AGRARIAN RESEARCH & TRAINING INSTITUTE

SMALL FARMER CREDIT

A CASE STUDY OF EDANDUWAWA AND TALGAMUWA-ATTAPITIYA GRAMA SEVAKA DIVISIONS IN THE ARTI FIELD LABORATORY, BEMINIWATTE, KEGALLE DISTRICT

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February, 1974

PREFACE

The need for credit especially for small farmers in the island has always been appreciated and over a period of time the country has experimented with several credit schemes. To what extent small farmers have made use of agricultural credit for cultivation purposes and what benefits have accrued to them and the nation have yet not been analysed in depth or detail purely because the effect of any particular institutional change or innovation cannot be examined in isolation from the entire package of institutional services that promote agricultural growth.

The ARTI considered it useful to examine even in a small way the role of small farmer credit in agricultural development in its Field Laboratory area. This study is a Case Study of two Grama Sevaka Divisions and is a forerunner to further detailed in-depth studies to be published on this subject. The two selected Grama Sevaka divisions fall within the area of the Field Laboratory at Bemeniwatte in the Kegalle District where the Institute is undertaking a closely supervised inter-disciplinary examination of the problems of farmers in that area. The study of these two Grama Sevaka divisions was therefore envisaged as an integral part of the work of the Bemeniwatte Field Laboratory.

It is hoped that this study will focus attention on the problems of small farmer credit in Bemeniwatte in particular and the Kegalle District in general.

Director

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19th February, 1974

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CONTENTS

LIST OF TABLES

Chapter 1

INTRODUCTION

Background:

Any definition of a small farm must be related to the average income from the farm and the size of agricultural land holdings available in the country. The case of each country must be judged therefore on its own merits. A definition of small farmers in relation to size of agricultural holdings in Sri Lanka itself is needed. The following table shows the relevant details about the size of holdings.

Table 1. Operators classified according to full time, part time occupations in agriculture and area of land operation (a)

Size of land	No. of full time operators	Income mainly from Agriculture	Income mainly from Non-Agriculture	All Operators Actual No.	(b) %
Under 1 acre	133,130	62,490	221,271	416,891	35.5
1 to under 2 acres	137,979	52,640	64,030	254,649	21.7
2 to 1.5 acres	224,610	54,601	40,020	319,231	27.2
5 to 50 acres	139,771	22,301	15,371	177,443	15.1
50 acres & above	5,451	252	185	5,888	0.5
Total	640,941	192,284	340,877	1,174,102	100

(a) This figure included 380 full time agricultural operators, 280 part time operators deriving income mainly from agriculture and 2830 part time operators deriving income mainly from non-agriculture who held no land but were enumerated as keepers of livestock and poultry in the rural sector.

(b) Source: Department of Census and Statistics Reports on the Census of Agriculture 1962 Vol. I p.33.

In the context of Sri Lanka's situation those operating holdings of sizes less than 5 acres may more appropriately be regarded as small farmers. This quantitative definition of course is an arbitrary one. To make it more objective it may be necessary to examine several aspects like the productivity of the holding, return on investment, incomes and expenditure of farmers etc. However, the scope of the present study does not warrant a deviation into an examination of such issues.

When those operating holdings under 5 acres are regarded as small farmers they account for 980,771 out of a total of 1,174,102 operators in the country, i.e about 84% of the total. Even if those operating holdings less than 2 acres are treated as small

farmers this group constitutes about 57% of the total number of agricultural operators. On an average if 5 persons are regarded as directly dependent on an agricultural operator nearly 50% of the total population can be considered as depending on small farms to a greater or lesser extent for their livelihood. Statistics indicate that the number of small farms has increased. At the 1946 census the average extent per holding was 3.31 acres; but in 1962 this was reduced to 2.68 acres. The increase in the number of holdings has been accompanied by a dwindling in the size of these peasant holdings through the years 1946 to 1962. Whether this is a continuing trend will be confirmed when the results of the 1972 Agricultural Census are known.

The figures above underline the importance of both production and consumption in the small farms sector in a developing economy like that of Sri Lanka. Sri Lanka's per capita income which was Rs 766/- in 1971 rose to only Rs 769/- in 1972, an increase of only 0.4 per cent. In the small farms sector the per capita income and its annual rate of growth are likely to be even less. Low productivity leading to low incomes keeps the small farmers in the so-called vicious circle with all the attendant symptoms and manifestations of poverty. Low consumption levels make the small farmers under-nourished and less fit for the strenuous type of work involved in farming with a traditional technology. Their work output and labour productivity tend to get lower and lower. Improvement of their consumption levels contribute to development in two respects: 1. As a sizeable social class the small farmers get the opportunity to enjoy a better standard of living.
2. Increased agricultural production resulting from improved labour productivity benefits the entire economy since foreign exchange needed for food imports could be utilised for other developmental purposes. However, to achieve these benefits of development, agricultural production in the small farms sector has to be increased. This calls for the adoption of new methods of agricultural production by the small farmers. But a traditional agriculture cannot be so easily modernised in this manner unless the small farmers are able to make the requisite capital investments. The small farmers of Sri Lanka do not have sufficient resources on their own to make such investments. According to the Consumer Finance Survey of 1963, during a period of 2 months the total consumption expenditure per spending unit in the rural sector, which is mostly the small farms sector, was Rs 324.66. This expenditure was 98.03% of income.

Thus only a small percentage seems to be available for any investment. Though this may be so for bigger farmers it is unlikely that savings of even such small magnitudes are available for small farmers. After ten years, today with the increase of population and rising prices the small farmers could surely be worse off. Therefore to enable him to produce more, some of the requisite additional capital has to be provided in the form of credit. It is this credit that is commonly labelled as agricultural credit. The title of the present report " Small Farmer Credit " means this type of credit.

Credit has been made available to the small farmers of Sri Lanka since about 1906, i.e. even prior to the formal beginning of the Co-operative Movement in the country.

The history of small farm credit is therefore about 70 years old. During this period the amount of credit granted per farmer has been gradually increased. At first credit was given in cash, later in kind. Loans were made available under three categories - long-term, medium-term, and short-term - for work operations, purchase of materials, machinery, equipment and animals. Initially loans were administered by the Food Production Department, subsequently they were handled by the Agrarian Services Department and now by the Banks. At all times Co-operatives were made to act as agents in distributing and recovering loans. The period of repayment was often extended, and instances where the loans were completely written off were not exceptional. The interest rate too has been varied from time to time from 2% to as much as 12%. Besides the usual non-institutional sources, the farmers are now able to get credit from several institutional sources: Co-operative Credit Societies, Multi-Purpose Co-operative Societies, Rural Banks, and since more recently, the Bank of Ceylon. With a view to making the loan procedures efficient, the provisions of the Co-operative Ordinance also have been modified from time to time. A survey of all these measures pertaining to the policy on agricultural credit gives the impression that there has been an over-emphasis on credit extension as a means of increasing agricultural production in the small farm sector. Nonetheless, there seems to be a general feeling of dissatisfaction over the achievement in credit use and the performance in agricultural production itself. Moreover, institutions which are expected to play a leading role in the provision of credit to small farmers have developed certain apprehensions too. Perhaps the statistics in the table overleaf may adequately explain the reasons for the development of this sceptical attitude. As seen from the table, since 1947 the quantum of loans granted have shown an increasing trend with intermittent fluctuations. Except during the four years, 1954-55, 1960-61, 1961-62 and 1967-68, recoveries during this 22 year period have been less than the amounts granted. The balance outstanding has been steadily rising from Rs 1,812,000 in 1947-48 to Rs 76,569,000 in 1968-69. The results of the new agricultural credit scheme from 1967/68 to 1972/73 Maha do not show any significant variation in this characteristic pattern.

Table 2. Loans granted to Co-operative Societies#, amounts recovered annually and Balance Outstanding at end of each year

Year	Loans Granted	Recoveries	Balance Outstanding
1947-48	4,356,000	2,544,000	1,812,000
1948-49	5,563,000	2,040,000	5,335,000
1949-50	4,247,000	3,654,000	5,924,000
1950-51	6,695,000	4,147,000	8,472,000
1951-52	8,836,000	7,420,000	9,888,000
1952-53	15,864,000	7,248,000	18,324,000
1953-54	11,709,000	11,305,000	18,728,000
1954-55	14,674,000	15,030,000	18,372,000
1955-56	18,370,000	17,512,000	19,230,000
1956-57	21,934,000	21,787,000	19,377,000
1957-58	13,809,000	12,544,000	20,642,000
1958-59	18,382,000	13,022,000	26,022,000
1959-60	13,961,000	13,815,000	26,148,000
1960-61	11,406,000	13,395,000	24,159,000
1961-62	12,618,000	13,134,000	23,643,000
1962-63	10,667,000	9,462,000	24,848,000
1963-64	34,588,000	16,200,000	43,200,000
1964-65	27,555,000	16,517,000	54,238,000
1965-66	28,138,000	21,324,000	61,052,000
1966-67	32,307,000	14,825,000	78,534,000
1967-68	2,630,000	6,146,000	75,018,000
1968-69	3,078,000	1,527,000	76,569,000*
	321,387,000	244,778,000	

* Of this sum loans granted prior to 1.10.58 amounting to Rs 5,784,000 have been written off leaving a balance of Rs 70,769,000 outstanding.

Source: Administration Report of the CAS for 1968-69 Part I, p. KK72.

It is, however, clear that the declining trend in the utilisation of credit is accompanied by a low level of repayment. The rate of default has continued to increase. This rate which was only 14.0% in Maha 1967/68 has increased to 50.4% in Maha 1970/71. Although the adoption of credit policies in the past seems to be guided by a belief that more credit has to be provided to the small farm sector to step up production, a significantly positive corelation between these two variables cannot be observed from the statistics in the following table:

le 3. Loans Granted and Yields Obtained in Paddy#

Year	Loans Granted	Yield Obtained Bushels in '000	Harvested Area in Acres	Yield per Acre in Bushels
1961-62	12,618,000	48,069	1,492,263	37.86
1962-63	10,667,000	48,154	1,525,343	37.94
1963-64	34,588,000	50,506	1,534,720	38.76
1964-65	27,555,000	36,252	1,242,631	34.41
1965-66	28,138,000	45,787	1,512,312	35.48
1966-67	32,307,000	54,917	1,566,967	41.43
1967-68*	2,630,000	64,569	1,634,138	46.02

Source: Based on statistics extracted from Administration Report of the CAS 1968-69 Part I, p. KK72 and Statistical Pocket Book of Ceylon, 1969 p.57.

* (In 1967-68 the New Agricultural Credit Scheme came into operation and loans were made available by the People's Bank)

During the years 1961-62 and 1962-63 the loans granted were much less than those during the years 1964-65 and 1965-66; but the yield during the former years has been higher than during the latter years.

Many have been inclined to think that agricultural credit so far has not contributed appreciably to agricultural development in Sri Lanka. Certainly, it is out of this postulated general feeling of dissatisfaction that the need for a study of the nature presently undertaken arises. Moreover, such a study seems opportune in view of the latest trends in the field of agricultural development as may be observed from the enactment of very important pieces of legislation, i.e. Land Reforms Law, Agricultural Lands Law, Agricultural Productivity Law and Agricultural Insurance Law. These Acts taken together lead to the adoption of an integrated and comprehensive approach to agricultural development in Sri Lanka for the first time in her recent history of economic development.

To avoid the pitfalls of the past and to make the new strides in agricultural development steady, it is clear that credit for the small farm sector has to be successfully organised. For this the right type of policy measures have to be identified and implemented. It is here that a proper diagnosis of the problems of small farm credit becomes a necessary prerequisite. Unfortunately in Sri Lanka studies made in this field are scanty. This may partly be due to the paucity of data and information relating to credit in the rural sector. As attempts to fill this lacuna two sample surveys on an island-wide basis were conducted, one in 1957 and the other in 1969. Besides these, from time to time Committees appointed by the government have examined the question of agricultural credit in the small farm sector. All these attempts however, have resulted in the identification of generalities for the country as a whole. It is true that the analysis of past survey data presents details in respect of sizes of holdings, occupational groups, capital and current expenditure

and interest rates etc. But these alone are not sufficient. In fact such analysis by itself does not provide adequate guidance for effectively implementable policies.

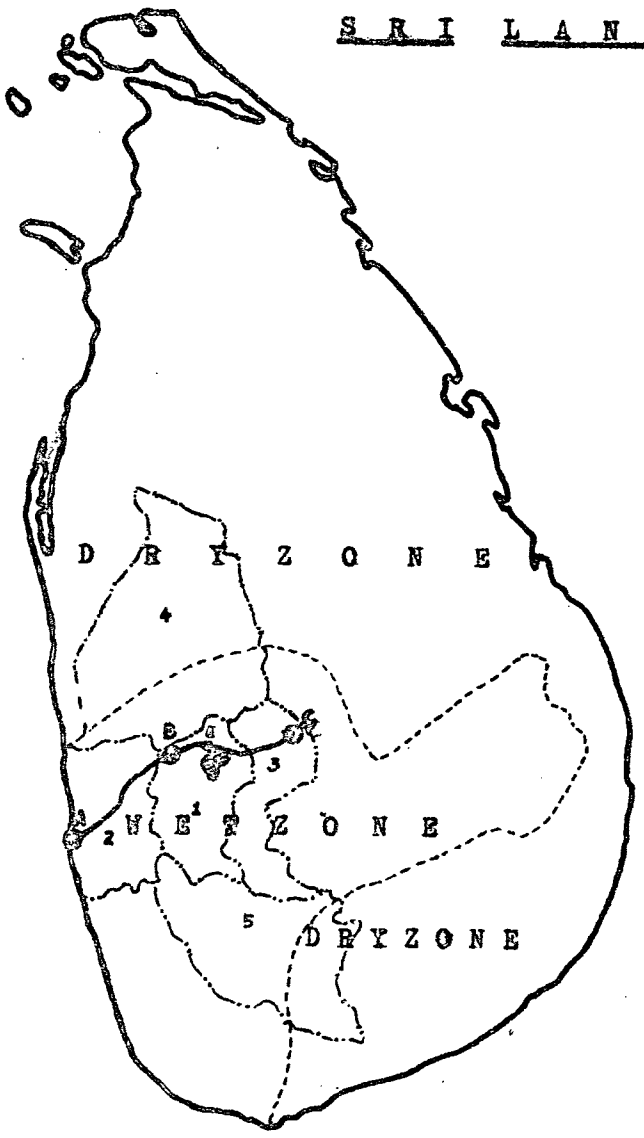
Farmers belonging to groups, identifiable only on the basis of their operational characteristics, may be distributed throughout the island. In generalising about such groups, many important characteristics tend to get lost. Moreover, as is observed from the previous surveys specific farmer groups, like the small farmers, may not be identified in terms of definite areas and regions, which vary agriculturally. But such knowledge is essential for formulating more practicable policies. When farmer groups and their operational characteristics are associated with specific regions or areas at a micro level, the details that tend to get lost in broader generalisations are retained. The study also could be made more area specific. This is precisely what is needed in searching for ways and means to promote agricultural development. Macro surveys of the nature referred to earlier have not been able to fulfil these requirements. The survey of 1957 was conducted for the purpose of preparing the Agricultural Plan 1958. But the credit policy that was implemented after 1958 has not proved to be that successful. It may be at least partly a result of over generalisation.

The problems of agricultural credit firstly are different from area to area depending on their physical and socio-economic environment. It is considered therefore that the problem is better approached from the level of micro studies. Hence to make the findings relevant to the whole of Sri Lanka a number of studies on the basis of distinctly identifiable areas may have to be conducted. The present study is only one of such possible studies. Being a case study it may be considered as representative of the Kegalle district in particular and the Wet Zone in more general terms. These generalities are expected to be identified in the course of the study itself.

Objectives:

The significance of the present study is further enhanced as the area chosen for the study lies within the field laboratory of the Agrarian Research and Training Institute. The study restricted to this area could be pursued in greater detail to formulate a design of experimental policy for further testing and verification under particular field conditions. From this angle the study may even be regarded as a pioneering effort, for policy experimentation in a restricted area before implementation has never been tried out in Sri Lanka earlier. The study served the added purpose of building up the concept of policy experimentation within a field laboratory of the sort already set up within the Beminiwatte Agricultural Productivity Committee area in the Kegalle district.

