crop loans by borrowers from co-operatives (in Rs)

Size-class	Co-operatives	Commercial banks
Below 1.5	9000 (5)	-
1.5 - 2.5	500 (1)	4000 (1)
2.5 - 5.0	1000 (1)	-
Above 5.0	2000 (1)	2000 (1)

(Figures in brackets refer to the total number of loanees)

Table 4 53 Dual financing of crop loans by borrowers from commercial banks

Size-class	Co-operatives	Commercial banks
Below 1 5	5000 (3)	-
1 5 - 2 5	5500 (2)	13000 (2)
2 5 - 5 0	12000 (4)	5000 (1)
Above 5 0	19000	-

Note (Figures in brackets refer to the total number of loanees)

Investment in minor irrigation

An agriculturist requires investment credit apart from production credit. The investment credit is provided mainly for irrigation purposes. At present the Cochin Co-operative Agricultural Development Bank (erstwhile Cochin Land Mortgage Bank) and commercial bank provide term loans, for minor irrigation purposes. The amount invested in minor irrigation out of owned and borrowed funds by the borrowers from co-operative and commercial banks are given in Table 4 41

It is noticed that the amount of investment in minor irrigation increases as the size-class increases, for the borrowers from co-operatives as well as commercial banks. In the case of the borrowers from co-operatives it is found that the land mortgage bank has financed 90 90 per cent of the amount invested in minor irrigation, for the borrowers

Table 4 ⁵⁴ Investment in Minor irrigation Source of funds

(in Rs)

Size - Class	By borrowers from co-operatives				By borrowers from Commercial banks			
	Source of funds				Source of funds			
	Owned	LMB	Commer- cial bank	Total amount in- vested	Owned	LMB	Commer- cial bank	Total amount invested
Below 1 5	1200 (9 10)	12000 (90 90)	-	13200 (100 00)	3800 (20 00)	-	15200 (80 00)	19000 (100 00)
1 5 - 2 5	10700 (71 57)	-	4250 (28 43)	14950 (100 00)	-	6500 (33 68)	12800 (66 32)	19300 (100 00)
2 5 5 0	4800 (24 53)	-	14770 (75 47)	19570 (100 00)	-	-	30000 (100 00)	30000 (100 00)
5 0 & above	10200 (32 09)	6000 (1923)	15000 (48 07)	31200 (100 00)	87000 (90 63)	-	9000 (9 37)	96000 (100 00)
Total	26900 (34 09)	18000 (22 81)	34020 (43 10)	79420	90800 (55 26)	6500 (3 96)	67000 (40 78)	164300 (100 00)

Note Figures in brackets denote percentage

of the size-class below 1.5 acres. The commercial banks have totally neglected the borrowers in the size-class below 1.5 acres, while they have financed for the other size-classes ranging from 28.43 per cent to 75.47 per cent.

For the borrowers from commercial banks, the Land Mortgage Bank has financed only one size class i.e. 1.5 to 2.5 acres and that too only to the extent 33.68 per cent, of the total amount invested.

Thus we find that the Co-operative Agricultural Development Bank has not been able to meet the investment credit requirement of the borrowers. This also^o establishes that there is no co-ordination in lending activities between the service co-operative banks in the study area and the co-operative Agricultural Development Banks/Commercial Banks. Hence there is a need to strengthen the investment credit provided by the Agricultural Development Banks/Commercial Banks for the borrowers of short-term credit. To achieve this both the concerned agencies may collaborate, and chalk out a plan.

Strategy

It has been seen that credit availability is a major constraint in farms cultivating paddy and banana. The extent of ^{gross} credit gap in paddy varies between 52 to 89 per cent of the credit required in the case of borrowers from co-operatives and 100 per cent in the case of commercial

bank borrowers for banana cultivators, credit gap varies between 40 to 92 per cent for borrowers from co-operatives. If the returns from these farm resources are to be maximised, it is imperative that the coverage should be increased with much more co-ordination between the co-operatives and commercial banks.

The existence of a number of agencies retailing credit in the study area had led to uncoordinated credit disbursement resulting in dual financing for the same crop and also diversion of resources to unproductive purposes. It is also noticed that the credit agencies have been unable to formulate and develop meaningful credit programme, on the basis of an area approach.

