CHAPTER II
REVIEW OF LITERATURE

Review of the relevant literature and the past empirical studies connected with the research work was done to have a precise understanding of the concepts and the tools of analysis. The review is presented in three sections viz., Concepts; History of rural credit in India; and Past empirical studies.

Section I: Concepts

AGRICULTURE

In a narrow sense, agriculture referred to crop production only. But, in its wider sense, it included other allied activities where biological transformation was the process of production. Therefore, following the definition given by the National Commission on Agriculture,¹ Agriculture was defined to include activities like, cultivation of crops, cattle rearing and dairy farming, raising poultry and piggery, bee-keeping, and development of fishery and forestry and also activities connected with their improvements.

AGRICULTURAL DEVELOPMENT

Hayami and Ruttan point out that agricultural development means an increase in the productivity growth brought about by a continuous stream of new technical knowledge and a flow of industrial inputs in which the new knowledge is embodied. And the National Commission on Agriculture called this an improvement for modernization of Agriculture.

FINANCE

Christy and Roden defined "Finance as the study of the nature and uses of the means of payment". This would include arrangement of payment for something purchased; study of the creation, nature, behaviour, regulation and problems associated with money and budget formulation by families, businessmen, investors.

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financial institutions and Governments. It would also be a study of the institutions like banks and stock exchanges, and phenomena like interest rates, inflation and credit that have arisen in money using societies.\(^5\)

According to them, credit might mean "being worthy of trust with other people's money or having the ability to obtain a loan when needed. But the tangible evidence of credit is simply a loan of money..."\(^6\).

To Cooper and Lijri "finance", would mean "supply with funds through the sale of stocks or bonds, floating loans, extending credit on open account, or transferring or appropriating money from internal sources," and the word "financial" would be related to "money and its management, movement, or objectives; as financial transactions, financial policies".\(^7\) Capital to them included goods intended for further production and the amount invested in an enterprise by its owners.\(^8\) "Credit", referred to, "the ability to buy or borrow in consideration of a

\(^5\)Ibid., p. 3.

\(^6\)Ibid., p. 21.


\(^8\)Ibid., p. 82
promise to pay within a period..."\(^9\)

Anderson defined "finance", as "matters relating to supply and demand of monetary resources in a business during the normal course of business activities. Also relates to activities concerned with raising capital, payment of dividends, arranging loans and overdrafts."\(^10\) He defined capital as the value of assets (wealth) owned and used by a business to generate additional capital or wealth. When the business came into existence, the initial capital provided by friends or banks could be called as "loan capital".\(^11\)

French and Saward defined Capital as "a stock of money, possessed by a person or firm, which might be invested from time to time in assets in order to earn income but which was intended not to be diminished."\(^12\)

\(^9\)Ibid., p. 140.


\(^11\)Ibid., p. 15

Johannsen and Page meant by capital the stock of money or goods used in a business enterprise. Such goods were either fixed capital, such as buildings, plant, and machinery, or working capital or circulating capital consisting of raw materials, part-finished goods, components and finished goods in store.\textsuperscript{13}

Hampton defined "finance" as the management of the flows of money through an organization, whether it be a corporation, school, bank, or government agency. Finance concerns itself with the actual flows of money, as well as any claims against money.\textsuperscript{14}

Blaisdell \textit{et al.}, defined capital as the existing stock of wealth used for the production of goods and services (excluding goods for personal consumption by the present owner) and credit as the device used to transfer temporarily from one person to another the power to


purchase capital goods and Mellar and Choubey used the same definition.

**AGRICULTURAL FINANCE**

To Murray, agricultural finance would comprise the borrowing of funds by farmers; the organization and operation of farm lending agencies; and society's interest in credit for agriculture.

Penson and David pointed out that the study of agricultural finance varied in scope from a very micro concept of agricultural finance, such as the study of the financing and liquidity services provided by credit, to a very macro concept of agricultural finance, such

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as the examination of agriculture's role in an integrated macro economy.  

According to Lee et al., agricultural finance was the economic study of the acquisition and use of capital in agriculture. It dealt with the supply of and demand for funds in the agricultural sector of the economy.  

**CAPITAL**  

According to Schultz, capital referred to not only tangible items like physical plant and equipment, construction of all kinds, machinery, and producers inventories, but also certain intangible items like education, technical training, and managerial knowledge. Thus the term capital might well be defined as a factor of production which generated a flow of income spread over a certain period of time. The term capital as used in agriculture was composed of both equity and debt capital. Debt capital was money borrowed and used to purchase inputs.

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for production processes and which generated money income over time. ...Equity capital was the capital which was fully owned and free of debt. Thus credit supplemented equity funds.

Rajagopalan defined "agricultural credit as the amount of investible funds made available for the purpose of development and sustenance of farm productivity".  

Singh defined credit as the transfer of purchasing power from one party to another over an interval of time. The transfer was made through a transaction in which present purchasing power was made available by the creditor to the borrower in exchange for an instrument of debt which would become an obligation of the debtor. The purchasing power made available to the debtor for the time being would enable him to acquire goods or services formerly beyond his reach.

22 Ibid.


Ross elaborated the concept to show that agricultural credit included a broad field: the principles of farm credit, the activities of lending agencies, and the ways in which farmers and farmers' organizations made use of credit.  