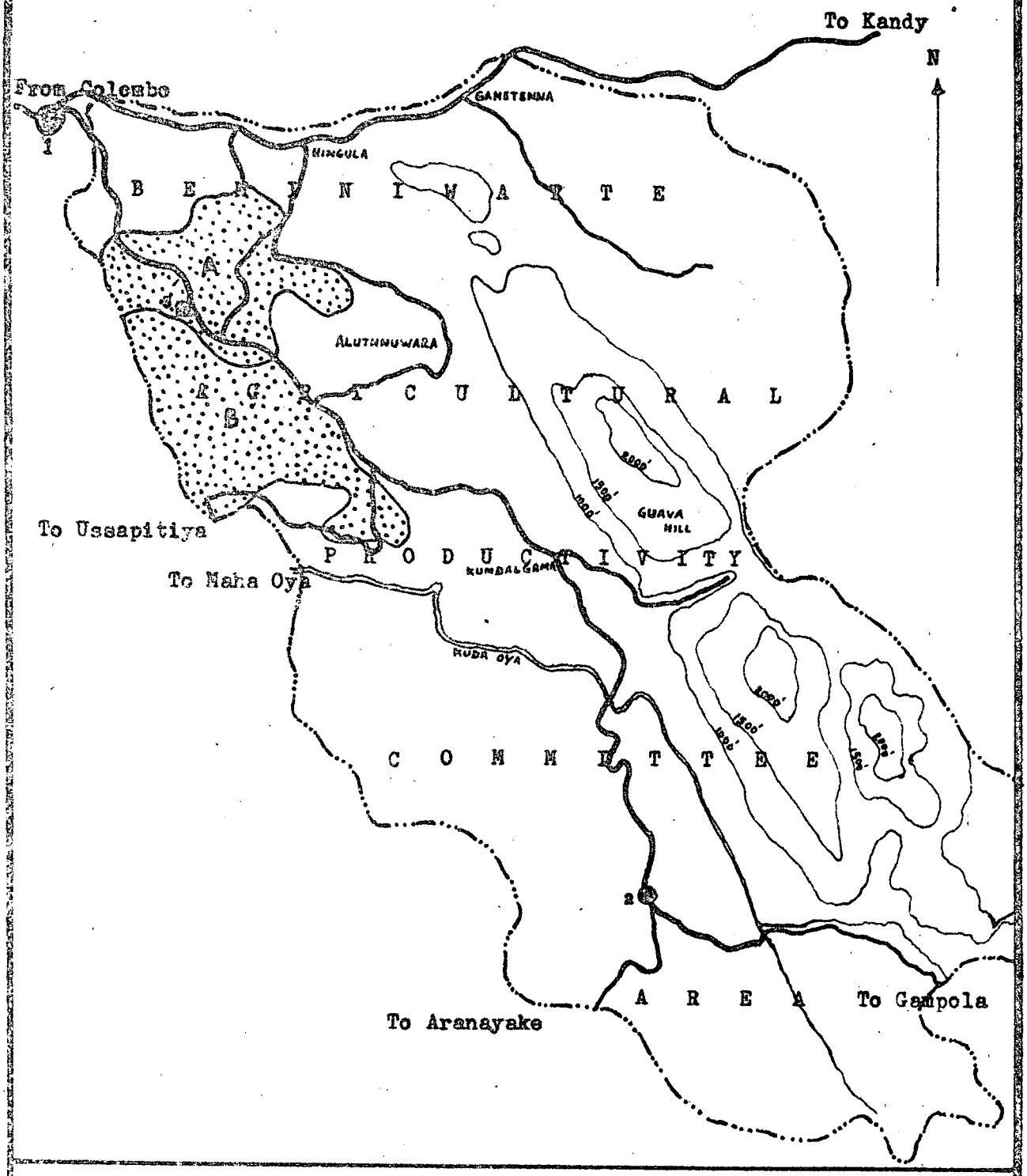
LOCATION OF THE BEMINIWATTE AGRICULTURAL PRODUCTIVITY COMMITTEE AREA



Wet/Dry Zone Boundary	C Kandy
District Boundaries	1 Kegalle District
Colombo/Kandy Main Road	2 Colombo District
Beminiwatte A.P.C. Area	3 Kandy District
A Colombo	4 Kurunegala District
B & E Kegalle & E.Mawanella	5 Ratnapura District

Fig. 1

LOCATION OF THE SURVEY AREA IN THE AREA OF OPERATION OF THE BEMINIWATTE AGRICULTURAL PRODUCTIVITY COMMITTEE



Survey Area — A. Edanduwawa, B. Talgamuwa/Attapitiya

Main Roads

Motorable Minor Roads

1 Mawanella Town

a Hemmatagama Town

3 Beminiwatte Agricultural Productivity Centre

A. Edanduwawa & B. Talgamuwa/Attapitiya are two Grama Sevaka Divs.

Fig. 2

The postulation in the study is that the extension of agricultural credit has been less successful than it might have been because the constraints that the small farmers face have not so far been removed. The study attempts to highlight these constraints in an order of priority and make some recommendations to serve as a basis for the formulation of a more effective agricultural credit scheme especially in respect of Wet Zone areas having characteristics similar to the Kegalle district.

Chapter 2

METHODOLOGY

Design:

The study is almost wholly based on a field survey conducted within the area of operation of the Beminiwatte Agricultural Productivity Committee (APC) in the Kegalle district (see map No. 1). For the survey however, only 2 Grama Sevaka divisions (1. Thalgamuwa/Attapitiya and 2. Edanduwewa - see map No. 2 - in the APC area were selected. Their selection was made more on the consideration of operational convenience than any other criterion.

The list of Agricultural Operators prepared in the first stage of the Census of Agriculture 1973 was used to prepare a frame of operators for use in the survey. An agricultural operator was defined for this purpose as the person responsible for operating the holding or livestock. He may carry out the operation by himself or with the assistance of others or simply direct the day to day operations. Information relating to the type and size of holding and the tenurial status of the operator of the holding was available in the schedule.

Based on this information, a frame of agricultural operators for use in this survey was prepared by eliminating the agricultural operators who operated less than $\frac{1}{2}$ acre of home garden only from the list of agricultural operators prepared for the census. The frame was thus prepared in order to conform to the definition of the agricultural operator as given in the Agricultural Productivity Law. The basic frames for Thalgamuwa/Attapitiya and Edanduwewa consisted of 408 and 264 operators respectively.

Within each G.S division two main groups of operators were considered as distinct areas of study.

Group 1 - Operators of home garden only
Group 2 - Operators of agricultural land and home garden or agricultural land only

The population of operators for each group within the two G.S divisions was as follows:

G.S Division	Group 1	Group 2	Total
Thalgamuwa/Attapitiya	84	324	408
Edanduwewa	70	194	264

A stratified random sampling design was adopted to select the sample within each group.

Each of the main groups was sub-divided into two groups (a) owners and (b) tenants and each of these groups was further sub-divided by size of holding groups. For the main Group 1 (the home garden only group) the size of holding groups were as follows:

0.5 to less than 1 acre
1 acre " 2 acres
2 acres " 5 acres
5 acres " 10 acres
10 acres and above

The main Group 2 was classified with an additional size of holding group: 'less than 0.5 acres'.

Thus Groups 1 and 2 were divided into 10 and 12 strata respectively, the strata being defined by tenurial status and size of holding.

Considering the resources available it was decided that the total number to be interviewed within each group should be approximately equal to 15% of the total number in each group. Having decided on a total sample size for the group the sample size for each stratum was at first determined by a proportionate allocation of the sampling unit among the strata. However, in strata where the population was very small sample sizes of either one or two operators were allotted and an adjustment made in the total sample size. This meant that the sampling fractions were not uniform for all strata.

Having determined the sample size for each stratum a simple random sample of the required size was chosen for each stratum by the use of Tables of random numbers. Reserves were also chosen for each stratum so that if an operator already chosen in the sample had been excluded for any reason, he could be replaced by one from the reserve list for the stratum to get the total allotted sample size for the stratum.

The information collected through the interviews held with the operators, on type and size of holding and tenurial status was found to be at variance with the corresponding information contained in the census schedule based on which the operators were classified into the main groups and strata. Hence, the sample for each main group was treated as a simple random sample and not as a stratified random sample for analysis of the data collected. The survey data was however utilized to classify the operators into the two main groups of interest and also to classify them by tenurial and size of holding groups for purpose of studying credit, income etc., within the different groups and comparisons between groups.

The working sample was constituted of 105 operators (Thalgamuwa/Attapitiya 65 + Edanduwewa 40). The reserve sample contained 54 operators (Thalgamuwa/Attapitiya 33 + Edanduwewa 21). For details of operators in the sample see the Appendix.

The questionnaire used (see Appendix) as a guide for the interviews was designed in conformity with the integrated approach to the study of rural credit. Thus it seeks to elicit information on the following aspects:

1. Family size, its composition, employment and literacy
2. Land holdings, their tenurial status, and fragmentation
3. Income and expenditure of the farming enterprise separately for paddy, highland crops and livestock, income from employment and trades and expenditure on family consumption and ceremonies during the two cultivation years 1971-72 and 1972-73
4. Adoption of modern agricultural practices both for paddy and highland cultivation during the last cultivation year, i.e. 1972-73
5. Capital formation and disinvestment during the two cultivation years 1971-72 and 1972-73
6. Details of indebtedness during 1971-72 and 1972-73
7. Progress in the repayment of debts
8. Effectiveness of existing rural institutions in serving the cultivator needs.

Accuracy of Data:

Data and information collected on the above aspects by means of the questionnaire interviews were further supplemented with information collected by means of discussions with the village level officers and officials of Co-ops. and CCs* in the area. Records of loan transactions kept by the Co-operatives also were used to ascertain the position in respect of credit transactions.

Except for a few operators, all the interviewing was done by the writers themselves during the period mid-October to mid-November 1973. As is usually the case, most of the answers provided by the interviewed are based on their memory which seemed to be quite fresh in respect of the details relating to the last season of cultivation. Although an attempt was made to elicit as accurate information as possible by checking their answers with other related situations and circumstances, still details in respect of events two or three seasons past tend to be more impressionistic. Nevertheless, based on such impressionistic details it was possible to obtain fairly reliable approximations on the details sought. In this it is true that the writers had to use a good deal of their judgement by cautiously observing the living conditions of the respective farm families in their localities. As the writers themselves have spoken with these operators and also visited their houses and fields, the picture emerging out of the approximations referred to above can be examined and evaluated avoiding the usual danger of interpreting statistics without a first hand knowledge and experience of the situation to which the statistics relate.

* Cultivation Committees

Limitations:

However, this is not to deny the occurrence of certain limitations resulting from the non-availavility of factual information preferably in recorded form. It is believed that limitations of this sort are unlikely to affect the overall diagnostic analysis of credit use in the area under study.

Chapter 3

CHARACTERISTICS OF CREDIT TRANSACTIONS

An attempt will be made in this Chapter to present a picture of the position that prevailed during the period 1971/72 and 1972/73 in respect of credit transactions in the survey area. The characteristics of borrowing of each Grama Sevaka division (hereafter called G.S division) examined separately, would be followed by a review of the overall position in the area as a whole.

1. Proportion of Borrowers:

Agricultural credit in Sri Lanka has been more associated with lowland or paddy cultivation than anything else. This, however, is not to deny that credit is made available for the production of subsidiary crops too; but apart from the fact that it is a much later development in the history of agricultural credit in Sri Lanka, such credit constitutes a very small proportion of the credit provided for paddy production. Therefore, the analysis here is firstly focussed on the credit position in relation to lowland cultivation.

In the Edanduwewa G.S division, it was stated earlier that, the sample of respondents interviewed consists of 40 agricultural operators. Out of these only 32 cultivate lowland. During 1971/72 and 1972/73 only 11 and 5 respondents respectively had made any borrowings (see Table 3 - I).

Table 3 - I) Amount of Borrowings classified by sources of borrowing during 1971/72 and 1972/73

Grama Sevaka's Division: Edanduwewa

Period		Sources: Co-operative	Friends & Relatives	Private Lendings	All Sources	No. of Borrowers
1971/72	Amount Rs:	-	15,584*	-	15,584	11
	%		100.0	-	100.0	
1972/73	Amount Rs:	250	1,112	5,000	6,362	05
	%	3.9	17.5	78.6	100.0	
Total	Amount Rs:	250	16,696	5,000	21,946	16
	%	1.1	76.0	22.8	100.0	

* Also includes one case of borrowing of Rs 1000 on leasing out the land (.75 acres for a period of 8 years).

As a proportion it can be stated therefore, that in Edanduwewa G.S division only 34.4 and 15.6 per cent of the paddy cultivators have taken loans in 1971/72 and 1972/73 respectively. This accounts for an average of 25 per cent over the two year period. If the total number of respondents interviewed in Edanduwewa G.S division are taken, this percentage goes down further.

The number of respondents cultivating lowland in the Thalagamuwa/Attapitiya G.S division is 53 out of a total of 65 respondents interviewed. Borrowings have been made by 11 and 18 lowland farmers during 1971/72 and 1972/73 respectively (see Table 3 - II). Hence the borrowers constitute 20.8 and 40.0% in the two years under consideration. On average, in Thalagamuwa/Attapitiya 27.4% of the lowland cultivators obtained credit during the two year period. Both G.S divisions taken together, the percentage of borrowers is 26 approximately. Therefore, by the number of farmers in the survey area only a little over 1/4 made any borrowings during the two year period under study in the present investigation.

Table 3 - II Amount of Borrowings classified by Sources of Borrowing during 1971/72 and 1972/73

		G.S. Division Thalgamuwa/Attapitiya							
Period		Co-op.	Friends & relatives	Traders	Landlords	Private lenders	Others	Total	No. of Borrowers
1971-72	Amt.Rs	2175	7887	-	360	-	72	10494	11
	%	20.7	75.2	-	3.4	-	0.7	100	
1972-73	Amt.Rs	4000	7231[a]	1500	750	75	1200*	14756	18
	%	27.1	49.0	10.2	5.1	0.5	8.1	100	
Total	Amt.Rs	6175	15118	1500	1110	75	1272	25250	29
	%	24.5	59.9	5.9	4.4	0.3	5.0	100	

* One respondent was a bus conductor who borrowed an amount of Rs 1,100 from CTB for house construction and consumption

Also includes 2 cases of borrowing (Rs 1,400 and Rs 1,500) on leasing out the land (1.50 and 1.25 acres) for periods of 2 and 5 years respectively and one case of borrowing (Rs 1,000) on mortgaging out the land (.25 acre) for an unspecified period

2. Amounts Borrowed:

The 16 loans made in Edanduwewa during the two year period amount to Rs 21,946/-. The average per loan is Rs 1,372/-. Although the number of loans decreased during 1972/73, the average amount per loan during the two year period in Edanduwewa remains more or less at the same level. In Thalagamuwa/Attapitiya the average amount borrowed per loan is Rs 871/-. This also has not changed very much over the two year period. Thus, the only important difference between the two G.S divisions is that in Edanduwewa the average of loans per borrower works out to Rs 1372 whereas in Thalgamuwa/Attapitiya it is Rs 871 (see Tables 3 - I and 3 - II).

3. Sources of Borrowings:

In Edanduwewa the most popular source of borrowing is friends and relatives. This source accounts for 76% of total borrowings, while private money lending sources comes next with 22.8%. The amount borrowed from the co-operative is only 1.1%. Hence in Edanduwewa G.S division the Co-operative is the least popular source of borrowing even among the smaller number of borrowers who resorted to borrowing during this period. The position during 1971/72 is very much worse than that in the following year as 100% of the borrowings happened to be only from friends and relatives. In Thalagamuwa/Attapitiya the position is not too different in respect of the popularity of friends and relatives as a source of borrowing. But the co-operative lending takes second place with a percentage of 24.5. The proportion borrowed from friends and relatives is 59.9%. Private lending sources (including traders and landlords)with 10.6% take third place. While borrowing from Co-operative and friends and relatives has risen in 1972/73 over that of 1971/72, the proportion of loans borrowed from friends and relatives has decreased by about 26.2%. In this change the borrowers have gone more to the private lenders than the co-operative, because the increase of co-operative lending is only by 6.4% whereas the increase of private lending over 1971/72 is by 10.7%. This shows that when the borrowers change over from friends and relations for borrowing they prefer the private lenders to the Co-operative. This trend is observable in both G.S divisions (see Tables 3 - I and 3 - II).

4. Analysis of Loans:

Loans made by borrowers in Edanduwewa during 1971/72 and 1972/73 are analysed by size classes of lowland holdings as shown in Tables 3 - III and 3 - IV).

Table 3 - III. Amount of Borrowings classified by Sources of Borrowings and Land Size Classes of Operators during 1971/72 and 1972/73

G.S.Division: Edanduwewa

Land Size Classes	Cooperative		Friends and Relations		Private Lendings		All Sources		No. of Borrowers	
	1971/72	1972/73	1971/72	1972/73	1971/72	1972/73	1971/72	1972/73	1971/72	1972/73
0 - 0.5	-	-	3,150	300	-	-	3,150 (20.2)	300 (4.7)	3	1
0.6 - 1.0	-	-	9,822	222	-	5,000	9,822 (63.0)	5,222 (82.1)	4	2
1.1 - 2.0	-	-	1,612	-	-	-	1.612 (10.4)	-	3	-
2.1 - 4.0	-	250	1,000	590	-	-	1,000 (6.4)	840 (13.2)	1	2
Total	-	250	15,534	1,112	-	5,000	15,584 (100.0)	6,362 (100.0)	11	5

Bracketed figures are the percentages of total borrowings by each land size class.

In 1971/72 farmers cultivating paddy holdings 1 acre or less have borrowed 83.2% of the total loans. As the holding size increases above 1 acre there is a tendency for less borrowing. For example, in the holding size class 1.1 - 2.0 acres the proportion of borrowings is 10.4% while in the holding size class 2.1 - 5.0 acres the percentage comes down to 6.4. In 1972/73 also the same characteristic is observable: about 87% of the loans are borrowed by the farmers in the two lower holding size classes. These smaller farmers also have not gone to the Co-operative for loans. It looks as if the relatively more affluent farmers in Edanduwewa have access to co-operative loans.