In order to overcome this problem it is suggested that the 'Service Area Approach' as recommended by the Reserve Bank of India, may be adopted, in the study area. This approach is unique in the sense that agricultural financing shall be the responsibility of only one commercial bank and thereby overlapping can be avoided. Co-operatives shall continue to be the main institution to finance for agricultural purposes. The efforts of commercial banks should be to supplement the finance provided by co-operatives and not to supplant them. However efforts are to be taken to see that commercial banks, finance those sections of agricultural population whom the co-operatives have not financed. In this context the commercial banks

should insist a No Objection Certificate from the co-operatives This is not insisted in practice by some of the commercial banks in the study area In the case of co-operatives, efforts should be taken to increase the share of agricultural loans in the total loans if they are to really function as primary agricultural credit societies in the village level Their present share is only 24.20 per cent of the total institutional credit for agriculture in Trichur district (See Appendix 5)

Since the Service Area Approach is to be implemented in all places it is felt that in Madakathara Panchayat the bank may develop their own schemes so that they can avail refinance facility from higher level agencies The lending institutions in the panchayat should take note of the fact that the credit demanded for seasonal crops is declining Hence they should provide loans for crops that are being cultivated newly It is further suggested that commercial banks may explore the possibility of giving loans for crops

other than banana and the technical committee at the district level should fix the scale of finance realistically for all crops The commercial banks should finance for purposes other than crop loans so that the hold of the non-institutional agencies with the small and marginal farmers, can^b avoided

In the light of the present study it can be suggested that the financing institution should be keen on proper follow-up of loans. Timely application of fertilizers and manures should be insisted upon. Special attention has to be paid on marginal farms. It can be seen from the analysis that co-operatives could meet only 35 per cent of the cost of cultivation on an average, in the case of paddy cultivation, and 43 per cent in the case of banana. Excess financing takes place in the case of tapioca cultivation. To narrow the credit gap it is suggested that at least 60 to 70 per cent of the cost should be provided by the institutional agencies. The rest can be met by the farmer from his personal savings.

It can be concluded that the technical committee at the district level should fix the scale of finance realistically for all crops. The present scale of finance has to be updated since it is found inadequate to meet the cost of cultivation. Adoption of scientific practices has to be advocated among the farmers. The PACs have to give more importance to agricultural financing, than providing credit to non agricultural activities.

Summary and Conclusion

CHAPTER V

SUMMARY AND CONCLUSIONS

Institutional credit for agriculture has been given importance in the successive five year plans. It is because the requirement of the farmer has increased considerably, due to the changing technology and the introduction of high yielding varieties. The owned resources of the farmer may not be sufficient to meet the total credit requirements. This is evident from the fact that the total co-operative credit fixed as target increased from Rs 135 crores in the First Five Year Plan to Rs 7070 crores in the Seventh plan.

The increasing importance of institutional credit has prompted numerous studies on various aspects. In order to arrive at the focus of the present study a critical review of the relevant literature relating to demand and supply of credit was made. The review revealed that the major limitation of the existing studies was that they confined themselves either at the state, district or borrowers level, independently, concentrating on a single agency and agricultural loans in general. A study trying to assess the requirements of different crops and the credit situation at the district panchayath and borrowers level was conspicuous by its absence. Hence the present study was undertaken with the following objectives:

- 1 To assess the total credit requirements for paddy and other seasonal crops in a selected village

- 2 To assess the extent of credit supplied by different credit agencies and to estimate the credit gap
- 3 To suggest a strategy for meeting the credit gap
- 4 To develop a methodology under technical programme

The study aims to have a better understanding about the own investment and credit required from outside agencies by the farmer. It will also help to have a clear idea about the existing credit gap and the share of co-operative and commercial banks in meeting it.

The Study is carried out in Madakathara Panchayath of Trichur District. The panchayath comprises of three villages viz, Madakathara, Kurchikara and Vellanikkara and it comes under the Ollukara Block. The study pertains to the year 1986-87.

Stratified random sampling technique was adopted to select the sample respondents whose total number was 100. Of this 52 respondents borrowed from co-operatives, 33 from commercial banks and 15 were non-borrowers. The farmers were categorised into four classes on the basis of their land holding. The study is carried out using secondary and primary data. Secondary data was collected from Trichur District Co-operative Bank, Ambalapad Service Co-operative Bank, Vellanikkara Service Co-operative Bank, Bank of Baroda, Trichur and State Bank of Travancore, primary data was collected with the help of a structured schedule.