In essence, the term "finance" would implicitly include the connotations associated with the terms "Capital" and "Credit" for the simple fact that its (finance) sufficient accumulation would enable the involved agencies to continuously transfer the purchasing power for the needy to make payments for especially productive activities and adding to productive capacities. In view of the same, the term finance would be more comprehensive than other terms, capital and credit. However, as Murray had shown, of the two major financial activities of farmers namely, borrowing and investing, the former would be the more important because of the critical nature of the decisions a farmer had to make in the process of borrowing and of using borrowed funds. Hence, in practice, agricultural finance had come to mean agricultural credit availed of by farmers through borrowing and its supply by lending agencies.


CLASSIFICATION OF FARM CREDIT

Murray's Classification

Murray attempted to describe farm credit on the basis of six criteria like (i) time; (ii) purpose; (iii) security; (iv) lender; (v) type of borrower; and (vi) productivity.27

On the basis of time, credit was classified as (a) short term (b) medium term, and (c) long term credit. Short term credit might be further classified into three groups such as (i) monthly (upto 3 months duration), (ii) seasonal (3-9 months duration) and (iii) annual (9 months-1 year duration). Medium term credit would be one in which credit extended would be repaid in periods varying between one year and five years. Loans for dairying, cattle rearing, orchards, livestock implements, feeding floors, drainage, irrigation system, heavy machinery and other improvements connected with them would fall under this category. All other credits involving repayment period of more than five years would be called long term credit.

27 William G. Murray, ibid., pp. 20-28; and also Warren P. Lee et al., op.cit., pp. 110-112.
Purposewise, there were three types viz., (a) production loans (b) real estate loans and (c) consumption loans. Production loans (include short and medium term loans) would be extended to (i) buy seed, feed, fertilizer; (ii) pay operating expenses; (iii) live stock development; (iv) buy machineries and equipments; (v) finance commodity storage and (vi) refinance any of the above items. Real estate loans (long term loans) would be sanctioned (i) to purchase a farm; (ii) to purchase additional land; (iii) to finance orchards, drainage and other improvements; and (iv) to refinance any one of these items.

By the type of security, again, three categories were identified, namely (a) secured short term and medium term loans which might be obtained by mortgaging tangible personal property like stored crops, livestock, machinery, equipment; intangible personal property like government bonds, stocks, life-insurance policies and warehouse receipts; (b) secured long term loans which might be real estate mortgage loans and land contracts; and (c) unsecured loans.  

A classification of credit based on lenders would be of use because policies of lenders might differ greatly.

Under this category, loans given by lenders, like relatives, private investors, commercial banks, financing companies, merchants and dealers, and cooperative bodies, might be grouped into (a) Private credit and (b) Institutional credit from the standpoint of creditor or credit giving agency. Private credit would be given by money lenders, indigenous bankers, traders, landlords, friends and relatives. The lending would not be governed by any codes of conduct but generally exploitative in character. Institutional credit would be supplied through "suitable institutions created for promotion of economic development...". There would be a proper code of conduct. It would be non-exploitative in nature.

Ross' Classification

Ross broadly classified agricultural credit into (i) consumption loans; and (ii) farm business credit/production loans. Consumption credit would be one in which the return would be measured in terms of personal enjoyment and standard of living rather than its direct effect on income. Farm business credit would be borrowed to carry on farm production or to assist in farm ownership. Further he classified farm business credit or production loans into

29 B.N. Choubey, op.cit., p. 17.
a) short period one which could be paid out of a single production operation e.g., crop, livestock feeding operation; (b) intermediate loans which included loans for equipment, breeding stock and repairs; and (c) real estate loans or mortgage loans or long term loans to buy a farm, additional land, to make permanent improvements like buildings and major repairs and also refinancing for such purposes. 30 Mellor also used a similar classification. 31

Planning Commission's Classification

According to the Draft First Five Year Plan, finance required for production could be divided broadly into; (i) short term (for periods upto 15 months); (ii) medium term (from 15 months upto five years); and (iii) long term (above five years). 32 Purchase of inputs and meeting labour charges would come under short term loans. Sinking wells, purchase of bullocks, pumping plants, and other improved implements would come under medium term loans. Loans used for clearing old debts, purchase of heavier machines, making permanent improvements and increasing the size of the holding would come under long term loans.


31 John W. Mellor, op.cit., p. 315.

National Bank's Classification

National Bank for Agriculture and Rural Development (NA:ARD) had three types of classification of agricultural finance for refinancing assistance, (i) short term credit—upto 18 months; (ii) medium term credit for periods between 18 months and seven years; and (iii) long term credit for periods not exceeding 25 years.33

Lee's Classification

Lee classified agricultural credit into three types namely (i) investment credit; (ii) operating credit; and (iii) consumption credit. Investment credit might be required for investment on land, buildings, machinery and livestock. These investments would serve as a basis for production. Credit needed for meeting operating expenses on feeding livestock, repairing farm machinery and buildings, buying seed and hiring labour, would constitute operating cost. Consumption credit would be that used to buy goods and services which were not directly connected with the process of production.34


Jha's Classification

Jha observed that "a farmer requires long term credit for the purchase of land and improvements, medium term credit for purchasing bullock and implements and short term credit to acquire working capital which is required for actual cultivation".35

Choubey's Classification

According to Choubey, agricultural production credit could be divided as (i) settlement credit; (ii) development credit; and (iii) production equipment credit. Settlement credit would be defined as "Credit required for purchase of land for a new settlement, rehabilitation, rounding off holdings, construction of farm-shed and godowns".36 Development credit would be required for permanent improvement or development of land, such as soil conservation, levelling, proper irrigation and drainage, fencing or enclosures, the building of proper barns and shearing sheds. Production equipment credit was intended to provide production facilities and running or operational expenses


which were less permanent as compared to land and its permanent improvements. They were expenses for major implements, livestock, plantation of fruit trees and expenses in payment of wages, purchase of seeds, fertilizers, fodder and other agricultural requisites.