In Thalagamuwa/Attapitiya on the contrary, in 1971/72 it is the farmers cultivating lowland holdings above 1 acre who have borrowed about 90% of the loans. About 77% of this is from friends and relatives and 22% from the Co-operative. Borrowings of this group of farmers from private lenders is as insignificant as 1%. Smaller farmers (i.e less than 1 acre holdings) have borrowed their entire loan requirement from friends and relatives and it is about 10% of the total borrowings of the year. This situa- also suggests that relatively bigger farmers have more access to co-operative credit. Smaller farmers may be considering friends and relatives as more reliable and also a safer source of borrowing. In 1972/73 farmers cultivating more than 1 acre have borrowed more than 50% of the total borrowings in the area; but the smaller farmers' share of borrowing being about 40%, has not fluctuated as much as that of the bigger farmers. In this year also the smallest lowland holders have not got any loans from the Co-operative. Farmers cultivating more than 1 acre on the other hand have borrowed from all the three sources referred to earlier, i.e friends and relatives, Co-operatives and private money lenders who include traders, landlords and other professional lenders (see Table 3 - IV).

Table 3 - IV. Amount of Borrowings classified by Sources and Land Size Classes of Operators during 1971/72 and 1972/73

(Lowland)
G.S. Division: Thalgamuwa/Attapitiya

Land Size Class	Cooperative		Friends and Relations		Traders		Landlords		Private Lendings		Others		All Sources		No. of Borrowers	
	71/72	72/73	71/72	72/73	71/72	72/73	71/72	72/73	71-72	72-73	71-72	72-73	71-72	72-73	71-72	72-73
0 - 0.5	-	-	87	334	-	-	-	-	-	75	-	-	87 (.8)	409 (2.8)	2	4
0.6 - 1.0	-	3,000	1,000	2,050	-	-	-	-	-	-	-	1,100	1,000 (9.5)	6,150 (41.7)	2	6
1.1 - 2.0	2,175	1,000	2,300	2,947	-	-	-	250	-	-	72	100	4,547 (43.4)	4,297 (29.1)	4	5
2.1 - 5.0	-	-	4,500	1,900	-	1,500	360	500	-	-	-	-	4,860 (46.3)	3,900 (26.4)	3	3
Total	2,175	4,000	7,887	7,231	-	1,500	360	750	-	75	72	1,200	10,494 100.00	14,756 100.00	11	18

Figures within brackets are percentages of total borrowings by each land size class.

On the whole the poorest farmers seem to depend mostly on friends and relatives for loans and invariably almost every year they are compelled by their adverse circumstances to borrow. If the response from this source is not in their favour, they go more to the private money lenders than to the Co-operatives. Relatively more affluent farmers on the other hand borrow less. They also prefer first to seek the assistance of their friends and relatives. Failing this of course they are more able to get loans either from the Co-operatives or private money lenders. Institutional credit through the Co-operatives still seems to play a less effective role among the farmers in general. Its effect on smaller farmers is more or less nil.

Analysis by tenurial categories of farmers in Elanduwewa shows (see Table 3 - V), that in both years more than 85% of the borrowings have been made by tenants and owners of paddy land; in 1971/72 the percentage of borrowing of owners is 84.4 where as in 1972/73 that of tenants is 83.3. Borrowings made by tenant owners/owner tenants (hereafter called TO/OT) in both years is as low as less than 7%. Owners have obtained all their loans from friends and relatives. Tenants have borrowed more than 90% from private lenders. TO/OT farmers seem to have gone to both friends and relatives, and the Co-operative; their borrowings from the former and the latter are 66.7% and 33.3% respectively.

In Thalgamuwa/Attapitiya farmers belonging to the owner class have borrowed more than 50% of the loans during the two year period. Tenant farmers have borrowed less than any other tenurial group (See Table 3 - VI).

Table 3 - V. Amount of Borrowings classified by Sources and Tenurial Categories of Operators during 1971/72 and 1972/73

G.S. Division: Edanduwewa

Tenurial Category	Cooperative		Friends and Relations		Private Lendings		All Sources		No. of Borrowers	
	1971/72	1972/73	1971/72	1972/73	1971/72	1972/73	1971/72	1972/73	1971/72	1972/73
Owners	-	-	13,150	312	-	-	13,150 (84.4)	312 (4.9)	5	2
Tenants	-	-	1,434	300	-	5,000	1,434 (9.2)	5,300 (83.3)	5	2
Tenant Owners/ Owner Tenants	-	250	1,000	500	-	-	1,000 (6.4)	750 (11.8)	1	1
Total	-		15,584	1,112	-	5,000	15,584 (100.0)	6,362 (100.0)	11	5

Table 3 - VI. Amount of Borrowings classified by Sources and Tenurial Categories of Operators during 1971/72 and 1972/73

(Lowland)
G.S. Division
Thalgamuwa/Attapitiya

Tenurial Category	Cooperative		Friends and Relations		Traders		Landlords		Private Lendings		Others		All Sources		No. of Borrowers	
	71-72	72-73	71-72	72-73	71-72	72-73	71-72	72-73	71-72	72-73	71-72	72-73	71-72	72-73	71-72	72-73
Owners	675	-	5,487	5,184	-	1,500	-	-	-	75	-	1,100	6,162 (58.7)	7,859 (53.3)	6	10
Tenants	-	500	-	100	-	-	360	500	-	-	-	-	360 (3.4)	1,100 (7.5)	1	2
Tenant Owners/ Owner Tenants	1,500	3,500	2,400	1,947	-	-	-	250	-	-	72	100	3,972 (37.9)	5,797 (39.2)	4	6
Total	2,175	4,000	7,887	7,231	-	1,500	360	750	-	75	72	1,200	10,494 (100)	14,756 (100)	11	18

Figures within brackets are percentages of total borrowings by each tenurial category

The share of borrowing of TO/OT class of farmers in this area is comparatively higher than that of Edanduwewa. In Thalgamuwa/ Attapitiya the borrowings of owners in both years are significantly higher than those of tenants. Tenants seem to be going more to the landlords and friends and relatives than Co-operatives. for their loan requirements. In 1971/72 tenants borrowed only from the landlords; but in the subsequent year more of co-operative loans were used instead of borrowing from friends and relatives and also landlords. Nevertheless, the hold of the landlords on the tenants in the matter of providing credit does not appear to be completely relaxed. Owners of paddy land in the first year got all their credit from the Co-operative and friends and relatives (approximately 11%and 89%). In 1972/73, however, the owners have not borrowed from the Co-operative at all. The proportion of borrowing from friends and relatives also decreased from 89% to 66% and for the balance of total borrowing for the year, the owners also have gone to the traders and other private money lenders. In both years the TO/OT farmers borrowed more than 90% from the Co-operative and friends and relatives. In 1972/73 the share of borrowing from the Co-operative increased up to 60% which in the earlier year was the share of borrowing from friends and relatives. Taking both G.S divisions together, the tenants and owners seem to borrow more than the TO/OT farmers. Tenants borrow mostly either from landlords or friends and relatives. Owners also prefer friends and relatives; next to this source they tend to borrow from any of the other sources which meet their credit requirements without much inconvenience and also as expeditiously as possible. There is a lesser amount of borrowing by the TO/OT farmers and they have greater access to the Co-operative; their dependence on friends and relatives for credit therefore is relatively less than that of the other tenurial groups. Thus the farmers cultivating lowland holdings below 1 acre, as well as the tenants, have greater credit needs. To fulfil these they have to depend mostly on friends and relatives. Co-operatives seem to have neglected them in this respect. Co-operative credit on the other hand is more readily available to the relatively bigger farmers who also may be the more enterprising ones in that in addition to the lands they own, they also manage to cultivate some land on tenancy basis.

Size of family in Edanduwewa does not seem to have affected the number of loans made in both years. But in Thalgamuwa/Attapitiya more loans are taken by families having four to eight members. In both areas families falling within this size category have borrowed the greater proportion of loans, over 80% (see Tables 3- VII through 3 - VIII).

Table 3- VII. Amount of Borrowings classified by Sources of Borrowings and Family Size during 1971/72 and 1972/73

(Lowland)
G.S. Division: Edanduwewa

Family Size	Cooperative 1971/72	Cooperative 1972/73	Friends and Relations 1971/72	Friends and Relations 1972/73	Private Lendings 1971/72	Private Lendings 1972/73	All Sources 1971/72	All Sources 1972/73	No. of Borrowers 1971/72	No. of Borrowers 1972/73
1 - 2	-	-	712	-	-	-	712 (4.6)	-	2	-
3 - 5	-	-	672	222	-	-	672 (4.3)	222 (3.5)	3	1
6 - 8	-	-	11,500	390	-	5,000	11,500 (73.8)	5,390 (84.7)	2	3
9 - 11	-	-	1,700	-	-	-	1,700 (10.9)	-	3	-
12 and above	-	250	1,000	500	-	-	1,000 (6.4)	750 (11.8)	1	1
Total	-	250	15,584	1,112	-	5,000	15,584 (100)	6,362 (100)	11	5

Bracketed figures are the percentage of total borrowings by each family size class

Table 3 - VIII Amount of Borrowings classified by Sources of Borrowings and Family Size during 1971/72 and 1972/73

(Lowland)
G.S. Division: Thalgamuwa/Attapitiya

Family Size	Cooperative		Friends and Relations		Traders		Landlords		Private Lendings		Others		All Sources		No. of Borrowers	
	71/72	72/73	71/72	72/73	71/72	72/73	71/72	72/73	71/72	72/73	71/72	72/73	71/72	72/73	71/72	72/73
1 - 2	-	-	75	10	-	-	-	-	-	-	-	-	75 (.7)	10 (.1)	1	1
3 - 5	2,175	3,500	4,500	1,400	-	1,500	-	-	-	-	-	-	6,675 (63.6)	6,400 (43.4)	4	4
6 - 8	-	500	3,300	5,797	-	-	360	750	-	-	72	1,200	3,732 (35.6)	8,247 (55.8)	5	11
9 - 11	-	-	12	24	-	-	-	-	-	75	-	-	12 (.1)	99 (.7)	1	2
12 and above	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	2,175	4,000	7,887	7,231	-	1,500	360	750	-	75	72	1,200	10,494 (100)	14,756 (100)	11	18

Bracketed figures are percentages of total borrowings by each family size class.

5. Borrowings in Relation to only Highland:

As stated at the outset in the foregoing sections, the position in respect of borrowings in the survey area was examined in relation to the lowland holdings. The borrowings of those who are cultivating only highland holdings were not examined. In Edanduwewa out of the 8 persons who are cultivating only highland holdings, only 2 persons borrowed during each of the 2 years 1971/72 and 1972/73. The proportion of borrowers is therefore 1/4 of the total number and it is similar to the position observed in relation to the lowland holdings (see Table 3 - IX).

In Thalgamuwa/Attapitiya, the number of farmers operating only highland is 12 out of the total number of 65 respondents interviewed as referred to earlier. Out of the 12 farmers cultivating only highland during 1971/72, only 2 had made any borrowings, in 1972/73 the number increased slightly to 4. During the two year period borrowers constitute 1/4 of the total number of those cultivating only highland (see Table 3 - X). This shows that borrowing in relation to highland is a little less than that in relation to lowland.

The total amount borrowed in Edanduwewa in 1971/72 is Rs 300/- and per loan it is only Rs 150/-. In 1972/73 the amount per loan however, has increased up to Rs 525/-. Average per loan for the two year period is Rs 337.50. It is lower than that in relation to lowland (see Table 3 - IX).

In Thalgamuwa/Attapitiya the average amount borrowed per loan is only Rs 75/-. But in 1972/73 there was an increase up to Rs 668.75. Taking the two year period together the average amount borrowed per loan in Thalgamuwa/Attapitiya is Rs 487.50 (see Table 3 - X). This also is lower than that in relation to the lowland holdings. So in the area as a whole, it can be concluded that borrowings in relation to the highland are much lower than that in relation to the lowland. Average for the highland per loan is Rs 487.50 but for the lowland it is Rs 871 per year.

Friends and relatives have again been the most popular source of borrowing in Edanduwewa in 1971/72, accounting for 75% of the total. But in 1972/73 all the borrowing has been from private lenders. On average for the two year period private money lenders including traders have provided 83.4% of the total amount of loans, the remainder by friends and relatives. The significant feature here is that the Co-operative as a lender is completely out of the scene (see Table3-IX). In Thalgamuwa/Attapitiya borrowings in 1971/72 have been made only from friends and relatives. In 1972/73 also about 50% is borrowed from this same source. Borrowing from the Bank is 34.2% and from traders 14.5%. Therefore, even here there is no Co-operative lending to the cultivators of highland (see Table 3 - X).

In Edanduwewa during 1971/72 all the borrowings have been made by farmers within the highland holding size class 0 - 0.5 acres. In 1972/73 loans were raised by those cultivating holdings less than 1 acre. The holders of land more than 1 acre in size have not

Table 3 - IX. Amount of Borrowings classified by Different Periods (1971/72 and 1972/73) and Sources of Borrowings

(Home Gardens)

G.S. Division: Edanduwewa

Different Periods	Total No. of Borro -wers	Friends and Relations Actual Amount Rs.	%	Money Lenders Actual Amount Rs.	%	Traders Actual Amount Rs.	%	All Sources Actual Amount Rs.	%
1971/72	2	225.00	.75	75.00	.25	-	-	300.00	100
1972/73	2	-	-	50.00	4.7	1,000.00	95.3	1,050.00	100
1971/72) 1972/73)	4	225.00	16.6	125.00	9.3	1,000.00	74.1	1,350.00	100

Table 3 - X. Amount of Borrowings classified by Different Periods and Sources of Borrowings

(Home Gardens)
G.S. Division:
Thalgamuwa/Attapitiya

Different Periods	Total No. of Borrowings	SOURCES: Friends and Relatives Amount	%	Mortgage Bank Amount	%	Traders Amount	%	All Sources Amount	%
1971/72	2	150.00	100.0	-	-	-	-	150.00	100.0
1972/73	4	1,500.00	51.3	1,000.00	34.2	425.00	14.5	2,925.00	100.0
1971/72/73	6	1,650.00	53.7	1,000.00	32.5	425.00	13.8	3,075.00	100.0

borrowed at all (see Appendix C-1). In Thalgamuwa/Attapitiya also the position in this respect during 1971/72 is similar to that of Edanduwewa. But in 1972/73 the situation is different in that the largest share of borrowing is attributable to the relatively bigger land holders, i.e between 5 to 10 acre holdings. They have borrowed from all the three sources: Bank, friends and relatives, and traders. Nevertheless, even in Thalgamuwa/Attapitiya no borrowings have been made from the Co-operative (see Appendix C-2).

In the analysis by tenurial groups it is seen that in Edanduwewa during both years 1971/72 and 1972/73 borrowings were made only by the owners. The sources they have gone to are friends and relatives and money lenders only. The proportion borrowed from each source has varied from one year to the other without showing any specific trend in favour of any particular source as such (see Appendix C-3).

In Thalgamuwa/Attapitiya also the position is very much similar, except for the fact that in 1971/72 owners have borrowed only from friends and relatives; and also in 1972/73 borrowings were made from three sources: Mortgage Bank, friends and relatives, and traders. Even there the proportion of borrowing from friends and relatives is larger than that from the rest (see Appendix C-4). Hence it is seen that in the area as a whole only owners have borrowed. This is because in respect of highland the same tenure system as operating in respect of lowland does not prevail. Apparently, lease holders and mortgagees of highland have not borrowed at all.

Borrowings in Edanduwewa do not show any clear trend in respect of the family size. In 1971/72 the two loans are made by persons having families with four and eight members. In 1972/73 the loans were raised by families with 3 and 7 members. But as the family size increases the amounts borrowed also seem to be increasing, (see Appendix C-5).

In Thalgamuwa/Attapitiya also the position is not very much different except that here even by the amounts borrowed there is no clearly discernible trend (see Appendix C-6).

Analysis of loans by income groups shows that in Edanduwewa in 1971/72 only those drawing an income more than Rs 1,500 have borrowed. Borrowings even by them are mainly from friends and relatives. In 1972/73 on the contrary only those drawing an income less than Rs 1500 have made all the borrowings and all these are from traders and money lenders. It is difficult to see any specific characteristic emerging out of the analysis of income groups in Edanduwewa (see Appendix C-7).

In Thalgamuwa/Attapitiya also the same feature, i.e the absence of any specific feature of borrowing in terms of income groups, is noticeable (see Appendix C-8).

6. Interest Rates:

On borrowing from the Co-operatives as is well known the rate of interest charged is 12%. Out of this the Co-operative pays 9% to the People's Bank from which borrowings are made. There is however, no clear indication whether the net return on the loan to the users in the area is normally above or below the interest rate currently being charged from the members. The rationale for fixing the prevailing rate of interest apparently has been the argument that when loans are extended at lower rates of interest, the borrowers tend to be irresponsible in the use of them. Whether this is a correct attitude in a situation of lending to promote agricultural production still remains unclear.

Borrowing from friends and relatives are mostly interest free. Although the borrowings per respondent during a year adds up to a fair sum, in fact they are composed of borrowings on several occasions of much smaller amounts, varying from about Rs 10 to Rs 50. These are borrowings made in a very informal manner, free of any interest, and also there is no rigidly followed period of repayment. When borrowings of this nature are made from several persons one's credit requirements are fairly easily met. Occasions are not unknown of such loans being easily forgotten. However, when bigger loans are raised from friends and relatives sometimes, depending on the kind of mutual relationship between the parties, some interest is charged either in kind or in cash; if in the former it is mostly in paddy. However, this varies from a very nominal amount to even as much as more than 25%.