The data has been analysed in three levels viz , district level, panchayat level and individual level, the results of which are given below

In order to have an idea about the functioning of Co-operative institutions in the panchayath secondary data collected from the two Service Co-operative Banks were analysed It was found that the percentage of borrowing members for agricultural purposes was declining, over the years 1977-78 to 1985-86 As far as short-term agricultural credit is concerned, there was no clear pattern in credit supplied, as there was wide fluctuations

The purpose-wise analysis of the loans given by the Service Co-operative Bank for the period 1977-78 to 1985-86 showed a declining trend in the case of short term agricultural loans, while the gold loans maintained a steady increase through out the period The degree of involvement in medium and IRDF loans is very negligible

The credit supplied per hectare on the basis of gross cropped area in nominal terms for the period 1977-78 to 1985-86 ranged between Rs 387 79 (1979-80) and Rs 3198/- (1985-86)

The analysis of primary data collected with the help of a structured schedule from the sample respondents of the study area, related to socio economic conditions, land

holdings, cropping pattern, cost of production, disposal of output and credit

The predominant community in the study area is the Ezhava community. As far as the annual income of the sample respondents are concerned a good percentage of the borrowers had an annual income of more than Rs 25,000, irrespective of the category. The percentage of borrowers earning less than Rs 5000 was very negligible and that was predominantly from the size-class of below 1.5 acres.

The cropping pattern of the borrowers from co-operative and commercial banks showed that cash crop occupied a major percentage of the land under cultivation, whereas non-borrowers cultivated paddy and mixed crops.

To arrive at the demand for agricultural credit relating to crops such as paddy, banana and tapioca, the cost of cultivation was found out. The cost was split up into material cost and labour cost.

The analysis of cost of cultivation of paddy showed that in the case of co-operative societies material cost was lowest for the size-class 1.5 to 2.5 acres whereas it was highest for the size class 2.5 to 5.0 acres. Labour cost was comparatively lower for 5 acres and above. As far as the borrowers from the commercial banks are concerned material cost is lowest for the size-class 2.5 acres to 5.0 acres and for the remaining size-classes it ranged from

Rs 3477/- to 4686 per hectare there by not showing much of a variation The labour cost of the commercial bank borrowers was lowest for the size-class below 1 5 acres Material cost is lowest in the case of non-borrowing farmers in the size-class below 1 5 acres and highest for these in the size-class 2 5 to 5 acres

The material cost for cultivating one hectare of banana varied from Rs 19163/- to Rs 72128/- irrespective of the category of borrowers The labour cost for borrowers from co-operative society ranges from Rs 4144/- to Rs 15196/- In the case of borrowers from commercial bank it varies from Rs 6393/- to Rs 16030/- per hectare As far as non-borrowers % are concerned labour cost was comparatively higher for the size-class 1 5 to 2 5 acres (Rs 19430 per hectare and 5 acres and above acres (Rs 11812 per hectare)

In the case of tapioca, it was found that the borrowers of co-operative societies in the various size-classes upto 5 0 acres spent more than compared with the borrowers from Commercial banks and non-borrowers of the size-classes above 5 acre The labour cost does not show much variation in the case of borrowers from co-operative societies But in the case of borrowers from Commercial banks as well as non-borrowers, the labour cost was comparatively higher for the size-class 1 5 to 2 5 acres and 5 acres and above

The analysis of crop-wise borrowings of the different size-classes from Co-operatives showed that more than 57 per cent of the loans provided by the co-operatives was for banana. Credit supply among different size-classes showed that 31.95 per cent of the total credit was supplied to the 2.5 to 5.0 acres.

The credit supplied by commercial banks was mainly for banana and to a very negligible extent for tapioca. The analysis in terms of size-classes revealed that of the total credit supplied the highest percentage is 29.36 per cent was for the size class 1.5 to 2.5 acres.