Institutional and Non-institutional Credit

Of all the classifications, one by source of credit was very important for the present study. Specifically, agricultural credit in India would be broadly classified under (i) institutional credit and (ii) non-institutional credit.* Institutional


ii) All India Rural Credit Review Committee used the term "non-institutional credit," Report of the All India Credit Review Committee (Bombay: Reserve Bank of India, December, 1969), p. 405.

iii) The Study Group of the National Credit Council used the terms "institutional and non-institutional agencies," Organizational Framework for the Implementation of Social Objectives (Bombay: Reserve Bank of India, October, 1969), p. 33.

sources of agricultural credit would cover (a) cooperatives, (b) commercial banks, (c) regional rural banks and (d) Government. Non-institutional sources would include (a) big farmers, (b) big-farmer cum-money lenders, (c) commission agents, (d) friends and relatives, (e) money lenders, (f) traders and (g) village shop-keepers.

Direct and Indirect Financing

Flow of agricultural finance in India would be either direct or indirect. All items under short, medium and long term loans would fall under the category of direct financing. Indirect financing of agriculture referred to flow of funds to agriculture indirectly through some other organizations or agencies which would also perform functions closely connected with agriculture. Examples were (i) financing primary agricultural cooperative societies, farmer's service cooperatives, large-size multi-purpose societies, producer's societies and marketing societies, (ii) fertilizer dealers (iii) agro-service centres, (iv) state electricity boards for energization of pumpsets, (v) state corporations for undertaking minor irrigation works and land improvement programmes, (vi) construction of godowns and warehouses to be used by the Food Corporation of India, Jute Corporation of India, State Warehousing Corporations, and Cooperative Societies, (vii) creation of cold-storage facilities for agricultural produce,
establishment of regulated market yards, (ix) development of forestry, and (x) financing regional rural banks to supplement their resources.  

DEMAND FOR CREDIT

The demand for agricultural credit would arise from farmers' credit requirement for the (i) purchase of seeds, manures, fertilizers, feeds; (ii) payment of wages, rent and electricity charges; (iii) maintenance of irrigation sources; (iv) repair and maintenance of agricultural implements; (v) purchase of land; (vi) reclamation of land, bunding and other permanent land improvement activities; (vii) digging and deepening of wells; (viii) development of other irrigation resources like tube-well irrigation and sprinkler irrigation methods; (ix) laying new orchards and plantations; (x) purchase of livestock, implements, machinery and transport equipment; and (xi) construction of farm houses, barns, cattle sheds and other necessary farm structures.

Therefore, the demand for farm credit would depend upon a number of factors like stage of development in the economy, need for production, availability of market

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facilities, technical knowledge attained by farming community, technological development in farming, land tenure system, development of food processing and agri-based industries, and government policy towards agriculture. At the micro level, it would depend upon agro-climatic conditions of the areas, availability of irrigation facilities, cropping pattern, size, and method of farming, literacy of farmers, physical production facilities available, quantum of equity finance available at farm level, nature of production plan aimed at, diversification of farming activity at farm level, proximity to dependable source of credit at reasonable cost, and the enterprising nature of the farmers.

**SUPPLY OF CREDIT**

Farmers need the supply of capital to add to the capital stock to generate income. But farmers in India did not possess enough equity funds to start with. Therefore, somebody's savings would have to be transferred to the needy borrowers in agricultural sector to fill up the gap between their production and investment requirements and their equity funds. The Royal Commission on Agriculture (1928) rightly observed that "As in every other country, the cultivator in India needs, from time to time, some source of capital either for carrying out permanent
improvements for the purchase of more expensive implements, or for current requirements."\(^{38}\)

The financial intermediaries serving agriculture had collected the loanable funds from a variety of sources and channelized them into agriculture. In India, non-institutional sources such as agricultural money lenders and professional money lenders, landlords, relatives, traders, and commission agents performed this function. They operated in the rural areas and their sphere of activities was mainly associated with the financing of agriculture. The moneylender, being the most important constituent in the rural credit machinery of the country in terms of number and business, charged high rates of interest and exploited the illiterate borrowers. Jacoby observed that, "he (money lender) seldom cares about the use of the money he lends out and frequently encourages his clients to continue borrowing as long as they could give additional security".\(^{39}\) According to the All India Rural Credit Survey Report, all the non-institutional sources accounted for 92.7 percent of the total borrowings.


of the cultivators until early fifties in India. The role of institutional sources of agricultural credit gained currency since First Five Year Plan; and its dimension assumed further significance since Nationalization of 14 major commercial banks in 1969 and six in 1980.