However, when borrowings of a different sort are considered, interest rates reaching levels even more than 100% are charged. It could be observed that when a bushel of seed paddy is borrowed at the end of the season $1\frac{1}{2}$ bushels have to be returned. At the rate of Rs 25 (GPS price) a bushel, therefore for every Rs 25 borrowed, a borrower has to pay Rs 12.50 as interest during one season. On this basis the interest per year works out to 100%. But computationally the rate of interest is much higher. Normally, the borrowed seed paddy is returned in about 4 months after the harvest of the 4 to $4\frac{1}{2}$ month varieties. So for 4 months the interest rate is 50% and for the year on this basis it is 150%. Although the farmers are not quite aware of the payment of such high rates of interest due to this being camouflaged, in fact they do pay very high rates of interest without any hesitation when the need for borrowing arises. The interest in certain instances was observed to be as high as even 300% per annum; but the borrowers have not realised it as the repayment was made in two or three months along with the stipulated extra amount that was paid either in kind or in cash in lieu of the borrowing.

7. Usufructuary:

There were three cases of borrowing from friends and relations which stipulated that the borrowers had to surrender the ownership of their land to the lender for a specified period. Leasing out of land is usually to borrow large amounts of money from other farmers. In such cases the lands are retained until both principal and interest amounts are recovered and after the specified period is over the land goes back to the borrower.

There was also one case of borrowing by mortgaging the land. The difference in this case is that only the interest accrues to the lender from the returns. The borrower still has to repay the principal amount in order to regain the ownership of the land. In both these cases the borrower has to sign a written deed in Court and has to bear all the expenses in this connection.

The amount of borrowings of this nature in the area under study varied from Rs 1000 to 1500 for periods of 2 to 8 years. Such borrowings were mainly for consumption expenses including construction of houses, education, food and repayment of old debts.

8. Surety:

Since moderate borrowing from non-institutional sources depends mostly on personal contact and individual dealings, the demand for surety usually does not arise. For larger loans the borrower has to sign a written deed giving his land on surety - with or without actually surrendering the ownership. In the latter case he has to pay a higher rate of interest either in cash or in kind. For co-operative society credit, personal surety of fellow members is needed.

9. Purposes of Borrowing:

Most of the borrowings made have been for different kinds of consumption rather than investment in agriculture. This is naturally to be expected in a context of low income which is hardly sufficient even for fulfilling the basic subsistence needs. Even little borrowings for investment in agriculture are mostly utilised for producing paddy. In spite of the existence of some organisation for agricultural planning it is difficult to say that the use of credit even for paddy production is planned in a way considered desirable by the farmers, let alone its use in other forms of agricultural production. So much so that farmers in the area may have to be considered more as improvisors than as planners of an agri-business. Thus, all of a sudden a farmer finds that others in the 'yaya' cultivate a particular variety of paddy which he does not have. If this is not available at this last hour, as is usually the case, on information picked up from another fellow farmer he rushes to a more affluent farmer to borrow one or two bushels of seed according to the requirement, invariably at whatever rate of interest stipulated by the lender; if the fields are not sown the consequences

are worse: starvation in the ensuing season. Moreover, for a farmer to leave the land uncultivated due to such reasons leads to a loss of face. Similarly if fertilizer is available and this coincides with the time of water availability the farmer will, if money is not available, borrow quickly from a friend or relative and purchase some fertilizer. Now that the buffaloes are scarce and tractor charges are also fairly high farmers seem to be borrowing for hiring buffaloes. Borrowing for highland cultivation is almost non-existent.

10. Repayment:

Repayment of loans is mostly irregular. As far as friends and relatives are concerned this is not so much of a problem: amounts borrowed are small; they are repaid even in small instalments as and when convenient. There is also no interest accumulating even if the payment is a little delayed. In respect of other private money lenders, however, repayment has to be made at the earliest opportunity; otherwise the interest payable accumulates. Hence priority is given to such loans in repayment. As a result the repayment of co-operative loans also tends to get delayed. Loans borrowed from Thalgamuwa/Attapitiya Co-operative remain unsettled. The reasons adduced are crop failure and low income (see Table 3 - XI).

Non-respondents:

The list of defaulters (all non-respondents) from Hemmatagama Primary Co-operative Society was obtained. A few who had defaulted in a large amount were interviewed. According to their version, crop failures associated with reduced income are important reasons for non-repayment. An investigation into their socio-economic conditions reveals that they are above the average residents of the area however in both social and economic status. For example one of them was holding about 10 acres of paddy land, formerly appointed as Village Headman, considered as a leader and social worker; he also contested election for the Local Council. His wife was a school teacher. The amount in default (on the date of survey) was Rs 1129.00 - the highest of all. It is therefore unlikely that crop failures or reduced income are the only important reasons for non-repayment of such loans. Along with other reasons, absence of loyalty towards Co-operatives and a sense of evasiveness on the part of member-borrowers also play an important role in the overall non-repayment situation.

11. General Observations:

Borrowings of larger families in general account for larger amounts, though the frequency of such borrowing is less than that of the smaller families. This is suggestive of a situation that as the family size increases consumption needs expand in a greater proportion than the rise in the family income. This characteristic of course is to be naturally expected if the loans raised are meant

Table 3-XI. Reasons for non-repayment of Co-operative Loans

G.S. Division Thalgamuwa/Attapitiya

Temurial Group	Size of Holdings (Acres)	No. of Borrowers from Co-op.	No. of Respon-ses	Reasons stated for non-repayment of Co-operative loans	
				Crop Failure	Low Income
Owner	.5	-	-	-	-
	5 - 1	-	-	-	-
	1 - 2	1	1	1	1
	2 - 5	-	-	-	-
	All size classes	1	1	1	1
Tenant	.5 -	-	-	-	-
	5 - 1	1	1	-	1
	1 - 2	-	-	-	-
	2 - 5	-	-	-	-
	All size classes	1	1	-	1
Tenant/Owner	.5	-	-	-	-
	5 - 1	1	-	-	-
	1 - 2	1	1	1	1
	2 - 5	-	-	-	-
	All size classes	2	1	1	1
All Temurial Groups	.5	-	-	-	-
	5 - 1	2	1	-	1
	1 - 2	2	2	2	2
	2 - 5	-	-	-	-
	All size classes	4	3	2	3

for different types of consumption purposes, like education of children, treatment of illness and ceremonies like weddings etc. Usually it is from friends and relatives that farmers borrow for these needs without much hesitation. For purposes of agricultural production it is easier to borrow from these sources the required amount in instalments as and when the need occurs. However, as to why there is no commensurate income rise as the family size expands is a question that may have to be examined closely by means of an employment survey in the peasant sector preferably in the survey area itself.

In terms of income status as the tenants have to forego a share of their produce to the landlords, ultimately their lowland income tends to be less than or resemble that of the owner operators having holdings in the same size class. Due to this position the grouping of farmers on the basis of lowland holding sizes could be a little misleading due to differences in the tenurial rights. Hence a more appropriate measure is the income from land holding either in terms of physical or value product.

In the year 1972/73 it is to be generally observed that the borrowing from friends and relatives is relatively less than in the previous year. Probably this reduction may be due to the non-repayment of the loans already borrowed. This seems to be a characteristic more associated with the smaller farmers. When borrowing from friends and relatives becomes restricted the smaller farmers go more to the private money lenders than the Co-operatives. The relatively bigger farmers do not appear to be so hesitant in borrowing from either Co-operatives or private lenders in addition to the more popular source of friends and relatives when the need for such borrowing arises. Now the questions that crop up from this situation are: (1) Does this mean that the relatively bigger farmers borrow only occasionally for purposes other than investment in agriculture? (2) By virtue of their higher income are they having better access to any of the sources mentioned above? (3) Are the poor farmers borrowing for investment in agriculture or to meet other consumption needs? (4) Could it be that the poor farmers are hesitant in borrowing from Co-operatives and private money lenders due to certain fears or, is it that even if the poor farmers make attempts to get credit from these sources they are unable to do so simply because they are too poor and weak in their bargaining power? (5) Above all why is it that despite repeated credit drives, the need for credit for modernised cultivation and the rather unfavourable economic circumstances of a majority of farmers, and in spite of the existence of institutions like Co-operatives, Cultivation Committees and Rural Banks ready to provide credit facilities, such a large proportion as more than 3/4 of the total number of farmers interviewed have not made borrowings in general, and an even still larger proportion remain without borrowing from the institutions meant to provide credit to farmers of the type under investigation? An attempt will be made to provide a rational explanation to these and other related questions in the next Chapter.

Chapter 4

FACTORS AFFECTING SMALL FARMER CREDIT

Agricultural Credit may be defined as borrowings that the farmers are able to make for investment in agricultural production. In the present context of agricultural development the most urgent need is to increase production. This urgency is felt both by the farmers as individual producers as well as by the society as a whole. However, it is the farmers who make the individual decisions regarding the utilisation of land, labour, and capital inputs. The type of crops and the amount of inputs to be allocated between them are decided upon by them. This sort of decision-making cannot be so easily replaced or substituted with another process at least in the near future without dislocating the rural life seriously. Then it seems necessary to make an inquiry into the process of decision-making by the cultivators in the peasant sector. This is useful to an institutional set up designed to assist the cultivators.

1. Two Groups of Farmers:

In this analysis it is desirable to classify small farmers into two groups qualitatively. 1. Farmers producing below subsistence requirements and 2. Farmers producing above subsistence requirements. Whether a farmer belongs to one or the other category depends on two variables: (a) the size of farm family and (b) the level of production. There is the possibility of a third variable too, i.e the level of consumption.

2. Consumption and Subsistence:

But what do we mean by consumption in this context? Is it only the consumption of food or other items as well? e.g clothing and housing. In general terms consumption includes these as well as other services the farmers may need. But for the purpose of the present study the meaning of consumption for ascertaining subsistence needs has to be narrowed down to mean only family consumption needs of a specific agricultural commodity that is already being produced or would be produced by a farmer. For example, it may be the family consumption needs of rice, coconut, vegetables, fruits, or livestock products. So what is needed to be identified in determining the economically desirable level of subsistence, is that level of family consumption the farm family is unwilling to forego either for cash or for any other alternative commodity. From this point of view the subsistence needs of a farm family vary with different types of agricultural products. In grains such as rice, it is very high as they form the staple food in many areas.

However, the economically desirable consumption level is not a uniform one for all areas and social groups. For farmers in the survey area, the economically acceptable level of consumption of rice is computed to be about 5 measures per day for a family of 10 members*.

3. Farmers producing below subsistence needs:

The main objective of agricultural production of the farmers of the first group, i.e those producing below subsistence is to produce to meet their requirements of family consumption. This is all the more strong a motivation in a set up when such farmers have smaller incomes from a few sources: there also may be a possibility of purchasing the required product from elsewhere. The farmers belonging to this category form a substantial proportion of the total farmer population in the area under study. This situation is further elaborated in the light of the survey findings in the following section.

4. Income of Small Farmers in the Survey Area:

The average annual income per employed person over the two years 1972/72 and 1972/73 in Edanduwewa Grama Sevaka division is Rs 953 (see Table 4-I). This is only about Rs.200/= more than the per capita income of the country as a whole for 1971. Average income per employed person varies from Rs 303 to Rs 2,413. The higher incomes per employed person are received by families whose size lies between 4 to 6 members. In the 32 respondent families altogether there are 108 employed persons or on average about 3 employed persons per family. In each family, since there are several unemployed members, the per capita income is most likely to be lower than even that for the country as a whole. In Table 4-I the average income of an employed person is analysed into different sources such as paddy, rubber, coconut, minor export crops (which include pepper, arecanut, plantains, coffee and spices), vegetables, other perennial crops, employment and trade and livestock. Of all these, income from employment and trade is the highest. Paddy, coconut and livestock are the other important sources of income in a descending order. Income from all the highland crops put together is only Rs. 235 as against Rs 236 from paddy alone. Income from coconut accounts for about 74% of the total income from all highland crops. Thus, it can be observed that those employed persons who engage themselves in agriculture on a part-time basis are earning much higher incomes than the rest. In fact about twice as much as the full time farmers: out of the Rs.953 of average total income Rs. 419 comes from employment & trade, a proportion of nearly 40% of the total. The average annual income of a full time farmer is only Rs 500. Rearing of livestock cannot be considered to be a noteworthy source of income. Therefore, it is likely that this situation drives more and more farmers to look for employment and trades in addition to farming. Full-time farmers tend to decrease in number while part-time farmers would increase.

* Computed in the course of field investigation.

Table: 4 - I

Income per employed person classified by size of family & sources of income (one year average of 1971-72 & 1972-73)
(in Rs:/=)
G.S. Division: Edanduwewa

Size of Family	No: of employed persons in the h. hold	S O U R C E S									
		Paddy	Rubber	Coconut	Crops other than paddy			Sub total	Employment & Trade	Livestock	All Sources
					Minor export crops	Vegetable	Other perenial crops				
1	1	303	-	-	-	-	-	-	-	-	303
2.	-	-	-	-	-	-	-	-	-	-	-
3.	17	159	-	30	2	19	5	56	488	7	710
4	5	225	-	15	5	-	-	20	982	-	1227
5	9	156	249	1446	-	-	60	1755	217	285	2413
6	8	313	-	26	2	66	1	95	790	-	1198
7	-	-	-	-	-	-	-	-	-	-	-
8	11	243	-	46	-	1	8	55	220	168	686
9	25	195	36	22	5	2	17	82	364	32	673
10	12	64	-	21	1	-	17	39	406	-	509
11	9	163	-	38	8	-	6	52	556	-	771
12	11	698	-	295	71	9	5	380	219	131	1428
All sizes	108	236	29	173	10	10	13	235	419	63	953

The fact that agricultural income is mostly determined by paddy/coconut crop combination even at the beginning of 1970's shows that the traditional pattern of agriculture is hardly changed. The continuance of this same pattern is further promoted as part-time farming tends to increase as referred to above. This situation is clearly brought out by the figures in the paddy, coconut and employment columns in Table 4-I. Irrespective of the size of almost all the families, incomes from these sources are higher than those from the remaining crops. However, the potential for income increase from livestock appears to be greater than that from other crops indicated in Table 4-I. Nevertheless, from field observations the writers feel that with careful planning and requisite technical guidance the income earning potential of other subsidiary and minor export crops could be improved gradually. This in fact should be the direction of agricultural diversification too.

The average income per employed person of those operating lowland holdings of less than 2 acres in size is around Rs 800 per annum. As the lowland holding size increases, the paddy income also increases from Rs 157 for holdings between 0 - 0.5 acre to Rs 517 for those between 2.1 - 5.0 acres. Income from coconut also shows an increasing trend along with the increase of lowland holding size. Contrary to this the income from employment and trades decreases as the lowland holding size increases: the rate of change in the two situations is more or less a uniform one. On the basis of this rate of change of incomes from agriculture and employment in relation to holding size, farmers may be divided into two distinct groups; (1) those operating holdings less than 1 acre in size and (2) those with lowland holdings above 1.0 acres. The earnings of the first group of farmers both from paddy and highland crops appear to be inadequate for subsistence. Hence to supplement the meagre income from farming, they have to depend more on other forms of non-agricultural employment. This itself may absorb a good part of their time available for farming. Farm work is likely to receive less attention than it needs leading to a decrease in productivity and income. In this situation though some of the capital needed for modernising farming is available to the farmer its output generating effect tends to be obviated by the reduction of available farming time. Moreover the size of holdings could be too small to absorb the capital investment needed to modernise farming. Therefore, this group of farmers are caught in a vicious circle.

The second group of farmers derive a higher income from farming. This is possible due to their size of holding being larger. They also need to devote less time for non-agricultural employment which may be regarded more as a subsidiary source of income. When agricultural income increases there is a tendency for the non-agricultural incomes to decrease as shown by the statistics in Table4 -.II. This group of farmers is more likely to be working on a full-time basis and devote more of working time to farming. They are also more disposed towards investing in farming to increase farm output. For this they would even readily resort to borrowing.

Table: 4 - II

Income per employed person classified by size group of lowland holding & sources of income (in Rs:/=)

G.S. Division - Edanduwewa

Size class in Acres	No: of employed persons	Paddy	SOURCE								
			Rubber	Coconut	Crops other than paddy				Employment & Trade	Live-stock	All sources
					Minor export crops	Vegetables	Other perennial crops	Sub total			
0 - 0.5	24	157	-	28	1	14	16	59	537	65	818
0.6 - 1.0	43	163	6	20	5	12	12	55	516	10	744
1.1 - 2.0	29	292	-	138	1	8	15	162	266	80	800
2.1 - 5.0	12	517	242	1099	65	-	6	1412	209	204	2342
All size classes	108	236	29	173	10	10	13	235	419	63	953

Even income from livestock rearing rises as the holding size increases. This seems contradictory because the holding size here refers only to lowland and usually the lowland is not used for the rearing of livestock. But in fact the farmers who own larger lowland holdings normally own larger holdings of highland too. Even if they do not have larger highland holdings their income is sufficient to expand livestock rearing either on the available highlands, or on other's highlands through some reciprocal agreement, i.e. looking after the land by clearing etc., in lieu of using the land for rearing one's livestock.