The analysis of credit requirement and credit supplied for paddy, banana and tapioca brought out the following results. The credit gap was 54.83 per cent, 52.10 per cent and 88.90 per cent for the size-classes 1.5 to 2.5 acres, 2.5 to 5.0 acres and 5 acres and above respectively, in the case of borrowers from co-operatives, commercial banks were not giving loans for paddy cultivation. In the case of banana, as far as the borrowers from co-operatives are concerned, it was noticed that there was a large credit gap for the size-classes 5 acres and above followed by 1.5 to 2.5 acres and below 1.5 acres. In the case of borrowers from commercial banks, the credit gap was just 14.32 per cent for the size-class below 1.5 acres, but there was over financing for the remaining size-classes ranging from 23 per cent to 71 per cent. Only co-operative provided finance for tapioca and over financing existed for all size-classes.

Lastly, the analysis of investment in minor irrigation of the sample borrowers revealed that the amount invested in minor irrigation increased as size-classes increased for the borrowers from co-operatives Agricultural Development Bank has not been able to meet the investment needs of the borrowers

The foregoing analysis can be summarised as follows

At the panchayat level

- 1 The service Co-operative Banks seemed to deviate from their original purpose of providing agricultural loans
- 2 Commercial bank were not keen on giving crop loans for paddy and tapioca
- 3 The percentage of credit gap was higher for paddy in the case of borrowers from co-operatives
- 4 Over financing for tapioca took place in the case of borrowers from co-operatives
- 5 For borrowings other than crop loans, non-institutional agencies still had a strong hold with the small and marginal farmers in the case of borrowers from co-operatives

The Service Area Approach recommended by the Reserve Bank of India, is an effective strategy for meeting the credit gap The approach aims at assigning each panchayat or service area, a bank branch and enabling them to have developmental orientation and concentrate on productive

lending, thus contributing to the development of specific areas assigned to it. The scale of finance fixed by the technical committee at the district level should be fixed realistically for all crops, and adoption of scientific practices has to be advocated among the farmer.

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Appendices

Appendix-1

EXPLANATORY NOTES ON THE METHODOLOGY OF ESTIMATING THE CREDIT REQUIREMENTS AND AVAILABILITY OF CREDIT FROM INSTITUTIONAL AGENCIES AS SUGGESTED BY M L DANTWALA

The Panel of Economists headed by Professor M L Dantwala adopted two methods for arriving at the probable credit needs of agriculturists. Under the first, credit requirements were assumed to bear a certain relationship to the value of agricultural produce. Accordingly the group applied the ratio of borrowings to the value of net agricultural produce in 1961-62 to the estimated value of agricultural produce in 1966-67 and 1970-71 at 1965-66 prices. Under the second method, peracre borrowings were multiplied by the estimated net acreage under cultivation in 1966-67 and 1970-71 and the estimates so obtained were then inflated by 25 per cent to allow for the increase in price level between 1961-62 and 1966-67. Under each of these methods again, two sets of estimates were made, in one, the entire borrowings of households expenditure were taken into account in addition to the borrowings for current expenditure in farm and non-farm business and in the other only 75 per cent of the borrowings for the household expenditure were taken into account in addition to those for farm and non-farm business.

The Economists Panel presented accordingly four estimates in regard to short-term credit requirements of

agriculturists which are shown below

ESTIMATES OF SHORT-TERM CREDIT REQUIREMENTS FOR
CULTIVATING HOUSE-HOLDS IN 1970-71
(Rs in Crores)

Method of Estimation	Estimates of credit require- ments in 1970-71
<u>Method No 1</u>	
A. Total borrowings for current expenditure in farm and non-farm business and household expenditure	1228
B. Total borrowings for current expenditure in farm non-farm business and 75 per cent of the borrowing for household expenditure	1011
<u>Method No 2</u>	
A. Total borrowings for current expenditure in farm and non-farm business and household expenditure.	1341
B. Total borrowings for current expenditure in farm and non-farm business and 75 per cent of the borrowings for household expenditure	1174

The study group of the National Credit Council adopted the methods of the Panel of Economists with some modifications. National income in 1967-68 was arrived at, on the basis of estimating for 1966-67 (Revised series) made by the Central Statistical Organisation and assuming

a 20 per cent increase in agricultural production in 1967-68 as given in Economic Survey 1967-68 and a 12 per cent increase in the prices of agricultural commodities. On this basis national income in 1967-68 from agriculture was put at Rs 15,592 crores. Further, only borrowings for current farm expenditure and three-fourths of those for household expenditure in 1961-62 were taken into account and by relating them to national income from agriculture in that year (according to revised estimates Rs 7010 Crores) the ratio arrived at was 1 7 1. On this basis, credit requirement in 1967-68 was estimated at Rs 1115 crores.