Credit Gap

The difference between total credit requirements and total credit supplied by all the agencies for the agricultural sector during one year period is defined as credit gap. However, the study group of the National Credit Council made a rough estimate of the credit requirements for major sectors of the economy and the extent to which they were met by institutional sources of credit. The group also felt that the credit gap was not to be judged by quantity of credit provided alone but the qualitative aspects of credit and the credit absorption capacity of the agricultural sector should be taken into account in the assessment of credit gap. In view of the difficulties associated with the estimation of total credit requirements of the agricultural


sector and the supply of total credit (including non-institutional agencies) to it along with due consideration of the qualitative aspects of credit, in general, credit gap is attempted to be estimated between total credit requirements of the farming sector and the quantum provided by the institutional agencies during a given period of time in India. By this definition the concept became applicable even at micro level, for individual farms.

RISK AND UNCERTAINTY

Risk and uncertainty are two important determinants of farmers' decision to borrow. Knight stated that the practical difference between risk and uncertainty was that in the former, the distribution of the outcome in a group of instances was known, while in the case of uncertainty that was not true.\(^{42}\)

According to Heady, risk might be defined as the variability of outcomes that would lend itself for quantitative measurement, whereas uncertainty would refer to the future events which could not be established in an empirical or quantitative manner.\(^{43}\)


Rajagopalan and Varadarajan defined that uncertainty as a state of mind in which an individual perceived no definite outcomes to a particular action, but several alternatives each with unknown probability. Risk, on the other hand, had to do with the degree of uncertainty in a given situation.\textsuperscript{44}

In general, farmers were assumed to be risk-averse and their decisions would be cautious optimization.

\textbf{PRODUCTION}

Returns to investment and, in turn, productivity of resources would be the major determinant of extent of borrowing by any rational farmer. Ohkawa and Rosovsky observed that productivity would conventionally mean product per worker or per unit of area.\textsuperscript{45}

Dewett \emph{et al.}, would say that productivity expressed the varying relationship between agricultural output and any of the major inputs like land/labour/capital. Thus there would be land productivity, i.e., yield per hectare;

\textsuperscript{44}V. Rajagopalan and S. Varadarajan, "Impact of Risk and Uncertainty on Farm Production and Income in the Hills of the Nilgiris, Tamil Nadu," \textit{Indian Journal of Agricultural Economics}, Vol.XXXIII, No.4 (October-December 1978), p. 35.

or productivity per worker/capital. Stated simply, productivity per worker/capital. In other words, productivity referred to the rate of outflow per unit of input—marginal or average.

**FARMING GROUPS**

In general, the farming community could be distinguished into different groups in terms of security they could offer for credit. The first category was agricultural labourers who were cultivators without any land holdings but deriving more than 50 percent of their income as agricultural wages. They did not have any immovable property to offer as security. Marginal farmers were cultivators having land holdings upto 2.5 acres of dryland or upto 1.25 acres of class I irrigated land. (However, any cultivator of this category deriving a steady income of Rs.200 and above per month from non-agricultural sources might not be eligible for SPDA/MFAL assistance). Farmers having 0.5 acre or more of plantation crops in income yielding stage would be excluded. Small farmers were cultivators having land holdings above 2.50 acres and upto five acres of dry land or above 1.25 acres and upto 2.50 acres of Class I irrigated

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This was Government of India's definition for giving subsidy under MPAL/SFDA/DRDA* for these groups due to their low resource base. The rest would have relatively better security to offer for availing credit.

**TYPES OF LOANS**

In the study area, different types of loans were made available to the farmers. They are briefly described below.

**Crop Loan**

Crop loan was a short term loan meant for production purposes. It would be sanctioned for a period of one year for meeting expenses connected with raising a crop, and to be repaid out of the income from the crop raised.

**Medium Term Loan**

Medium term loan was granted for a variety of agricultural and allied activities for a duration of one to five years. The repayment period was effected in convenient instalments after a grace period in the initial stage.

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*MPAL—Marginal Farmers and Agricultural Labourers Development Agency was merged with SFDA, Small Farmers Development Agency in 1979. Small Farmers Development Agency was merged with the Integrated Rural Development Programme on October 2, 1980. Afterwards SFDA in district level has come to be called as District Rural Development Agency, DRDA.*
Long Term Loan

Long term loan was provided normally for effecting permanent improvements on land and farm development activities. The repayment was in convenient instalments after providing for an initial grace period. These loans were sanctioned generally for a duration of five to 15 years.

Jewel Loan

Loan provided against the pledge of jewels/gold ornaments was called jewel loan. It was for meeting agricultural expenses and granted normally for one year period. However, commercial banks allowed a period of three years provided interest was cleared annually.

Taccavi Loan

Taccavi loans were previously granted by the Government for agricultural purposes during the period of natural calamities and other difficulties. They were mostly routed through revenue department. They were long term in character. Their significance had come down in recent years because of the financing activities of the land development banks.

Loan Expenditure

Government, whenever needed at villages, directly spent on land development measures like contour-bunding, land levelling, check-dam construction, pipe-line laying,
tractor-ploughing, silt-application and afforestation. These expenditures were to be shared by the Government and the direct beneficiaries of these measures. Therefore, these expenditures were called as "loan expenditures".

In addition to supply of short, medium and long term credits, the cooperative institutions allowed conversions of loans to longer periods, on specific cases of failure of investment financed by the loans.