Most of the highlands consist of home gardens. In these the main crop is coconut. But other crops like arecanut, pepper, plantains, fruit trees and yams, etc., are also grown. When the holding size increases income from such crops also tends to rise, as seen from the income figures in the 'sub-total' column of Table 4-II. When total family income from all sources is compared with the number of employed persons there appears to be a negative correlation: as the number of employed persons increases the total income from all sources shows a decreasing tendency. This suggests that the per head earnings of farmers operating smaller lowland holdings are small both in farming as well as in non-agricultural employment. The latter is more likely to be in the nature of intermittent employment or casual jobs in the villages. In the case of the operators of larger lowland holdings also the situation in respect of non-agricultural employment remains unchanged: the average income from employment per head of the smaller farmers is about Rs.516, and for the farmers operating more than 2 acres it is about Rs.209. Therefore it is still the agricultural income varying in proportion to holding size of the lowland that creates the income differential between the two groups of farmers referred to earlier.

Out of the total number of employed persons in the 32 households in Edanduwewa the largest number of employed persons are in the owner families, about 50% (see Table 4-III). Tenants and owner tenants/tenant owners groups come next in order of importance. Owner's paddy income per head is the least and owner tenant/tenant owners' paddy income per head is the highest. But the income from highland crops is least for the tenant group and highest for the tenant owner/owner tenant group. This may be due to lack of sufficient land for tenant operators. Whatever produce available for the tenants is restricted to only very small home garden plots. However, owners' income from employment and trades is the highest of the three groups, tenants come second. Tenants have to cultivate double the extent of land that the owners cultivate to derive the same income. In this process they spend twice as much time as the owners do on farming. Hence tenants have less time available for non-agricultural employment and trades. This is likely to be a cause for smaller incomes for the tenants from non-agricultural employment. Agricultural income of the tenant owner/owner tenant group both from paddy and other highland crops is much higher than that of the other tenurial groups. Due to this reason owner tenants/tenant owners groups perhaps pay less attention to earning incomes from non-agricultural employment.

Table: 4 - III

Income per employed person classified by tenurial category of operators and source of income
(in Rs:/=)

(one year average of 1971-72 & 72-73)

G.S. Division - Edanduwewa

*Tenurial category	No: of employed persons in the h. hold	SOURCE									
		Paddy	Crops other than paddy					Total	Employment & Trades	Livestock	All sources
			Rubber	Coconut	Minor export crops	Vegetables	Other perennial crops				
Owners	53	200	17	90	4	18	18	147	554	29	930
Tenants	37	223	7	21	1	2	7	38	326	66	653
Owner Tenants & Tenant Owners	18	369	111	731	46	-	12	900	214	154	1637
All tenurial categories	108	236	29	173	10	10	13	235	419	63	953

* Tenurial category for lowland only

Income from livestock also shows a pattern of change similar to that of the paddy income among the three tenurial groups. Total income from all sources again is quite low for the tenants, but that of the tenant owners/owner tenants is even more than twice that of the tenants. It is to be observed that the tenants are the worst affected group. For them both agricultural as well as non-agricultural employment poses a challenge for subsistence. Owners of small extents, similarly rely more on non-agricultural incomes and tend to regard farming as a customary way of life providing some means of subsistence only as a safeguard against total unemployment. Both these tenurial groups are less prone to making use of institutional credit; nor are they that creditworthy to be provided with such loan funds.

In the Edanduwewa Grama Sevaka division family size with 3 members records the highest frequency of occurrence. 9 and 5 member families show the next highest frequencies (see Table 4-IV).

Average annual income per person is highest for the 5 member families and lowest for the 8 to 11 member families. (Though a one member family has the lowest income of Rs 303, it is not considered here as a household representing a typical family). The per capita income of the families in the sample is Rs. 498. This is about Rs. 250 lower than the per capita income for the country as a whole. But the per capita income of more than 50% of the total number of persons in this sample is between Rs 303 and Rs 375. Per capita income from employment and trades is at a relatively higher level than that of the others; paddy, highland crops and livestock come next in a descending order of importance in so far as their income contribution is concerned (see the last row in Table 4-IV). Per capita income of persons in the farm families operating less than 0.5 acre is the lowest out of the four holding size classes (see Table 4-V). In the two holding size classes 0.6 - 1.0 and 1.1 - 2.0 acres the difference in the income is not so large.

Whatever differences that exist in income distribution among these three classes are caused mainly by the differences of income from employment and trades. Income from paddy and other highland crops vary in proportion to the holding size. Even income from livestock shows this trend except of course for the size class 0-0.5 acre. Size class 2.1 - 5.0 acres records the highest income per person in paddy, highland crops, livestock and also by way of total income from all sources. Income per person from employment and trades, however, is the least out of all the four size classes. Obviously in larger land holdings there is sufficient full time work which is also remunerative at the same time for more persons in the family. Therefore, the need for non-agricultural employment outside for the persons in families operating farms of this particular size class is very much less.

In terms of tenurial categories the income per person in the tenant group is the lowest - Rs. 361. This is about half the per capita income for the country (see Table 4-VI.)

Table:4-IV

Income per person in the household classified by family size & sources of income (Rs:/=)

G.S. Division - Edanduwewa

Size of Family	No: of persons in the household	Paddy	Crops other than paddy	Employment & Trades	Livestock	All Sources
1	1	303	-	-	-	303
2.	-	-	-	-	-	-
3	21	128	45	395	6	574
4	12	94	8	409	-	511
5	20	70	790	20	128	1008
6	18	139	41	351	-	531
7	-	-	-	-	-	-
8	24	111	26	101	77	315
9	45	108	47	202	18	375
10	20	38	28	244	-	310
11	22	67	21	227	-	315
12	24	320	174	100	60	654
All size categories	207	123	123	219	33	498

Table: 4.V

Income per person in the household classified by size of lowland holding and source of income (in Rs:/=)

G.S. Division: EDANDUWEWA

Size Category Acres	No. of persons in the household	S O U R C E S Paddy	Crops other than paddy	Employment and Trades	Livestock	All Sources
0-0.5	57	65	24	222	27	338
0.6-1.0	71	100	34	312	6	452
1.1-2.0	54	156	87	143	43	429
2.1-5.0	25	248	677	100	98	1123
All size categories	207	123	123	219	33	498

Table: 4 - VI

Income per person in the household classified by tenurial categories of operators & sources of income (in Rs:/=)

G.S. Division: EDANDUWEWA

Tenurial category	Total No. of persons in household	SOURCES Paddy	Crops other than paddy	Employment and Trades	Livestock	All sources
Owners	111	95	70	262	14	441
Tenants	67	123	21	180	37	361
Tenant Owners/ Owner Tenants	29	229	559	133	96	1017
All Tenurial Categories	207	123	125	219	33	498

Income of the Tenant group per person is higher as regards paddy and livestock than that of the Owners group. Total income per person in the Owner group is higher than that of the Tenants. This is because the owners seem to be getting a higher income than tenants from highland crops and employment and trades. Except in employment and trades, the owner tenant/tenant owner group receives the highest income of all tenurial groups from the remaining sources. Their income from employment is the least. The higher income accruing to owner tenant/tenant owner group may be due to the larger holding they operate both as tenants and owners. They also can be regarded as more enterprising full time farmers who depend solely on farming for their livelihood. This also explains the small incomes from employment which they perhaps get during off seasons in the year when some time could be spared for farming. So much so that the level of living of the owner tenant/tenant owner group is more than double that of the Owner and Tenant categories (compare the statistics in the last column of Table 4-VI).

In Thalgamuwa/Attapitiya G.S division too the income characteristics discussed above are not dissimilar. As seen from Table 4-X, the average income per person per year is only Rs 579. This is similar to the income level of the Edanduwewa G.S division. On either side of this average there are families of 9 members whose per capita income is Rs.246 and also those with 4 members having a per capita income of Rs 1808. But there are only 7 such families out of a total of 53. In all others the per capita income is less than Rs 730. Hence the income of most families in the area are less than the per capita income for the country as a whole (see Table 4-X).

The characteristics of family income in terms of sources, holding sizes, tenurial groups and employed persons in the households also reflect the main characteristics that were discussed in detail in relation to the Edanduwewa G.S Division. For those interested in examining these in greater detail Tables 4-VII through 4-XII may be seen.

5. Effects of Low Income on Farming:

From the foregoing account it becomes amply clear that for the farmers in the survey area there is a great need to produce more. The number of employed persons per family is not high and the income per employed person is rather low (see Tables 4-II, 4-III, 4-VIII and 4-IX). Thus, if these farmers produce more they can have more food in the family; otherwise the desired extra amount of food has to be purchased in the market. To produce more these farmers can do two things: (1) cultivate more land; double cropping is equivalent to bringing more land under cultivation, and (2) cultivate the already available land more intensively using improved techniques of production. In the prevailing circumstances of the survey area today, given the opportunity, farmers would be more ready to resort to the first method rather than the second, simply because providing for increased family consumption by the first method is less costly. Under this a farmer's normal tendency is to bring under cultivation only that extent of land that could be cultivated by utilising his family labour or any 'attan' labour. Usually then for labour input he does not incur any extra expenditure as such. Implements and draught power (from animals) he borrows if he does not own.

Table: 4 - VII

Income per Employed Person Classified by Family Size and Sources of Income (One year average of 1971-72 & 1972-73) (in Rs:/=)

G.S. Division : Thalgamuwa - Attapitiya

Family Size	No: of employed person	SOURCES										
		Paddy	CROPS OTHER THAN PADDY							Employment & Trade	Livestock	Total
			Coconuts	Minor Crops	Vegetables	Other Crops	Tea	Rubber	Total			
2	5	154	7	2	-	3	-	-	12	13	1	179
3	7	150	16	5	29	15	-	-	64	104	32	350
4	18	896	87	51	1	38	-	885	1062	847	7	2812
5	21	547	59	3	10	35	-	228	335	446	11	1339
6	31	351	19	5	25	45	19	21	134	279	61	825
7	33	282	19	9	3	37	-	84	152	472	63	969
8 *	23	237	32	33	1	9	2	98	269	194	51	751
9	9	120	18	4	5	29	-	-	56	561	-	737
10	10	517	15	2	22	1	310	40	390	450	12	1369
11	-	-	-	-	-	-	-	-	-	-	-	-
12	-	-	-	-	-	-	-	-	-	-	-	-
13	9	287	3	11	-	12	5	-	31	722	13	1053
Total	166	385	31	14	10	29	23	161	282	422	36	1125

* One operator has given only the total income from other crops.

Table: 4 - VIII

Income per Employed person classified by Size Group of lowland holdings and sources of income (in Rs:/-)

G.S. Division : Thalgamuwa-Attapitiya

Size class (in acres)	No: of employed persons	SOURCES								Employ- ment and Trade	Live- stock	All Sou- rces
		Paddy	CROPS OTHER THAN PADDY									
			Coconut	Minor Export Crops	Vege - tables	Other Crops	Tea	Rubber	Total			
0 - 0.5 *	40	130	15	20	21	13	16	-	140	310	26	606
.6 - 1.0	50	321	27	21	5	27	-	105	185	409	49	964
1.1 - 2.0	38	298	42	9	5	44	-	37	137	614	44	1093
2.1 - 5.0	48	825	44	5	7	32	83	530	701	367	21	1914
All size classes	166	385	31	14	10	29	23	161	282	422	36	1125

* One operator has given only the total income from other crops.

Table: 4 - IX

Income per Employed Person Classified by Tenurial Category and sources of Income (One year average of 1971-72 & 72-73) (in Rs:/=)

G.S. Division:- Thalgamuwa - Attapitiya

Tenurial Group	No: of employed persons	SOURCES										
		CROPS				OTHER THAN PADDY				Employment & Trade	Livestock	All Sources
		Paddy	Coconut	Minor Export Crops	Vegetables	Other Crops	Tea	Rubber	Total			
Owner	95	457	36	20	13	25	39	232	366	464	19	1306
Tenant *	33	178	11	4	1	16	-	-	98	337	50	663
Owner - Tenant	38	389	37	10	6	46	-	124	223	395	65	1072
All Groups	166	385	31	14	10	29	23	161	282	422	36	1125

* One operator has given only the total income from other crops.

Table: 4 - X

Income per person in the household classified by Family size and sources of Income
(in Rs:/=)
G.S. Division : Thalgamuwa - Attapitiya

Family Size	No: of person in the H.hold	Paddy	SOURCES									
			CROPS OTHER THAN PADDY							Employment & Trade	Livestock	Total
			Coconuts	Minor Crops	Vege - tables	Other Crops	Tea	Rubber	Sub Total			
2	6	129	6	1	-	2	-	-	9	11	-	149
3	9	117	12	4	22	12	-	-	50	81	25	273
4	28	576	56	33	1	25	-	569	684	544	4	1808
5	40	287	31	1	5	19	-	120	176	234	6	703
6	54	202	11	2	15	21	11	12	77	160	35	474
7	77	121	8	4	1	16	-	36	65	202	27	415
8 *	48	113	15	16	1	5	1	47	129	93	24	359
9	27	40	6	1	2	10	-	-	19	187	-	246
10	20	258	8	1	11	1	155	20	195	225	6	684
11	-	-	-	-	-	-	-	-	-	-	-	-
12	-	-	-	-	-	-	-	-	-	-	-	-
13	13	199	2	7	-	8	4	-	21	500	9	729
Total	322	198	16	7	5	15	12	83	145	218	18	579

* One operator has given only the total income from other crops.

Table: 4 - XI

Income per person in the household classified by size of lowland holding and sources of income (in Rs:/=)

G.S. Division : Thalgamuwa- Attapitiya

Size of class (in acres)	No: of members	SOURCES										
		Paddy	Coconut	CROPS OTHER THAN PADDY						Employment & Trade	Live-stock	Total
				Minor Export Crops	Vege - tables	Other Crops	Tea	Rubber	Total			
0 - 0.5*	94	55	6	8	9	5	7	-	60	132	11	258
0.6 - 1.0	102	157	14	10	3	13	-	50	90	201	24	472
1.1 - 2.0	65	174	24	5	3	26	-	22	80	359	26	639
2.1 - 5.0	61	514	27	3	4	20	52	331	437	228	13	1192
All size classes	322	198	16	7	5	15	12	83	145	218	18	579

* One operator has given only the total income from other crops.

Table: 4 - XII

Income per person in the household classified by Tenurial Categories of operators and sources of Income (Rs:/=)

G.S. Division:- Thalgamuwa-Attapitiya

Tenurial Groups	No: of members	SOURCES										
		CROPS OTHER THAN PADDY										
		Paddy	Coconut	Minor Export Crops	Vege - tables	Other Crops	Tea	Rubber	Total	Empl-oyme-nt & Trade	Live-stock	All Sou-rces
Owner	194	223	18	9	7	13	19	114	180	227	9	639
Tenant *	53	110	7	2	1	10	-	-	61	210	31	412
Owner-Tenant	75	197	19	5	3	23	-	63	113	200	33	543
All Groups	322	198	16	7	5	15	12	83	145	218	18	579

* One operator has given only the total income from other crops.

No artificial fertilizer would be normally used. Even if this is used it is a small quantity depending on his ability to spare some extra cash for the purpose. Seed material consists of traditional varieties and are locally procured. This position can be seen from Tables 4 - XIII and 4 - XIV.

Even in respect of paddy where there has been a concentrated drive for intensification, all farmers do not use improved seed. More farmers apply fertilizers, but the amounts applied are small and very often, as the writers could observe, it is restricted to nitrogenous fertilizers. In respect of highland crops the position is worse. The most substantial item of expenditure is family labour whose opportunity cost is as low as zero. By doing extra work what is lost is only leisure. At this point these farmers stop incurring that cost too if the additional return is not worth such extra effort. This of course they come to know through their own experience.

However, at present farmers are unable to bring more land under cultivation in this manner to produce the extra quantity of food needed for increased family consumption. Even if they were able to they could not be allowed to use the land in this manner from the point of view of national needs. Therefore, in the present situation if the farmers producing below minimally desirable home consumption needs are to augment their food supplies, they have to cultivate the already available land as intensively as possible. This is the more desirable approach ultimately from a national viewpoint. To cultivate land intensively new techniques have to be adopted; new inputs have to be applied. Farmers have to make additional investment of capital and even additional labour is needed. This a farmer is unable to find either from his own family or by way of 'attan' labour as he used to do, because the need to conform to tight cultivation schedules pressurises all the cultivators to concentrate on their plots. Further, labour available in the respective farm families is trained (through formal education) for farmers to cultivate their land intensively. Nevertheless, any additional production from their land has to be retained for home consumption. The change in this case is that the cost of consumption now is more than when production is augmented by the use of more land, because the additional input used to get the additional output is costly.

Farmers are willing to incur these additional costs to produce the additional output if purchasing the latter in the market is more costly. In this instance they have to be provided with the requisite funds to meet the additional costs of the new inputs.