Similarly, borrowing per acre in 1961-62 was arrived at, by including those for current borrowings and three-fourths of those for household expenditure i.e. Rs 15.02 per acre. Providing for 70 per cent increase in prices, the requirement per acre in 1967-68 worked out to Rs 25.68. Net cultivated area was taken as 369.85 million acres in 1967-68. Provision was also made at the rate of Rs 200 per acre for area under High Yielding Variety Programme which for 1967-68 was worked out on the basis of a target of 32.5 million acres for 1970-71. On this basis, credit required in 1967-68 amounted to Rs 1275 Crores.

Surveys undertaken by the Reserve Bank of India in certain areas covered by Intensive Agricultural District Programme indicated that borrowings of participant

cultivator for current farm operations amounted to Rs 23 per acre in 1965-66. Allowing for the increase in price level since then, the credit requirement would amount to Rs 30 per acre in 1967-68. On this basis, the production credit requirement was placed at Rs 1,060 acres.

Appendix-2

Estimation of Credit requirements for farm and Non-farm
business

<u>Short term Credit Requirements</u>	<u>Amount</u>
<u>Farm</u>	
1 Value of three major inputs in 1973-74 (Crores Rs)	1423
2. Credit needs values at 50 per cent of the input value (Crores Rs)	713
3 Farm Credit during 1961-62 for purposes other than inputs (Crores Rs)	100
4 Estimated credit needs for miscellaneous purpose during 1973-74	274
5 Total credit needs for agriculture in 1973-74	987
6 Double cropped area during 1973-74 (Per cent)	17
7 Double counting in the calculated credit under column 5 at 17 per cent	168
8 Net credit needs for farm business during 1973-74	819
<u>Non-farm</u>	
9 Total borrowings of cultivators for house hold expenditure in 1961-62 (Crore Rs)	482
10 Estimated figure of the above item in 1973-74* (Crore Rs)	1085
11 Increase in Agricultural Production during 1962-74 (per cent)	51 9
12 Increase in per-capita agricultural pro- duction (per cent)	21 00
13 Improvement at the self financing capa- city at 21 per cent (Crore Rs)	227
14 Estimated borrowing at 1973-74 (1085-227) for the agricultural population (crores Rs)	858

15 Total needs for agriculture and household expenses (crores Rs)

1677

*Total farm credit was Rs 140 crores Total value of pesticides and fertilizers was Rs 75 crores Adding another Rs 5 crores for improved seed the total value of the three inputs was Rs 80 crores Allowing half of this as credit needs the balance of credit needs for miscellaneous used on the farm works out to Rs 100 crores 80 per cent due to price increase and another 52 per cent due to capital intensiveness

* Includes 80 per cent due to price increase and another 52 per cent for agricultural population increase from 317 to 396 million

Appendix-3

Questionnaire

'The Demand & Supply of Agricultural-Credit-Cas Study of
Madakathara Panchayat

Name of the Respondent

Name and Occupatio of the
Head of the family *

Religion**

Caste***

Type of house ****

House-hold information

Sl No.	Name	Sex M/F	Age	Relation ship to the head of the family	Ednl Qfn	Occupation Main Subsidiary
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Sl No	Name	Sex	Age	Relation ship to the head	*Ednl Qfn	Occupation Main	Subsidiary
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* (1) Agriculture (2) government job (3) Agricultural Labour (4) Non-Agricultural labour (5) Business (6) others

** (1) Hindu (2) Christian (3) Muslim

*** (1) Brahmin (2) Nair (3) Ezhuttassan (4) Ezhava (5) SC (6) ST (7) Others

**** (1) Kacha (2) Pucca (3) Tiled (4) Concrete

*(1) Primary (2) Middle School (3) High School (4) College Education (5) Technical Education (6) Professional Education

Participation in Agriculture

Sl No.	Name	Sex	Age	*Nature of work
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* Manual/Supervisory/Both

Land Particulars

Land House owned site	Operating area under each crop						If irrigated	
	Paddy		Tapioca		Banana		Source	Method
	I	UI	I	UI	I	UI		