Medium Term Conversion (MTC)

In the event of failure of crops raised out of the short term loan, it would be allowed for conversion into medium term loan called "Medium Term Conversion". This medium term conversion would be for three years from the conversion date of short term loans. Society would apply for this medium term conversion when the crop yield was declared to be less than 50 percent of the normal or standard yield due to failure of monsoon/pest attack/floods. This declaration would be made by Tahsildar of the taluk concerned by issuing annawari certificate to the effect that the out-turn of crops was less than 37 paisa.  

Medium Term Conversion Rephaseament (MTCR)

Medium term conversion rephaseament for five years would be allowed for the beneficiary of medium term conversion in the event of crop failures in any of the three year period. Such extensions would be for five year period from the date of allowing of medium term conversion. This would also be subject to the condition of the issue of annawari certificate by revenue officials.\textsuperscript{49}

Conversion of Medium Term Loan

Similar to conversions in respect of short term loans, conversions or extension of repayment period would be allowed for medium term loans in the event of natural calamity. If natural calamity occurred for the first time, the recovery of the annual instalment due in that year might be postponed by one year so that the total period of loan would still be four years from the date of advance. If there would be further failure of crop in the second successive year, the instalment could be extended by one more year, i.e., upto a maximum of five years. Thus the three year medium term loan could be re-scheduled for repayment in a five year succession.\textsuperscript{50}

\textsuperscript{49} Ibid.

\textsuperscript{50} The Registrar of Cooperative Societies, Madras-5, Circular No.240392/75-A.1, dated 23-3-1976 (in the files of the Coimbatore Central Cooperative Bank).
Consolidation of MTC/MTCR Loans

Two or more medium term conversion loans/medium term conversion rephasing loans due from a member would be consolidated and such consolidated loans would be called "Medium Term Consolidation". Clubbing of loans and period of repayment of consolidated loans would be for three years for two loans; five years for three loans; and six years for four loans. The period of repayment would take effect from the date of consolidation.

OVERDUES

The entire loans/installments of loans, which stood unpaid as on 30th June every year in respect of village societies and as on 31-12-1983 in respect of primary land development and commercial banks had been considered as overdues in the study.

OPERATIONAL AREA

Total area owned, plus land area leased-in minus land area leased-out, was the operational area of the farm. But, part of this was not available for cultivation because it was under farm structures such as wells, cattle-shed, farm-house including store-house, irrigation channel, threshing floor, compost pit, farm roads and paths, and waste

land. Therefore, operational area net of area under farm structures was referred to as operational area, as it was suitable for cultivation, but it might be or might not be cultivated in the reference year.

**NET SOWN AREA**

The net sown area referred to that portion of the operational area of the farm that was actually used for cultivation during the reference year.

**GROSS CROPPED AREA**

This referred to the total area brought under cultivation of different crops in a farm during the different seasons of the same agricultural reference year under study, i.e., 1982-83.

**INCOME**

Income of a farmer would come from the sale of crops, hiring and/or sale of draught animals, milch animals, sheep, goat, poultry and piggery and their products; from the lease of property, interest on loans, dividend on equity capital and from other miscellaneous sources.

**EXPENDITURE**

Expenditure of a farmer included cost of cultivation of crops, maintenance of livestock and perennial trees, and
other overhead costs such as operational cost of farm machines and tools, wages paid to permanent labourers including the value of perquisites paid in cash and/or kind, depreciation of farm assets, rent and hire charges paid, cost of power (electricity or diesel) paid, regular taxes paid on land, other assets and income.

NET INCOME

Farmer's revenue from his farm activities net of expenses incurred in carrying out those activities was defined to be his net income. This amount might be spent on consumption and saving by farmers. Expenses for the purpose included direct and indirect costs of production and selling of farm products.

ASSETS

Farm assets included market value of land, building, electric motor and pumpset, oil engine, other farm machineries and equipments, draught animals, milch animals, sheep, goat, poultry, piggery and others such as deposits, bonds held by a farmer.

LIABILITIES

Liabilities included annual recurring expenses such as land revenue, property tax, agricultural income-tax, contractual obligations like rent for leased-in land, payment of
electricity bill; debt including principal and interest charges and other regular expenses such as repairs and replacements of farm assets and equipments during the agricultural year.

ADOPTION OF FARM TECHNOLOGY

By farm technology reference was made to the art of producing and selling crop and livestock products by farmers. This art was practised by farmers with much variations between farms in various farm practices. The actual level of practices vis-a-vis the standard (officially) recommended practices would show the level of adoption of technology. More specifically, the level of adoption of farm technology was measured with reference to (i) number of ploughings; (ii) pattern of sowing seeds; (iii) seed variety; (iv) seed rate kilograms per hectare; (v) seed treatment practised; (vi) nature of compost pit; (vii) soil testing carried out or not; (viii) use of chemical fertilizers (like nitrogen, phosphate and potash); (ix) number of irrigations carried out; (x) plant protection measures undertaken; (xi) practising of crop rotation; and (xii) the nature of marketing of produce.

52 Interview with the Deputy Agricultural Officer, Panchyat Union Office, Annur, August 11, 1983 (various standard agricultural practices recommended for the farmers of the block were obtained and referred to in the study).
Section II : History of Rural Credit in India

A historical review of rural credit and the evolution of the institutional structure for its supply is discussed in this section under three parts viz., (i) Before 1951; (ii) Since 1951; and (iii) Supporting Institutions.