6. Two Case Studies:

Let us examine this analysis with reference to the actual situation of two families in the survey area. In one case, Family A, a household consisting of two members both males with ages 26 and 36 reported that if they were to have full meals, they need at least 1½ measures of rice per day, but as it is they are able to have only ½ a measure. At this rate their rice requirements per year

work out to 547 measures. In bushels of paddy this is 78 bushels. But the actual amount they are able to consume now during one single year is 182 measures; i.e. 26 bushels of paddy. Their subsistence gap therefore is 52 bushels of paddy per year; i.e. 26 bushels per season. The actual consumption per season is 13 bushels. The total subsistence requirement per season is 39 bushels (i.e. 19½ bushels per person per season). This particular household cultivates only 2/5 of 3/16 of an acre (3/40th of an acre) of paddy land. This shape is too small to be divided. Therefore 3/16 of an acre of paddy land is cultivated on a 'thattumaru' basis. From this during Yala 1973 the yield obtained was only 3½ bushels. This also happened to be the harvest the family gathered after 5 years. The subsistence gap for this season is 35½ bushels and for 4½ years production is zero and the entire consumption requirement has to be procured from outside. In these circumstances the cultivator hesitates to experiment with his cultivations. Even if he does experiment with new methods of cultivation the additional costs that this would entail ultimately amount to an additional cost to provide for the extra consumption that he is aspiring to enjoy. This, as referred to earlier, he would do willingly if such additional cost of consumption is temptingly lower than the cost of purchasing the extra quantity of food.

In Family B which consists of 10 members (2 parents + 8 children at ages of 22, 20, 18, 16, 14, 12, 8, 6; 5 females and 3 males out of whom 4 are studying - 2 females and 2 males), to have two main meals of rice and also some kind of preparation out of rice for breakfast, this family needs 5 measures of rice per day, i.e. 1825 measures per year. In measures of paddy this works out to 3650. Therefore on average the annual requirement per person is 365 measures of paddy. In Family A a person's average annual requirement works out to 547 measures of rice. (In bushels of rice the former is 26 and the latter 39). According to the Survey of Consumer Finance 1963, during a two month period in Zone 4 to which Kegalle district belongs, consumption of rationed and unrationed rice per spending unit is 74.53 and 27.35 measures respectively, a total of 102.88 measures. For the rural sector the equivalent figures are 75.26 + 26.09 = 101.35 measures. No significant differences between these two groups is noticeable. Therefore taking 102.88 as the two months rice consumption per family in Kegalle district, the annual consumption requirement is 102.88 x 6 = 617.28 measures of rice, or 1234.56 measures of paddy, or 88.18 bushels per family. The average size of a family in the survey area is 5. On this basis, per head consumption requirement per annum is 17.63 bushels or 8.81 bushels per season. The seasonal requirement per head in Family A is 20 and in Family B is 13 bushels. The figure computed from the Consumer Finance Survey data however, shows the rice consumption under the prevailing conditions of restricted

Table 4 - XIII G.S. Division-Edanduwewa

Modern Agricultural Practices or Use of New Technology by Respondents

Modern practices	Crops			
	Paddy	Rubber	Coconut	Vegetables
Improved seeds	27	2	-	1
Fertilizer	31	-	2	3
Insecticides	23	-	-	1
Tractors	3	-	-	-
Irrigation Water	-	-	-	1
Training	4	-	-	-
Transplanting	26	-	-	-
Weeding	1	-	-	-

Use of Modern Agricultural Practices

Table 4 - XIV G.S. Division: Thalgamuwa/Attapitiya

Item	Paddy	Coconut	Rubber
Improved seeds	46	3	7
Fertilizer	48	2	4
Insecticides	39	1	2
Tractors	5	1	-
Irrigation Water	1	-	-
Training (Supervision of Inputs)	7	-	-
Transplanting	39	-	-
Weeder	1	-	-

production and limited supply. Family A consists of 2 grown up males only; hence it is not a typical family. Therefore, the per head consumption need as computed from the details pertaining to family B may be more reliably taken in representing the average per head rice consumption requirement of the survey area.

To meet the seasonal rice consumption requirements of Family B, therefore, it is seen that 130 bushels of paddy are needed. This particular farm family cultivates only ½ acre of paddy land of which 2/3 is cultivated on the basis of share-cropping and the remaining 1/3 under the 'thattumaru' system. For the Yala season 1973 the total yield from the family's paddy holding was 6 bushels; in 1971/72 Maha, 12 bushels; in the two seasons in between the fields were not cultivated. Assuming that the entire ½ acre extent of paddy is cultivated by the family as if they are the sole owners the maximum yield they would be able to get per season is not likely to be more than 40 bushels. This is an estimate made on the presumption that the per acre yield could be raised to 80 bushels. But the target yields per acre for the Kegalle district in 1971/72 Maha and 1972 Yala were 62 and 53 bushels respectively. Therefore, the assumed 80 bushels per acre is a yield that is expected to be achieved under exceptional management efficiency. Even if Family B produces 40 bushels out of the ½ acre paddy holding, still they have to fill in a subsistence gap of 90 bushels. The present technology of production is not so advanced as to produce this extra 90 bushels of paddy in the same ½ acre holding in one season. To produce the extra 90 bushels therefore at least another 1 acre has to be cultivated at the same exceptionally high level of management efficiency. When managerial efficiency decreases the holding size has to be increased if production is to remain more or less constant.

However, from the experience of this farmer himself, to obtain a yield of 130 bushels per season, at a reasonable level of management presently regarded as practicable in the area, about 3 acres would need to be cultivated. For this he would need to incur the following expenses:

			Rs	
I.	Preparatory tillage:	1st ploughing	150	
		Mammotying	84	
		Levelling	100	334
II.	Seed paddy - 4 bushels		120	
III.	Transplanting		160	
IV.	10 cwts. fertilizer		200	
V.	Agro-chemicals		50	530
VI.	Harvesting & Threshing:	1. Reaping	60	
		2. Carrying	48	
		3. Buffaloes	30	
		4. Threshing & Cleaning	6	
			80	
			40	254
			Rs	1118

Proportionately, for an extent of ½ acre the total production expenditure is Rs 186/33.

With this the yield expected is about 22 bushels. Thus the cost per bushel of paddy is approximately Rs 8/50; that is 7 measures of rice, which means that to produce a measure of rice it costs about Rs 1/25 to the farmer. The above cost estimate was made in the course of discussion with the farmer in Family B itself and is based on the price levels that prevailed in October/November 1973. According to the latest situation an upward revision in the cost of production is necessary. If the increase of fuel price is taken as a guide and a moderate 75% increase is assumed under the prevailing price levels, the production cost of a measure of rice may be taken as about Rs 2.20. But the price of rice in the open market (or black market) is about Rs 3.50 to Rs 4.50 per measure. In terms of the GPS price also if rice is sold a measure costs Rs 3.57. Since the proportion of subsidised rice is low and the substitution effect is not that strong there is a compelling need for farmers of this type to produce more by using more land.

7. Farmer attitude to Production and Credit:

But what is still not sufficiently clear is whether the farmers would have this same motivation to produce on their own if, in a situation like that of Family B a farmer has got to produce more than 90 bushels more on an extent of about ½ acre to fill in his subsistence gap. To produce at least whatever is achievable with the prevailing level of technology, more inputs and greater efficiency of management are needed. But in achieving this how would the production cost increase? Certainly not constantly throughout. After some point, costs tend to increase more than proportionately to extra yield. At this rate an output level will be reached where the production cost per unit of rice ceases any longer to be less than the price per unit of rice available in the market. This the farmer learns not through any simple formal calculations, but through sheer experience by trial and error, probably during one or two seasons. From that moment onwards he reduces his level of operations in the holding, whatever other facilities are provided. This change is quicker when more profitable alternative employment is available. In a situation of this sort farmers are not concerned so much with credit for investment in agriculture. Agricultural credit in this situation, has to be preceded by the identification and location of farmers who are likely to face such circumstances and also by an evaluation of the costs and returns at different levels of input use and management that farmers are persuaded to adopt by means of planning, extension, propaganda and servicing.

Farmers know that whatever has been borrowed has to be repaid with interest within a time period. They also know that if additional income is not available, as is the case with many farmers noticed in the course of discussion earlier, the only means of repaying

such loans is by the sale of their produce. They cannot sell, although this would repay the loan, because at the same time they may have to starve. The extra amount produced with the loan is not a surplus above family consumption needs for most of the farmers in the area; therefore it cannot be sold even to repay the loans. Therefore the farmers falling into this category are reluctant to make use of this type of institutional credit. They do not like to get indebted. They have the fear of losing even their plots of land in the event of failure to repay the debts. So their attitude is to play safe by avoiding such 'traps'. They are more disposed to borrowing from friends and relatives on a very short-term basis, the so-called 'atha maru' i.e. small sums of money which they consider are safe borrowings, repayable with whatever income they are confident of getting. Very often there is no interest and the sums borrowed vary from about Rs 10 to Rs 50. Even if creditors are not repaid in cash the borrowers repay them tacitly in the form of 'free labour'. If these farmers are persuaded to borrow from institutional sources, defaulting and accumulation of debts in arrears is the most likely result. These cultivators become ineligible for fresh loans and if they are to be entitled to fresh credit the old loans have to be written off.

8. Problem of the Small Farmer:

Thus, in respect of this category of farmer both the technology and the holding size are inadequate to produce surpluses over and above home consumption needs in sufficient amounts to repay the loans. This, of course is on the basis of the prevailing prices. If the relative prices of the items of costs and returns are changed, there is a likelihood that the proportion of net returns would rise. The problem with regard to this group of farmers is that at the present levels of production and income, they are not credit-worthy. To solve this one or more of the three variables, i.e. holding size, technology and prices may have to be adjusted.

If holding size is to be adjusted it involves enlarging the holdings. This is a problem of sub-division of larger holdings and consolidation of smaller holdings. In this process some farm population may have to be taken out of their land as well as the area itself, otherwise individual ownership of land may have to be replaced by corporate or collective ownership. In either case the prevailing form of land ownership and tenure may have to be changed.

However, if sole reliance is to be placed on the adjustment of the holding size and the form of tenure, it is tantamount to ignoring the role that production technology could play. Even presently uneconomic smaller holdings could be made viable economic holdings if production technology is improved. Such improvement must be designed taking into account the position of resource availabilities and costs. As labour is readily available and least costly an improved production technology may more appropriately be made labour intensive. To increase production in the small holdings by this

means therefore, more reliance would have to be placed on the breeding of seeds and planting material which are capable of giving high yields even at low levels of application of the more costly inputs like fertilizer and agro-chemicals.

Prices may be adjusted to a certain extent by means of subsidies. In fact, this is what has been done all along. But this should be of a short-term nature. Even so it has certain limitations which have to be overcome by the adjustment of other variables.

So far the reference to the holding size and subsistence needs has been in terms of a crop like paddy. This, however, is a partial approach to the analysis of farmer income and expenditure. Paddy is not the only source of income of the farmers as indicated earlier. Income is derived from other crops, livestock and also from non-agricultural sources.

Though the subsistence needs may be high where the crop is paddy, it may not be so in the case of other crops, tea, rubber, coconut, vegetables, fruits, and even livestock products. If surpluses could be produced in these, any net returns from them could be used to both fill in the subsistence gap in the basic staple diet and also repay any loans borrowed not only for paddy but also for other crops and livestock as well. For this the net returns from them must be sufficiently high. To calculate such net returns also, farming has to be considered as a total system rather than as a collection of separately functioning activities. Available evidence already presented however suggests that farmers' income from their total agricultural operations also is insufficient to meet their subsistence needs even in the basic articles of food. When the subsistence needs in other aspects of living are taken, this income subsistence gap widens further.

9. Pattern of Farmer Expenditure:

This may be illustrated briefly with reference to the expenditure pattern in the survey area itself. Expenditure per household in the Edanduwewa G.S Division is Rs 3999/-(see Table 4 - XV). Family consumption and ceremonies absorbed about 85% of total expenditure. Expenditure on paddy production is about 12% while for highland crops it is only about 3%. Therefore annual investment in the area by these farmers could be considered as around 16% of the total household expenditure. This does not vary much from the 17% investment target fixed in the latest Five Year Plan. But the investment for the development of highland crops does not appear to be sufficient to promote diversification in agriculture. Expenditure per household increases as the holding size increases. Up to 2 acres size the rise of expenditure is gradual while above 2.0 acres size expenditure per household rises sharply from Rs 3801 to Rs 10,171. This characteristic is observable in expenditure on family consumption and ceremonies and highland crops, except for the family consumption of the 1.1 - 2.0 acre size class. It is lower than that of the 0.6 to 1.0 acre size class.

Table 4 -XV

Expenditure per household classified by size of lowland operational holdings & items (one year average of 1971-72 & 1972-73) of Expenditure (in Rs:/=)

G.S. Division - Edanduwewa

Size class Acres	No. of house-holds	ITEM OF EXPENDITURE							
		Paddy	%	Crops other than paddy	%	Family consumption and ceremonies	%	All expenditure	%
0 - 0.5	9	221	9	26	0.9	2448	90.1	2695	100
0.6 - 1.0	13	344	9.6	28	0.8	3211	89.6	3583	100
1.1 - 2.0	7	868	23	235	6	2698	71	3801	100
2.1 - 5.0	3	934	9	788	7	8449	84	10171	100
All size Categories	32	480	12	149	3	3375	85	3999	100

With the change from this latter size class to the next higher size class also there is a sharp rise in the expenditure on highland crops. But the expenditure on paddy shows a gradual increase more or less proportionate to the increase of the holding size class. Farmers in the two lower size categories spend 90% of the total expenditure on family consumption and ceremonies. Of the remaining 10% about 9% is spent on paddy production and the amount spent on highland crops is negligible; less than 1%. Farmers operating larger holdings, i.e those above 1 acre spend between 9% to 23% on paddy and 6% to 7% on highland crops and their consumption expenditure is between 71% to 84%.

Thus it is seen that the farmers operating holdings less than 1 acre in size consume more and invest less on production than those who operate holdings of more than 1 acre in size. It may be that the small farmers' income is hardly sufficient even for subsistence. If so they are unable to spend more than the barest minimum that is needed for cultivating their holdings. Farmers in the holding size class 2.1 to 5 acres however, appear to consume more and invest less on paddy than the farmers in the size class 1.1 to 2.0 acres. Perhaps a feeling of greater security for the farmers of this size with bigger land holdings may be motivating them to consume a little more and invest a little less than the farmers in the 1.1 to 2.0 acre size class who in all likelihood may be on the border of subsistence.

In the analysis of the expenditure pattern on the basis of the tenurial groups, annual expenditure per household (see Table 4 - XVI) of the tenants, is the lowest - only Rs 2669 as against Rs 8678 - the highest, for the tenant owners/owner tenants group.

Therefore, tenants have to be considered as the worst off group. But they are the group investing most on paddy cultivation and spending least on family consumption and highland crops. The expenditure on the latter is as insignificant as less than even 0.1% of the total per household expenditure. This may be due to lack of sufficient highland for the tenants. Insecurity perhaps makes them invest more on paddy cultivation and less on family consumption. The owner group spends the highest proportion on family consumption, 86%. On highland crops the expenditure is less than on paddy, 4% as against 10%. Regarding the expenditure on paddy there is a marked difference between the Owners and the Owner Tenant/Tenant Owner groups. The latter group spends the highest proportion on the production of highland crops. This is possible as the owner tenants/tenant owners have sufficient extents of highland as well as some capital to spare out of family consumption and also what they invest in paddy production. On paddy their expenditure appears to be on traditional technology. Therefore, for increased output they depend more on the use of additional land rather than on new inputs and improved methods of cultivation. About 87% of the households belong to the expenditure group below the mean for the total number of households, i.e. below Rs 4085 (See Table 4 - XVI).

Table 4 - XVI

Expenditure per household classified by tenurial categories of lowland operational holdings and items of expenditure (in Rs:/=)

G.S. Division - Edanduwewa

Tenurial Category	No: of house-holds	ITEM OF EXPENDITURE						
		Paddy	%	Crops other than paddy	%	Family consumption and ceremonies	%	All expendi-ture
Owners	15	376	10	145	4	3382	86	3903
Tenants	13	505	19	2	1	2162	80	2669
Tenant Owners & Owner Tenants	4	785	9	600	7	7293	84	8678
All tenurial categories	32	480	12	144	3	3375	85	3399

Pattern of expenditure in the Thalgamuwa/Attapitiya G.S. division is also similar to that of Edanduwewa discussed earlier. In the former the average annual expenditure per household over the two year period is Rs.3999/- and the latter Rs.4085/- (see Table 4 - XVI@).

Table 4 - XVI@ Expenditure per household classified by size of holding & items of expenditure - G.S.Division:Thalgamuwa/Attapitiya

(One year average of 1971/72 & 1972/73 in Rs.)

Size of holding	No. of families	ITEMS Paddy	%	Crops other than paddy	%	Family consumption & ceremonies	%	All Items	%
0-0.5	15	195	8.3	30	1.3	2137	90.4	2362	100
0.6-1.0	17	598	19.3	182	5.9	2324	74.8	3104	100
1.1-2.0	12	848	23.7	144	4.0	2590	72.3	3582	100
2.1-5.0	9	1477	15.7	938	9.9	7000	74.4	9415	100
Total	53	690	16.9	259	6.4	3125	76.7	4074	100

Family consumption and ceremonies absorb the highest proportion of expenditure while paddy and highland crops come next in order. The proportion of expenditure on these two items is only about 23%. Of this expenditure on highlands is about 1/3 of that spent on paddy. Family consumption rises as the holding size increases. A similar trend is observable too in the other items of expenditure. The position is almost unchanged in respect of tenurial groups (See Table 4 - XVI@) except for the fact that Owners invest and also consume more than Tenants and Tenant Owners/Owner Tenants. In actual numbers Owners account for 60% of the total.

Table 4 - XVI@ Expenditure per household classified by tenurial categories & items of expenditure - G.S.Division:Thalgamuwa/Attapitiya

(In Rs.)