Type of land I Irrigated U I Unirrigated

Method of irrigation

- 1 Lift irrigation
- 2 Persian wheel
- 3 Diesel pumpset
- 4 Electric pumpset
- 5 Others (specify)

*Cost of cultivation for paddy
Cost of labour*

Season	<i>Land preparation</i>				<i>Sowing Transplanting</i>						<i>Weed control</i>			<i>Harvest</i>			<i>Post harvest</i>			<i>Total person</i>	<i>Total labour</i>		
					H	F	W	H	F	W	H	F	W	H	F	W	H	F	W	emplo	cost		
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	W	M	F	M	F	H	F
																					yed		
																					H	F	

Virippu

Mundakan

Punja

*Break up of opns in
land preparation*

Source of hired labour Male/Female

*Make provision to reduce Food and transportation expanded on
labour and share of out-put harvested
given as wages*

Cost of Fertilizers and Manures

Type of fertilizers used	Quantity required	Qty Purchased	Source of purchase	Total cost of fertilizers	Type of manure used	Wgt/bundle of GM	Wet/bag of CD	proportion of manure purchased to farm produced	Total cost of manure
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Virippu

Mundakan

Punja

Fertilizer (1) Factomphos (2) Urea (3) Potash (4) Compound fertilizers (5) Any other specify

Manure (1) Gree Manure (2) Cow dung (3) Ash (4) Lime (5) Compost Manure

Out put and Disposal of Paddy

Season	Qty used for self consump tion	Qty used for seed	Source of disposal	Mode of transp ortation		Cost of Trans- portation			Total cost	Gross income Total cost = Net income
				Own	hired	Qty	Km	Loading & unload ing char ges		
Virippu										
Mundakan										
Punja										

Source of disposal 1) Local trader (2) Commission Agent (3) Local buyers
 (4) Hawkers (5) Others

Made of transport (1) Truck (2) Mini-lorry (3) Bullock cart (4) Headload (5) Others

Disposal of Output

<i>Crop</i>	<i>Qty product in Kg</i>		<i>Farm price per Kg</i>	<i>Gross income</i>	<i>Qty used for self consumption</i>	<i>Qty used for seed</i>
	<i>Main production</i>	<i>By-product</i>				
<i>Tapioca</i>						
<i>Banana</i>						
<i>Other plantain</i>						

Productivity for each crop

Qty sold as seed	Qty sold in ma- rket	Source of dispo- sal	Made of transpor- tation	Cost of transportation		Load ing & unload ing cost	Total expen- ses	Net income
				Qty	Kms			

Tapioca

Banana

Other
Planta-
in

Investment on Assets

<i>Mode of Invest- ment</i>	<i>Year of Invt</i>	<i>Cost of Pur</i>	<i>Source of finance</i>	<i>Rate of Int</i>	<i>Propn for depn</i>	<i>Secu- rity</i>	<i>Period</i>
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Well

*Irrigation
equipments*

*Agricultural
implements*

*Others
(specify)*

Details of crop loan

	Paddy			Tapio	Other
	V	M	P	ca	plan-
					tain

a Duration of crop

b Amount of loan

 A

 B

 C

c Source of loan

d Data of application

e. Date of sanction

f Amount sanctioned

 A) Cash

 B) Kind

 C)

g Was the loan amount sufficient

h If not by how much

i Source by which it was supplemented

j Interest rate

k Security

l Repayment (monthly)

 A) Quarterly

 B) Half Yearly

 C) Yearly

m Loan outstanding to be repaid

n Conversion (MT)

o Purpose for which the C Loan was used

Income

Sl No.	Income from agricul- ture	Salary from employ- ment	Income from self-em ployment	Income saved by fami- ly labour	Specify other sour- ces if any like remi- ttance
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remaining size-classes ranging from 23 per cent to 71 per cent Only co-operatives provided finance for tapioca and over financing existing for all size-classes

It was thus observed that credit availability is a major constraint on farms cultivating paddy and banana

Appendix-4

Crop-wise Loans of Trichur District Co-operative Bank Ltd. from 1976-77 to 1984-85