B E F O R E  1 9 5 1

Before 1951, when development planning had its beginning in India, the unorganized money market had the indigenous bankers and the money lenders. Being the main source of rural credit, they were exploiting the illiterate farmers with exorbitant interest rate. To protect the agriculturist debtors from those usurious money lenders, the Government passed "The Deccan Agricultural Debtors Relief Act of 1879." This Act authorized the courts of law to examine the history of a farmer's debt and determine the amount, to direct with-holding of the payment of unreasonable rate of interest, and to prevent the arrest of agriculturist and sale of land unlawfully. Similarly Land Alienation Acts in Punjab, United Provinces and Central Provinces and Berar, helped the farmers. The Usurious Loans Act of 1918 protected farmers against hard bargains. The

53 History of Reserve Bank of India - 1935-1951
(Bombay: Reserve Bank of India, April, 1970), p. 78.
rule of Damdupat, under which no debtor was liable to pay by way of interest an amount exceeding the principal of the loan, also came to be applied. 54

Then came the Great Depression to ruin the farmers in debt. Land attachment was quite high. To save the farmers from this situation, Debt Conciliation Acts were passed in 1933 in Central Province and Berar; in 1934 in Punjab; in 1935 in Assam; and in 1936 in Bengal and Madras. These acts were able to adjust repayments in reasonable number of instalments.

In order to control the money lenders, different acts were passed by different provinces. The noteworthy among them were (i) the Central Province's Money Lenders' Amendment Act of 1956; (ii) the Punjab Registration of Money-Lenders' Act of 1938; (iii) The Bengal Money Lenders' Bill of 1938; (iv) the Bihar Money Lenders' Bill of 1938; (v) the U.P. Money Lenders' Bill of 1939; and (vi) the Bombay Money Lenders' Bill of 1938. These acts provided for the registration and licensing of money lenders. Money lending without licences was declared an offence. 55 But these acts had many loopholes to the advantage of the money lenders.

54Ibid.

Moreover, farmers would never expose the money lenders, because they had no alternative source of finance, then.

**Government Lending**

The first action of the then British Government in the provision of agricultural loan directly to the farmers could be traced back to the (i) Land Improvement Loans Act of 1883 and (ii) Agriculturists Loans Act of 1884. Under the former, long-term loans or **taccavi** loans were given for undertaking land improvement measures like embankments, tanks, water-courses and the like with a maximum repayment period of 35 years. Under the latter, short-term loans were provided for the purchase of seeds, cattle, manure and implements. **Taccavi** loans played an important role during times of famines, floods and droughts. These loans were routed through the Revenue department of the State Government. In 1958-59, **taccavi** loans were Rs. 31.91 crores, while it rose to Rs. 54.75 crores in 1964-65.  

Besides **taccavi** loans, State Government like Tamil Nadu undertook soil conservation measures such as contour-bunding, land levelling, check-dams, pipe-laying, silt-application, tractor-ploughing, and afforestation and past

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56 Report of the All-India Rural Credit Review Committee (Bombay: Reserve Bank of India, Agricultural Credit Department, December, 1969), p. 379.
control measures. These works were carried out through the Agricultural Engineering and Soil Conservation department and Agriculture department.

Cooperative Movement

The Government of India looked for European experience on cooperation for guidance to try for cooperative methods in the provision of rural credit. The Madras Government was the first to appoint Frederick Nicholson in 1892 to study the European experience on cooperation and suggest a similar movement to be introduced in India. In 1895 and 1897, Nicholson brought out an exhaustive report on the systems prevalent in Europe. Nicholson came to the conclusion that the banks started by Raiffeisen and Delitzsch in Germany and by Buzatti and Wollmert in Italy could be the models of starting such organizations in the Madras Presidency. He suggested that there would be a need for an "...Agriculturists bank, i.e., a bank intended for the cultivating classes, from which they can borrow for all their various needs, whether for the improvement of land, the erection of a house or farm buildings, the purchase of stock, the paying off of prior debts, the maintenance of the family etc."\(^{57}\) Moreover, he felt that"...the only

alternative; for money lenders in rural areas, "is the local village bank which satisfies the postulates of proximity, security, and facility, ...".\textsuperscript{58} He visualized that "the bank might be either cooperative or joint-stock".\textsuperscript{59}

While Nicholson's work was in progress, Dupernex was assigned the responsibility to explore the possibilities of introducing agricultural banks in selected localities in the united provinces. His work resulted in the book entitled 'People's Bank for Northern India' (1900).\textsuperscript{60}

Dupernex's suggestion and Nicholson's recommendation encouraged some district officials to establish a few pioneer societies in parts of Punjab, the united provinces, and Bengal. But they could not provide rural credit for want of suitable legislation. A committee was appointed under Edward Law to make proposals regarding cooperative societies. The committee concluded that "cooperative

\textsuperscript{58} \textit{Ibid.}, p. 373

\textsuperscript{59} \textit{Ibid.}, p. 385

\textsuperscript{60} \textit{Report of the Committee on Cooperation in India-1915} (Reprinted; Bombay: Reserve Bank of India, November, 1957), p. 3.
societies were worthy of every encouragement and of a prolonged trial." The committee drew model schemes of management for rural and urban societies. Their recommendations provided the basis of the Cooperative Credit Societies Act of 1904. This Act marked the beginning of cooperative movement in India.