Tenurial Groups	No. of families	Paddy	%	Crops other than paddy	%	Family consumption & ceremonies	%	All Items	%
Owner	31	643	14.5	370	8.3	3426	77.2	4439	100
Tenant	9	548	18.1	29	1.0	2444	80.9	3022	100
Owner/Tenant	13	899	22.9	153	3.8	2879	73.3	3931	100
All Tenurial Groups	53	689	16.9	259	6.4	3126	76.7	4074	100

10. Income/Expenditure Gap and Credit:

It could be pointed out that income from non-agricultural sources can be used to supplement the gap between income and expenditure. As seen from Tables 4-XV, XVI, XVII and XVIII, there is such a gap of

about Rs.500 to Rs.700. But how many farmers are able to bridge the gap by earnings from non-farm sources? Some may not be competent, for others there may not be opportunities. Moreover, what happens to the farm if farmers have to set apart a fair amount of time for earning incomes, as it is, from non-agricultural sources? Quite obviously agriculture tends to get neglected unless some kind of a plan is prepared for these farmers to get employed in agro-based small industries which do not interfere with their agricultural operations. Even so net returns from such small industries have to be fairly substantial. The solution to the problem of making production oriented agricultural credit effective with this category of farmers, therefore lies in improving their total net income level above subsistence. To do this also credit has to be provided. But such credit must mostly be channelled to more profitable avenues of agricultural production in which farmers produce above subsistence needs. There is therefore a strong case to be made in the direction of agricultural diversification.

11. Credit for Production and Consumption

One other aspect that has to be borne in mind in providing such credit is that it should also provide for the day to day consumption needs of the farmers. As it is now, credit is provided to meet only the apparent production costs. Credit is not provided to cover the cost of family labour; possibly because family labour is not purchased for its own work. Nevertheless, it is naive to consider that it is costless. If the family cannot provide for consumption from the family farm itself, they have to find work outside to earn enough to subsist. When they do this they do not have sufficient time left to farm their own land in anticipation of returns several months hence. This applies particularly in respect of farmers who have to cultivate small extents of highland.

Thus if family labour under such circumstances is to be fully employed in the scientific farming of even such small holdings, credit has to be provided to meet their day to day consumption needs during the period when they have to engage themselves in their farm work. Although this may appear to be consumption credit, in fact it has to be regarded as an item of production credit because this credit is used to purchase the earning time of family labour which otherwise could have been engaged in some other job. If no other alternative employment is available they may starve or consume so little as to make them unfit to work efficiently. This could lead to a decline of the productivity of capital as well. Hence to make the use of credit efficient, labour efficiency also has to be bought by providing for basic consumption needs of the unemployed members of the farm household. If such provision is not made the so called production credit would be used for family consumption if they were to farm the land at all. Then some of the inputs may have to be cut down which in turn would lead to a decrease in production. With this the returns would be lowered, thereby rendering it impossible for the farmers to repay the loans. Knowing that this happens through their experience farmers hesitate to borrow. Therefore, for this category of farmers, credit must be provided to meet their day to day consumption needs. In fact all the subsidies could be effectively tied up with such a scheme providing for consumption credit of this nature.

12. Cultivators Producing above Subsistence Needs

This group of farmers produces some surplus. They could increase the surplus further if scientific methods of cultivation are adopted. For this increase investment becomes necessary. Additional funds needed however, have to be procured from sources outside. It is here that institutional credit plays a vital role. But the additional funds procured through borrowing have to yield a surplus return at least to cover up the total repayable loan (i.e. the principal plus the interest). This depends on the availability of inputs, technical guidance, good agro-economic practices, the price structure, and the marketing possibilities. If these are not properly organised, again the farmers attitude to surplus production tends to be passive and the need for production credit would not be there. However, assuming that these prerequisites are properly organised, if the borrowing procedure is too rigid or the lending institution is inefficiently managed, credit cannot be properly timed to suit the cultivation time table.

It is also equally important to maintain an effective communication network between the farmers and the lending institutions. The importance of this became amply clear in the inquiry into the position and procedure of credit transactions both of Hemmathagama and Mawanella Multi Purpose Co-operative Societies serving the needs of the survey area. At both places it was brought to the notice of the writers that during the 1973/74 Maha cultivation season, the cultivators in the area were informed by means of posters and even drum beating in certain instances, of the dates before which credit applications should be forwarded by those who were eligible for loans. Accordingly both co-operatives received less than 100 applications each from the qualified cultivators. But co-operatives had to entertain credit applications even from those who were ineligible at the first instance by giving them an extended date. Along with these applications, both co-operatives received credit applications even from those cultivators who were eligible to apply at the first instance itself. Still out of a total of 40 branches, these two Societies received applications only from 25 branches. This further shows that in addition to the problem of effective communication there is also a problem of the effectiveness of the village institutions.

13. Village Institutions

In both G.S.'s divisions the village institutions common to the rest of rural Sri Lanka are existent: a Co-operative society, a Cultivation committee, a Rural development society, a Death Donation Society and other similar organisations (see Tables 4 - XVII). Out of these the Co-operative Society is the most patronised. From among the 32 lowland operators in Edanduwewa, 23 have become members of the Co-operative Society; approximately 71% of the total (see Table 4 - XVII). This is hardly a satisfactory position. Considering the number and the intensity of the attempts made in the past to expand co-operative membership to cover all the lowland cultivators, 100% of them should have by now obtained membership. In the survey area this has not happened. Ironically it is the smaller farmers who need co-operative membership most who still remain non-members. Out of the 22 smaller farm operators (i.e. those operating

Table 4 - XVII Membership and different positions in the rural institutions being held by the respondents (classified by size of lowland holding)

G.S. Division : Edanduwewa

Size of lowland holding	Co-operative				Cultivation Committee				Rural Development Society				Death Donation Society				Community Centre				Trade Union			
	At present		Last two years		At present		Last two years		At present		Last two years		At present		Last two years		At present		Last two years		At present		Last two years	
	Members	Members of board	Members	Members of board	Members	Members of board	Members	Members of board	Members	Members of board	Members	Members of board	Members	Members of board	Members	Members of board	Members	Members of board	Members	Members of board	Members	Members of board	Members	Members of board
0-0.5	6	-	3	1	3	-	2	-	5	-	2	-	5	-	3	-	-	-	-	-	1	-	-	-
0.5-1.0	9	1	7	-	5	-	3	-	4	-	3	-	6	1	5	-	-	-	-	-	-	-	-	-
1.0-2.0	6	-	2	-	4	1	1	-	4	1	2	-	3	-	1	-	1	-	1	-	-	-	-	-
2.0-5.0	2	-	-	-	2	-	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
Total	23	1	12	1	14	1	6	-	14	1	7	-	15	1	9	-	1	-	1	-	1	-	-	-

Table: 4 - XVIII

Membership and Positions Held in Rural Institutions by the Respondents
(Classified by various low land size classes)

G.S.Division:Thalgamuwa/Attapitiya

Size of land holdings (acres)	Cooperative						Cultivation Committees				Rural Development Society				Janatha Committee				Others			
	Member at present	Member last 2 years	Member of Board of Directors		Chairman, VC Secretary		Member at present	Member last 2 years	Member of Board of Directors		Member at present	Member last 2 years	Chairman, VC Secretary		Member at present	Member last 2 years	Chairman, VC Secretary		Member at present	Member last 2 years	Chairman, VC Secretary	
			At present	Last 2 years	At present	Last 2 years			At present	Last 2 years			At present	Last 2 years			At present	Last 2 years			At present	Last 2 years
0 - 0.5	10	7	-	-	-	-	2	1	-	-	6	5	-	-	-	-	-	-	4	1	1	-
0.6 - 1.0	13	8	-	-	-	1	5	3	-	-	5	3	-	-	2	1	2	-	3	-	1	-
1.1 - 2.0	12	7	-	1	1	-	2	2	1	1	3	2	1	1	1	1	1	-	3	-	-	1
2.1 - 5.0	6	2	1	-	-	-	1	1	-	-	1	1	-	-	2	-	-	-	-	-	2	-
5.1 - 10.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total:	41	24	1	1	1	1	10	7	1	1	15	11	1	1	5	2	3	-	10	1	4	1

lowland extents below 1.0 acre size) only 15 are members of the co-operative; non-members are 32%. Whereas 8 out of 10 farmers operating extents above 1.0 acre are members, the non-member percentage is only 20%. Do the bigger farmers benefit more from the co-operatives by way of ready access to credit facilities? What prevents the smaller farmers from becoming members of the co-operative? These questions need attention.

On the committee of the co-operative there is only one representative from among the 23 members, or 32 lowland operators, interviewed. This particular committee member is a small farmer, operating a holding less than 1.0 acre in size. In a committee of 9 whether this one member looks after the interests of the small farmers adequately is doubtful in view of the survey findings that (1) the smaller farmers have not borrowed any loans from the co-operatives, and (2) about 32% of them are still not members of the co-operative. On the cultivation committee also there is only 1 out of the 32 operators interviewed. He happens to be a farmer cultivating a lowland holding between 1.1 and 2 acres. Again the smaller farmers representation in the cultivation committee appears ineffective. The Rural Development Society and Death Donation Society unlike the Co-operative Society and the Cultivation Committee are not statutory organisations with the specific aim of providing assistance to lowland cultivation. Their role is limited to general community developmental aspects and welfare work in the village. In Edanduwewa Grama Sevaka division contrary to expectations these two societies appear to be popular. In Thalgamuwa/Attapitiya, however, there is no Death Donation Society. These societies serve useful functions of constructing roads, public wells and assisting the poor at times of distress both in cash as well as in free labour. For farmers this seems to provide a considerable relief in certain ways.

In these activities unfortunately there is a lack of mutual contact and association among these different organisations which ultimately are meant to serve the interests of the villagers of whom more than 80% happen to be farmers. On the whole the active participation of the small farmers in these organisations is rather restricted if one interprets active participation from the representation in the committees of these organisations. Even the services expected to be generally provided by the institutions specifically meant to assist farmers cannot be considered satisfactory (see for example Table 4 - XIX). The reasons as to why the co-operatives have not been able to perform an important function like the extension of credit are observable in the tables 4-XXI & 4-XXII. Lack of a need for co-operative credit, lengthy procedure and the lack of membership in the society appear to be the main reasons given. Why there is "no need for co-operative credit" may be due to two reasons: (I) as shown earlier, borrowings are made from other sources and (II) there is no opportunity provided to the farmers firstly to identify the profitable investment in agriculture and secondly to have access to the facilities and requisites needed in making such investments. Both these reasons seem to be more or less equally responsible factors. The main attraction of the private lending source is the convenience in borrowing. Psychologically this seems to cancel out the effect of the high rate of interest (see Table 4 - XXV).

Table 4 - XIX Services provided by different agencies (as expressed by the respondents)

G.S. Division - Edanduwewa

Services	Co-operative	Cultivation Committee	Rural Development Society	Agricultural Extension Centre	Private Source	Death Donation Society
Consumer Goods	28	-	-	-	3	-
Cultivation loans	5	-	-	-	-	-
Certified seeds	-	-	1	7	1	-
Agro - chemicals	12	-	-	-	6	-
Tractor	-	-	-	1	3	-
Sprayer	6	10	-	-	-	-
Irrigation	-	3	-	-	-	-
Organisation of training classes	-	3	-	1	-	-
Advices on new methods	-	4	-	5	-	-
Organisation of Shramadana	-	1	8	-	-	1
Marketing of Paddy	16	-	-	-	1	-
Organisation of village gathering	-	-	2	-	-	-
Aids for death ceremonies	-	-	-	-	-	8
Marketing of crops other than Paddy	1	-	-	-	1	-
Fertilizer	1	-	-	-	-	-
Joint Planning	-	1	-	-	-	-
Total	69	222	11	14	15	9

Table 4 - XX

Services provided by different agencies (as expressed by the respondents)

G.S. Division - Thalagamuwa-Attapitiya

Services	Co-operative	Cultivation Committee	Rural Development Society	Private traders
Consumer goods	53	-	-	1
Cultivation loans	9	-	-	2
Certified seeds	2	1	-	3
Agro - chemicals	26	-	-	11
Tractor	-	1	-	2
Sprayer	-	9	-	8
Irrigation	-	-	-	-
Organisation of training classes	-	-	-	-
Advices and new methods	-	2	-	-
Joint Planning	-	1	-	-
Organisation of Shramadana	-	1	1	-
Marketing of Paddy	22	-	-	3
Marketing of crops other than Paddy	-	-	-	7
Organisation of village gatherings	-	-	1	-
Total	112	15	2	37

Table: 4- XXI

Reasons for Non-Borrowing of Co-operative Credit
Classified by Lowland Size Classes

G.S.Division: EDANDUWAWA

Size Class (in acres)	Total No. of respondents	No. of respondents giving reasons	REASONS					
			Coop. does not provide credit	Coop. credit not needed	Not Members of Coop	Procedures are lengthy	Coop. does not provide credit to poor	Others
0 - 0.5	9	7	-	3	-	2	-	2
0.6 - 1.0	13	8	2	2	4	1	1	2
1.1 - 2.0	7	5	2	1	1	2	1	2
2.1 - 5.0	3	1	-	-	-	-	-	1
All Size Classes	32	21	4	6	5	5	2	7

Table: 4- XXII

Reasons for Non-Borrowing of Co-operative Credit
Classified by Tenurial Category and Land Operators

Tenurial Groups	Total No. of respondents	No. of respondents giving reasons	REASONS					
			Coop. does not provide credit	Coop. credit not needed	Not Member of Coop.	Procedures are lengthy	Coop. does not provide credit to poor	Others*
Owner	15	13	1	4	2	2	1	5
Tenant	13	6	2	2	2	2	1	2
Owner/ Tenant	4	2	1	-	1	1	-	-
All Tenurial Groups	32	21	4	6	5	5	2	7

* Others include: Fears of not being able to repay; difficult to get personal surety; due to draught; being Member of the Committee he should let others to borrow, etc.

Table: 4- XXIII

Reasons for Non-Borrowing of Co-operative Credit Classified by Lowland Size Classes

G.S.Division:Thalgamuwa/Attapitiya

Size Class (in acres)	Total No. of respondents	No. of respondents giving reasons	REASONS					
			Coop. does not provide credit	Coop. credit not needed	Not Members of Coop.	Procedures are lengthy	Coop. does not provide credit to poor	Others
0 - 0.5	15	10	-	1	2	2	2	5
0.6 - 1.0	17	13	1	6	-	2	1	5
1.1 - 2.0	12	8	-	4	-	6	-	2
2.1 - 5.0	9	7	1	3	1	2	-	2
All Size Classes	53	38	2	14	3	12	3	14

Table: 4- XXIV

Reasons for Non-Borrowing of Co-operative Credit Classified by Tenurial Category of Lowland Operators

G.S. Division: Thalgamuwa/Attapitiya

Tenurial Groups	Total No. of respondents	No. of respondents giving reasons	REASONS					
			Cooperative does not provide credit	Coop. credit not needed	Not Member of Coop.	Procedures are lengthy	Coop. does not provide credit to poor	Others*
Owner	31	24	2	8	3	5	3	9
Tenant	9	8	-	2	-	3	-	4
Owner/Tenant	13	6	-	4	-	4	-	1
All Tenurial Groups	53	38	2	14	3	12	3	14

* Others include: uncertainty of income and fears of non-repayment; not provided in time; difficult to get, etc.

Table: 4- XXV

Opinions Regarding Private Lending
Expressed by Lowland Operators

Opinions	EDANDUWANA		THALGANUWA/ATTAPITIYA	
	Actual	%	Actual	%
Easy to get loans	17	32.7	22	33.3
Prompt in advancing loans	7	13.5	6	9.2
Sympathy towards borrowers	6	11.5	3	4.5
No harassment	5	9.6	2	3.0
High rate of interest	11	21.2	17	25.8
Exploit poor farmers	5	9.6	7	10.6
Others	1	1.9	9*	13.6
Total:	52	100.0	66	100.0

* Most important among the opinions under others are 'they can tell their difficulties and extend the periods of repayment' (4 cases).

14. Credit Supervision

If institutional borrowing is to be improved and sustained the procedures in lending must be made easy; secondly a system of credit supervision has to be designed to make such borrowed funds productive to the farmers and recoverable by the lending institutions. Else, both after borrowing as well as prior to repayment, there is the possibility of the funds being utilised for other purposes. To ensure that this does not happen, supervision has to be maintained at three stages: I. at the stage of granting credit, II. at the stage of actual use and III. at the stage of repayment.

According to the prevailing practice at the first stage of granting, credit is provided in kind wherever possible. e.g. fertilizer, and agro-chemicals. This is supposed to prevent the credit being utilised for other purposes. However, if needed cash could yet be realised by the farmer selling the fertilizers and chemicals. Therefore, giving credit in kind by itself is no guarantee against the misuse of credit. So far supervision in the use of credit has not been maintained in the survey area as is also the case in the rest of Sri Lanka. Similarly recoveries also have not been supervised. Attempts have been made to perfect the legal provisions in respect of loan recoveries. However, the position in respect of the loan recoveries is not yet quite satisfactory. As seen from Table 3-XI(p.31) it has not been possible to recover the loans granted by the co-operative. Crop failure and low incomes are the main reasons.