Crops	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-8
Paddy	60 30 (20 20)	44 14 (18 87)	46 01 (18 39)	42 10 (14 39)	35 93 (9 19)	59 07 (9 14)	55 41 (8 17)	53.47 (7 07)	58 (6 39)
Arecunut	80 36 (29 57)	61 94 (26 46)	66 13 (24 44)	77 90 (26 62)	96 29 (24 63)	141 82 (21 95)	149 83 (22 08)	179 58 (23 57)	204 02 (22 39)
Coconut	75 91 (27 94)	70 01 (29 91)	79 26 (31 69)	90 61 (30 96)	120 40 (30 80)	208 55 (32 28)	248 14 (36 50)	283 26 (36 47)	377 83 (41 45)
Banana	17 87 (6 58)	27 44 (11 72)	24 16 (9 66)	40 62 (13 87)	70 49 (18 03)	138 35 (21 41)	148 00 (21 81)	163 38 (21 61)	192 29 (21 09)
Plantain	3 78 (1 39)	3 74 (1 60)	3 77 (1 51)	5 82 (1 99)	8 64 (2 21)	13 98 (2 16)	15 19 (2 24)	14 30 (1 89)	17 25 (1 89)
Topioca	31 03 (11 42)	24 49 (10 46)	28 05 (11 22)	26 78 (9 15)	41 56 (10 63)	53 13 (8 22)	52 80 (7 78)	45 39 (6 00)	46 67 (5 12)
Others	2 47 (0 90)	2 37 (0 98)	2 76 (1 09)	8 83 (3 02)	17 65 (4 51)	31 23 (4 84)	9 28 (1 36)	16 66 (2 39)	15 33 (1 67)
Total	271 72 (100 00)	234 13 (100 00)	250 14 (100 00)	292 66 (100 00)	390 96 (100 00)	646 13 (100 00)	678 65 (100 00)	756 04 (100 00)	911 62 (100 00)

Source (Annual) Reports of Trichur District Co-operative Bank, 1976-77 to 1984-85

Note Figures in brackets refer to percentages

Appendix 5

Institutional Credit for Agriculture in Trichur District

(Rs in lakhs)

Institutional Agencies	1980	1981	1982	1983	1984	1985
Commercial Bank	1385 (78 82)	1732 (74 68)	1668 (68 71)	2270 (73 76)	2358 (69 33)	3975 (75 80)
Co-operatives	372.24 (21.18)	587 31 (25 32)	759 65 (31.29)	807 39 (26 23)	1043 06 (30 67)	1269 26 (25 20)
Total	1757 24 (100.00)	2319 31 (100 00)	2427 65 (100 00)	3077 39 (100 00)	3401 06 (100 00)	5244 26 (100 00)

Source Third Round Survey DCP Trichur District, 1983
Annual Reports of TDCB 1980-81 to 1984-85

- Note 1. Figures pertaining to co-operatives includes loans advanced by Trichur District Co-operative bank and land mortgage bank, Trichur.
- 2 Figures in brackets refers to percentages

DEMAND AND SUPPLY OF AGRICULTURAL CREDIT -A CASE STUDY OF MADAKATHARA PANCHAYATH

By
RENUKA. S. MENON

ABSTRACT OF A THESIS

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ABSTRACT

The Study viz - 'The Demand and Supply of Agricultural credit - A case study of Madakathara Panchayath' has been carried out to assess the total credit requirements for paddy and other seasonal crops and to assess the extent of credit applied by different credit agencies so as to estimate the credit gap

Hundred farmers consisting ten percent of the population in Madakathara Panchayath were selected at random for detailed survey

Percentage analysis of the cost of cultivation and credit supplied for paddy banana and tapioca revealed that in the case of borrowers from co-operatives, the credit gap was 54.89 per cent, 52.10 per cent and 88.90 per cent for the size classes 1.5 to 2.5 acres, 2.5 acres to 5.0 acres and 5 acres and above, respectively. Commercial banks were not giving loans for paddy cultivation. In the case of banana, as far as borrowers from co-operative are concerned, it was noticed that there was a large credit gap for the size classes 5 acres and above followed by 1.5 to 2.5 acres and below 1.5 acres. In the case of borrowers from commercial banks, the credit gap was just 14.32 per cent for the size-class below 1.5 acres, but there was over financing for the

remaining size-classes ranging from 23 per cent to 71 per cent. Only co-operatives provided finance for tapioca and over financing existing for all size-classes.

It was thus observed that credit availability is a major constraint on farms cultivating paddy and banana