The difficulties associated with the functioning of cooperative societies established under the Act of 1904, especially in the absence of central agencies for supply of capital and supervision, necessitated the Government to come out with the more comprehensive Cooperative Societies Act of 1912. The Act provided for non-credit function also. New organizations namely (i) unions, consisting of primary societies for control and audit, (ii) central banks, and (iii) provincial banks were recognized. This Act infused new energy into the cooperative movement leading to a rapid growth of many central institutions.

The Government of India appointed a committee under the presidency of Maclagan to examine the cooperative movement in its financial aspects and suggest suitable measures for improvement. It submitted its report in 1915.

61 Ibid.
The committee felt that the movement could be placed on sound footing provided it would be (i) really cooperative, (ii) businesslike, and (iii) well supervised. It wished that the secretary managing the society would be a local man. It suggested uniformity in nomenclature. Institutions dealing with individuals would be called as "primary societies", or societies. All federal institutions constituted of these primary societies doing banking business also would be named as "Central Banks"; if they would do supervisory work or guarantee only, they might be termed as "unions". A bank dealing with central banks or societies throughout a whole province could be called as a "provincial bank".\(^{62}\) Besides, the committee made a number of useful suggestions for the composition, employment, audit and supervision of capital relating to primary societies and central banks. One of the recommendations of this committee was the establishment of "provincial cooperative banks".

With the passing of Government of India Act of 1919, cooperation became a Provincial subject. Following this, some provinces enacted their own Provincial Acts. This Act gave great stimulus to the Cooperative movement.

The Royal Commission on Agriculture was appointed in 1926 under the chairmanship of the Marquess of Linlithgow. The commission believed that "the greatest hope for the salvation of the rural masses from their crushing burden of debt rests in the growth and spread of a healthy and well-organized cooperative movement based upon the careful education and systematic training of the villagers themselves." It made a number of administrative suggestions to improve the cooperative movement. As per its report, there were 67,000 agricultural primary societies in 1926-27.

By 1944, a three-tier system of agricultural cooperative credit i.e., (i) the provincial cooperative banks at the apex level (at present state level); (ii) the central cooperative banks at the intermediate level (at present district level) and (iii) the primary credit societies at the base level (at the village level) came into existence in India. As on June 30, 1934, there were 10 provincial cooperative banks, 603 central banks and 92,226 agricultural cooperative societies.


The Agricultural Finance Sub-Committee, 1944,\textsuperscript{65} the Cooperative Planning Committee, 1945,\textsuperscript{66} and the Cooperative Sub-committee, 1946\textsuperscript{67} studied the progress and suggested measures to strengthen the movement. There were 1,49,000 primary societies, 505 cooperative central banks and 15 provincial cooperative banks in India in 1950-51.\textsuperscript{68}

In 1863, the first land mortgage bank called the "Land Mortgage Bank of India Ltd.," was established by an English Company. This was a private Bank and enjoyed no preferential treatment from the Government. The bank raised the working capital through issue of debentures. Loans were issued for a maximum period of eight years. The bank functioned well all over India for about 20 years. However, the bank was to be closed shortly after 1885.\textsuperscript{69}

The first cooperative land mortgage bank was established at Jhang in 1920 in Punjab, followed by organisation of similar banks in Madras in 1925 and Bombay in 1929. In the beginning, primary banks in Madras raised resources by floating debentures.

\textsuperscript{65}Ibid., p. 762.
\textsuperscript{66}Ibid., p. 763.
\textsuperscript{67}Ibid., p. 766.
\textsuperscript{68}Ibid., p. 793.
But this resulted in certain problems and therefore, the Townsend Committee on Cooperation appointed by the provincial Government of Madras in 1927 recommended the establishment of a provincial land mortgage bank for floatation of debentures instead of individual primary banks doing the same. This was accepted by the Government. The Madras Cooperative Central Land Mortgage Bank was established in 1929. "The decade which followed witnessed the organization of similar institutions in Bombay (1935) and Orissa (1938) as well as in Mysore (1929) and Cochin (1935) which at that time were known as Indian states". There were 286 primary land mortgage banks and five central land mortgage banks in June, 1951.

Commercial Banks

The fore-runners of the joint stock banks in India were the Agency Houses of Bombay and Calcutta. In 1785, the Bengal Bank and the General Bank of India were established. The latter was liquidated in 1791. The Bengal Bank of Calcutta started in 1806 was chosen to act as a banker to


the Government. Then the Bank of Bombay and the Bank of Madras were established in 1840 and 1843 respectively. Due to financial difficulties, the Bank of Bombay was wound up in 1868 and later in the same year, a new Bank of Bombay was established. These three banks were called as "The Presidency Banks". They were reconstituted by the Presidency Banks Act of 1876.\(^2\)

Chamberlain Commission appointed in 1913, authorized two of its members Earnest Cable and Keynes to prepare a proposal for setting up a State Bank in India. Keynes' proposals suggested the amalgamation of the three Presidency Banks which would be named as "the Imperial Bank of India". The proposal was accepted by the Government and the Imperial Bank of India Bill was introduced during March, 1920. The bank came into effect from January 1921.\(^3\) The growth of Commercial banking in India started with this.

There were 1269 commercial bank offices (including 323 head offices) in 1935. These branches were located only in about 475 towns. The total number of branches increased to 1964 in 1940 and to 5201 in 1945. These banks served industry and commerce as they were urban-centred in nature and functioning.