How can an effective scheme of credit supervision be evolved? It is clear from the foregoing account that credit could be repaid only by those who are already credit-worthy or those who could be made so with credit granted initially. Therefore, firstly, farmers belonging to this category have to be identified and to start with only this category of farmers should be selected. Living conditions of those farmers who do not fall into the above category cannot be improved through agricultural development by providing credit alone though they also have to be made credit worthy by providing credit. Unfortunately the emphasis placed on agricultural credit so far gives the impression that credit could work like a magic formula irrespective of the individual situation of the farmer. Farmers who are unable to become creditworthy even after the provision of initial credit are handicapped by other problems, e.g. smallness of the holding size, lack of water, unfavourable tenure conditions etc. It is by removing these obstacles that such farmers could be made creditworthy. If such obstacles cannot be removed they have to be considered as the excess of population in the agricultural sector. For these people, employment will have to be found in the non-agricultural sectors. However, with agricultural development proceeding systematically it is unlikely that these farmers would remain as part of an excess agricultural population.

15. Saving Deposits (Capital Formation):

In an area where most of the farmers are at subsistence level, or even below, talk of capital formation by means of saving deposits

becomes ridiculous. Reference to compulsory savings is even more sensitive and inflamatory. But for the success of a comprehensive credit scheme particularly for small farms, none can deny the importance of savings deposits. It is true that savings schemes in the small farm sector cannot go alone - they must be combined with means for increasing production i.e. the introduction of new technology on one hand, and extension and education on the other.

The habit of thrift deposit, if encouraged by the credit institution, gives confidence and increases credit worthiness of the small farmer. It attracts outside agencies for further investment in the small farm sector. The small farmer is motivated to participate in group activities because of the involvement of his money. Above all, if rural banking facilities are provided and small farmers who constitute the major portion of the rural population are unable to participate actively in the scheme, its objective is immediately defeated.

From the survey it appears that there was no provision under any rural institution to encourage mobilization of local resources in the form of regular thrift deposits. Only small deposits by way of share purchases were made by some farmers - which they had to do in order to become the members of the co-operatives. A small number made saving deposits in the Post Office and the Bank on their own initiative (see Appendix C - 23 and 24).

* * * * *

Glossary

1. Grama Sevaka Division - area of authority of the village level representative of the Government which usually comprises 5 - 6 villages.
2. 'Yaya' - a contiguous tract of paddy land.
3. Maha - cultivation season which normally extends from about September - October to February - March and coincide with the North East monsoon.
4. Yala - cultivation season which normally extends from April to August and coincides with the South West monsoon.
5. 'Attan'- exchange of labour.
6. 'Ande' - Share cropping.
7. Tenant/Owner - a farmer of both owned and tenanted land.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

During the period subjected to this investigation, i.e. 1971/72 and 1972/73,borrowings in the survey area (Edanduwewa and Thalgamuwa/Attapitiya Grama Sevaka divisions) both in amounts as well as in the number of borrowers, are not appreciably high: the proportion is about 1/4. *The most popular source of borrowing is friends and relatives and the least popular one is the co-operatives. Whenever borrowing from friends and relatives decreases, that from private lenders increases much more than that from the co-operatives.* Friends and relatives are most popular as a source of borrowing due to several reasons such as convenience in borrowing, security in being indebted, non-payment of interest and the absence of strict time periods for repayment. *As against the co-operatives the private lenders are preferred despite high interest rates because of the rigidity of procedure in co-operative lending and also the convenience in borrowing from private lenders. The other factors that make co-operative lending less effective are: (1) lack of co-operative membership for some farmers, (2) non-existence of a communication network to keep the farmers informed of details about available credit facilities and how to make use of them, (3) absence of a genuine farmer leadership to organise the farmers in a manner acceptable to them and also to maintain the necessary link with the institutions set up to assist farmers. This then leads to the need for building institutions which remain faithful to the farmers cause.*

Agricultural development and agrarian change so far have been attempted from a partial approach, i.e. emphasising more on the improvement of paddy production. Highland cultivation and livestock development especially in the small farm sector have not received so much of attention. The problem of agricultural diversification lies mostly here. For this the small farmers must know in what types of agricultural projects on highland they can make profitable investment. This is a rather laborious task in project identification and farm planning in the small farm sector; because it has to be done in respect of different categories of farmers, for different locations, in consultation with them by technically competent men.

Profitability assessment in such an approach is very important and this must essentially focus attention on the subsistence needs of farm families. The assessment of profitability may have to be preceded by the identification of farmers' groups in terms of their subsistence needs and surplus production capacities in the respective agricultural commodities. On this basis the two basic farmer groups referred to in Chapter IV can be identified separately, i.e. I. the farmers who are unable to produce a certain agricultural commodity above subsistence level and II,the farmers who are able to produce surpluses.

Having identified the two basic farmer groups their problems need separate attention. Farmers producing below subsistence do so both due to the low level of management as well as the uneconomic size of the holding. *Inefficient management results from low labour efficiency, illiteracy, lack of training and information on the methods of advanced management practice, and also from insufficient time being devoted to farming as in the case of part time farmers who have more remunerative alternative employment like teaching and business. In such situations extension of credit has to be coupled with a programme to improve management efficiency upto optimally profitable levels of production.* In respect of part time farmers still this may be problematic as they simply would not be disposed to giving up their more profitable alternative employment. In circumstances of this nature either price incentives will have to be provided to make agriculture a more profitable employment or some arrangement may be required to cultivate the holdings of such part time farmers utilising the extra capital they usually have by virtue of their alternative employment and also the labour of those who could devote their full time to farming. *The system that could be evolved may be chosen considering possibilities like pooling such land at the initiative of village institutions like the Co-operative, the Cultivation Committee and the Agricultural Productivity Committee. Them landless labour could be organised for cultivating them either on a leasehold basis as implied in the Agricultural Productivity Law or on a joint farming basis. It is with an arrangement of this nature that agricultural credit has to be provided.* But the most important thing here is that in this sort of re-organisation every farming unit must be examined in terms of its economic viability and productivity before providing credit for investment. Here the approach required is not to ascertain the desirability of cultivating one or two pre-selected crops and make the decision to use borrowed funds on this basis alone. *It should be rather an approach more oriented to identifying several investment possibilities using technical information and guidance and then choosing the most profitable investment out of them.* A credit programme has to be drawn up to match the needs of such investments. It is at this stage that farm planning also becomes necessary. *In fact, the credit plan should evolve from the farm plan.*

It became clear that low income is a very significant factor slowing down the progress in the use of agricultural credit. This is strongest in respect of those whose actual production remains below the subsistence needs: it may be due to several reasons. If the most fundamental cause is related to the size of holding this has to be solved first as referred to earlier before providing credit. However, if other causes are more responsible they have to be diagnosed and removed. But in the removal of these other causes like low efficiency in labour and management, lack of knowledge etc. credit can play a vital role. *The problem with most of the farmers producing below subsistence is that they are not credit worthy. Therefore, agricultural credit for them has to be provided to make them credit worthy. Due to this they need separate treatment in credit extension.*

Once the effects of these basic problems, or the root causes, are mitigated the farmers who are used to traditional ways of managing their affairs in isolation have to be organised around nuclei of genuine farmer leaders acceptable to the farmers themselves. They

need to be linked to the village institutions providing credit and other assistance for agricultural operations. This linking must be such that an effective system of two way communication between every individual farmer and farm unit and the relevant village institutions like the co-operative and cultivation committee is maintained.

There is also a need to make the management of the village institutions more efficient especially in matters relating to the interests of the farmers. Personnel also may have to be trained from time to time to create an atmosphereof mutual understanding between the officials of the village institutions and the farmer groups. This also makes both parties aware of the problems on both sides as well as the opportunities available for extending services and making use of them.

There also seems to be a case for relaxing the rigidity of the lending procedure. This seems to be affecting the use of credit much more than the interest rate. The approach of the institutional credit services to put agricultural credit in a straight jacket of production expenses unrelated to the most basically needed family consumption requirements is also proving to be lop-sided. That is why invariably the farmers have to fall back firstly on friends and relatives and secondly on private lenders.

Low income and low production in relation to family needs make the repayment of institutional credit a problem for small farmers. This also keeps them back from resorting to borrowing from institutions, whereas borrowing of interest free loans without strictly followed repayment periods from friends and relations is safer for the small farmer. In the event of failure to repay ultimately they could at least set them off against free labour and help they may extend from time to time to the lender friends and relations in certain mutually understood ways.

Although institutional lending has been in operation for more than two or three decades the credit granted is not supervised. As a result some farmers have got used to irresponsible ways of using borrowed funds. Moreover even where repayment is possible it is neglected. This indicates that there is a strong need for credit supervision.

As it is, farmers have lost faith in almost all the village level institutions set for agricultural development due to inadequate attention and the almost haphazard type of service they receive. The need for rebuilding the correct image of these institutions therefore looms larger.

In conclusion therefore, the following recommendations for future action could be pin pointed. But they are made specifically for the purpose of experimentation in the field laboratory area of the Agrarian Research and Training Institute. Such experimentation could be appropriately taken up in view of the fact that this investigation was also conducted in the same area. However, this is not to negate the relevance of the recommendations at least in respect of those areas in the wet zone showing characteristics somewhat similar to the survey area (particularly Kegalle and parts

of Kandy, Ratnapura, and Matale districts). Nevertheless, the writers do not wish to make such generalised recommendations, as the inferences drawn and the conclusions made themselves are highly tentative and need more rigorous treatment than could be attempted in this work within the short period of time available to complete it.

Recommendations

1. *Edanduwewa Grama Sevaka division in the Bemeniwatte Agricultural Productivity Committee areamay be selected for an experiment in credit extension.*

2. *In the selected area a programme may be launched to examine the economic viability of the agricultural holdings. This programme could consist of the following aspects.*

   (a) Group the farmers into three classes on the basis of their operational holdings of highland and lowland separately as follows:

   I. Operators of less than 1 acre
   II. Operators of 1 to 2 acres
   III. Operators of more than 2 acres.

   (b) Select a representative farmer and his farm holding from each group and examine the range of crops that can be grown and also the livestock that could be reared. This may be done by a technically qualified officer of the Department of Agriculture in consultation with the farmer selected from each group.

   (c) Once the task (b) is completed the profitability of such alternative possibilities also may be examined by a trained person again in consultation with the farmer. After this a suitable farm plan acceptable to the farmer could be evolved. From this the farmer comes to know his credit requirements. He also becomes convinced both of the profitability as well as the repayment possibility of credit.

3. *Select the credit worthy farmers on the basis of the above programme getting also the assistance of the farmers who were involved in the programme. This makes selection quicker and more reliable. An opportunity also must be provided for farmers to make their claims for credit.*

4. *In estimating the credit requirement, allowance must be made for farmers' basic consumption requirement during the period of agricultural work. Thus productivity or profitability has to be examined as stated earlier in relation to the borrowed funds also, because the borrowed fund has a cost in the form of interest and incurring this cost is not worth unless at least that is recoverable as a net reutnrn.*

5. *In the profitability estimation an assumption has to be made always regarding the level of operation and input requirement, say in the form of farmers' attention and care, level of knowledge and training, extension and also inputs like seed, planting material and fertiliser.*

While organising these through the Co-operative Society, Cultivation Committee and agricultural extension service to achieve the expected operational level, credit also must be tied to specific input components.

6. All the above measures can be adopted only in respect of those farmers who qualify as credit worthy mainly by virtue of their having relatively larger holding sizes or non-agricultural sources of income. But there are farmers who are not so credit worthy and they could be identified through the implementation of the programme suggested in recommendation No.2 For these credit must be provided individually only if any profitable investment is possible at all in their holdings. Otherwise the following possibilities must be explored.

   (a) making available some land in extents of about one or two acres on lease or rent from those who have cultivable but uncultivated land which the owners are not interested in improving. Such lease or rent should be on short term basis renewable only on the basis of cultivator performance adjuged by the Cultivation Committee and the Agricultural Productivity Committee.

   (b) joint farming by pooling the holdings and making them function as economically viable units implementing a commonly accepted farm plan at the initiative of the Cultivation Committee.

   (c) any other form of collectivisation acceptable to the respective small farmers.

7. When the farmers belonging to the class who are ineligible for agricultural credit as individual farmers are organised in any one of the ways mentioned in No.6 only should agricultural credit be made available to them on their farm unit.

8. Individual small farmers must be organised into small 'pressure groups' around genuine and more knowledgeable farmers who could provide some guidance and also assistance to other members of such groups. These groups must be trained to maintain close liaison with the Cultivation Committee and the Co-operative Society to obtain the required services like credit in time. Through this organisation a constant flow of information also must be maintained by deviding a suitable system.

9. In the Co-operative Society there should be a separate section specialising in the extension of services needed by farmers. Agricultural credit along with the sale of other inputs and machinery and also the collection, transport and marketing of agricultural produce must be handled by this section. If the co-operatives are reluctant to organise such functions they could be taken over by the Agricultural Productivity Committee to be handled through the Cultivation Committees.

10. Finally it is necessary to examine what sort of system may desirably be adopted to supervise agricultural credit. There is no dispute that agricultural credit is expected to be utilised as an investment. An investment is not worth making unless it is beneficial. In respect of each applicant for credit, therefore,this aspect has to

scrutinised. On scrutiny if the estimated yield on borrowed funds is likely to be less than the generally fixed interest rate, adjustment of the latter in favour of smaller farmers is desirable especially when more productive investment is not available for the farmers concerned.

For such scrutiny competent persons may have to be trained at the Cultivation Committee level. Applications from the Cultivation Committee level could be then passed on to the Agricultural Productivity Committee level for rescrutiny and recommendation. After this the applications for credit could be passed on to the Bank Office at the Agricultural Productivity Committee Centre. If needed the Bank could once again examine such applications and make credit available as a block grant to the manager of the agri-section of each co-operative in the respective Cultivation Committee areas. Cash may be given only when such credit cannot be given in kind. Each cultivator or loan applicant now gets that amount of credit needed at a time from the manager of the agri-section of the Co-operative on the production of his farmer Identity Card. Cultivation Committee members must be made responsible to check whether the loan applicants in their respective areas use the credit for purposes provided at each stage. In the event of a farmer misusing such credit, the Cultivation Committee can decide to withhold the granting of the remaining credit until the misused amount is repaid. If the repayment does not take place within a specified period, the Cultivation Committee could take over his land and cultivate it using the credit properly, charge all the costs to his account and also impose a fine and return only the balance. Any dispute arising out of this could be settled by the Agricultural Productivity Committee. Even in the repayment of loans, the Cultivation Committee members could be held responsible to see that the farmers in their respective areas repay the loans in time. The Bank could have an officer to supervise the loan transactions of the managers of the agri-sections and also to train them to transact business efficiently. For the recoveries of loans in time some commission may be paid to the Cultivation Committee/Agricultural Productivity Committee.

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(1) *In the Agricultural Census of 1963, a small holding is defined as an agricultural holding less than 50 acres in extent, see Department of Census and Statistics, , Report on the Census of Agriculture 1962, Vol. I (Colombo, Government Press, 1965), p.33.*

The average extent of holding below 20 acres in size at the Census of 1952 was 2.49 acres; see page 17, Census of Agriculture 1952, Part IV

(2) *See, Census of Agriculture 1962, Vol. I, p.37*

(3) *See, Central Bank of Ceylon, Annual Report 1972, p.2*

(4) *Central Bank of Ceylon, Survey of Ceylon's Consumer Finances 1963 (Colombo, 1964)*

(5) *Sessional Paper II - 1970, Report of the Royal Commission on the Co-operative Movement in Ceylon (Colombo, Dept. of Government Printing 1970), p.9*

(6) *J.M. Gunadasa, 'Credit Schemes and Paddy Cultivation in Ceylon' The Journal of the National Agricultural Society of Ceylon, Vol.5, June 1968, pp 1-20.*

(7) *Co-operative Societies Ordinance, 1956 revision; Co-operative Societies (Amendment) Act No.27 of 1964; Co-operative Societies Law No 5 of 1972 of the National State Assembly.*

(8) *Central Bank of Ceylon, Annual Report 1972, p.114*

(9) *Land Reform Law, No.1 of 1972 of the National State Assembly (Colombo, Department of Government Printing)*

(10) *Agricultural Productivity Law, No. 2 of 1972 of the National State Assembly (Colombo, Dept of Government Printing)*

(11) *Agricultural Lands Law, No.42 of 1973 of The National State Assembly (Colombo, Department of Government Printing).*

(12) *Agricultural Insurance Law, No.27 of 1973 of The National State Assembly (Colombo, Dept of Government Printing)*

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(13) *Department of Census and Statistics, Survey of Rural Indebtedness in Ceylon 1957*

(14) *Central Bank of Ceylon, Report of the Survey of Rural Credit and Indebtedness 1969 (Colombo 1971)*

(15) *See Sessional Paper VII - 1910, Agricultural Banks; Sessional Paper III - 1920, State Banks for Agriculturists; Sessional Paper J. 1945, Second Interim Report of the Commission to Inquire into*

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(16) Ceylon Government, Ministry of Food and Agriculture, Agricultural Plan: First Report of the Ministry of Planning Committee, (Colombo Government Press, 1958).

(17) Richard J. Ward ed., The Challenge of Development (Chicago, Aldine Publishing Co. 1967), p.208

(18) Agricultural Productivity Law, No. 2 of 1972

(19) FAO, Guide to Methods and Procedures of Rural Credit Surveys, (Rome 1962)

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