\(^3\)Ibid., pp. 21-25.
The Government of India appointed "Rural Banking Enquiry Committee" in November, 1949 under the chairmanship of Purshotamdas Thakurdas. Its unanimous report came in May, 1950. The committee was satisfied with the structure of rural credit societies. It concluded that commercial banks concentrated in towns and that indigenous bankers and money lenders continued their dominant role in rural credit even though their activities were on the decline. It felt that "the establishment of a single financial agency to cover the entire field of rural credit would not be feasible..." while re-affirming its faith in cooperative societies as the ideal agency at the village level, it favoured the establishment of strong multipurpose societies for each group of contiguous villages. It also felt that commercial banks could provide agricultural advances against produce and gold for purchase of expensive agricultural equipment.

The Royal Commission on Indian Currency and Finance, popularly known as the Hilton Young Commission, was appointed in August, 1925. In 1926, this commission recommended the establishment of a central bank to be called as the "Reserve Bank of India". The Indian Central Banking Enquiry Committee of 1931 had also strongly recommended this. This recommendation

74 Ibid., p. 768.
was accepted by the Government and the Reserve Bank of India Bill was passed in December 1933. After the completion of other formalities, the Bank came into full operation from 1-4-1935. The Agricultural Credit Department came into being as a wing of the Reserve Bank of India since its inception. In the beginning, the Bank wanted to have detailed information about rural credit and the involved agencies. Hence it undertook two studies: (i) the Preliminary Report 1936 and (ii) the Statutory Report 1937. Both reports subscribed to the dominance of the money lenders in the provision of almost the entire rural finance and the negligible role played by the cooperatives, commercial banks and the Government. Both the reports suggested for suitable legislative measures to regulate money lending and to check the mal-practices of these money lenders. These reports considered the cooperatives as an indispensable element in the rural economy of India. The Preliminary Report recommended the establishment of land mortgage corporations for meeting the long-term credit needs of agriculture.

**Since 1951**

The Reserve Bank's role, which was promotional in nature in agricultural credit, experienced a marked expansion since 1950's. 75

All-India Rural Credit Survey Committee

The appointment of this committee by the Reserve Bank, under the chairmanship of Gorwale, synchronized with the launching of the First Five Year Plan in India in 1951. The committee undertook a comprehensive survey of rural credit and submitted its report in August, 1954. The survey revealed that the shares of institutional and non-institutional sources of rural credit were 7.3 percent and 92.7 percent respectively. The committee observed that cooperation has failed, but cooperation must succeed.

Its several recommendations were collectively known as the Integrated Scheme of Rural Credit. The main features of the scheme included (i) State partnership through contribution to the share capital of cooperative credit institutions; (ii) full coordination between credit and other economic activities, especially marketing and processing; and (iii) administration through adequately trained and efficient personnel, responsive to the needs of the rural population.76

The committee recommended production oriented short-term credit called "the crop loan system", based on crop outlay and not on the basis of ownership of assets as done in the past. The committee suggested the creation of the

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National Cooperative Development and Warehousing Board, the All-India Warehousing Corporation and State Warehousing companies in order to promote storage, processing and marketing facilities. It recommended the amalgamation of the Imperial Bank of India and certain State-associated banks to form the State Bank of India to provide vast remittance facilities for cooperative and other banks and to promote coordination between the rural and cooperative credit, and the banking system. It also recommended creation of certain special funds at the national, state and institutional levels. 77

The recommendations of the All-India Rural Credit Survey Committee were broadly accepted by the Government. Measures were undertaken to amend the Reserve Bank of India Act for the constitution of the National Agricultural Credit (Long term operations) Fund and National Agricultural Credit (Stabilization) fund in 1955. State Bank of India came into being from July, 1955. The Agricultural Produce (Development and Warehousing) Corporations Act was enacted to create the National Cooperative Development and Warehousing Board and the Central and State Warehousing Corporations.

Mehta Committee (1959)

This committee favoured a dynamic programme of agricultural credit and all other necessary facilities which would help farmers to raise agricultural production. It desired a systematic programme of rectification, consolidation and revitalisation of a large number of credit societies that would help in the expansion of rural credit. The committee felt that the Government could contribute to the shore capital ranging from Rs.1000 to Rs.10,000.00 on a matching basis and its contribution to "the special bad debt reserve" to weak societies. The committee recommended for the provision of funds even to the tenant cultivators. It desired that a large portion of the loan would be in kind form to avoid misapplication of loans. The committee recommended that central banks and village societies would consider arrangements to collect repayments of medium term loans in certain cases of beneficiaries not from the end of the first year but from the second year/third year when such loans would start yielding additional income sufficiently. The primary land development banks would consider not only the existing value of land but also the anticipated value of land in sanctioning long term loans for land improvements to the members. If favoured quick measures to link credit with marketing to reap the benefits of organized marketing that would help in the recovery.

Patel Committee

The Government of India appointed this committee in July, 1961 to examine the question of organisational, procedural and administrative difficulties associated with routing taccavi loans and other facilities of the Government through cooperatives. The committee in its report (1963) observed that the preparation of production plans would be the responsibility of the Panchayati Raj institutions and the implementation would be the responsibility of the cooperatives. The State Government would make available upto date information regarding taccavi loans. The committee recommended that all loans for normal production should be arranged through the cooperative institutional agency and that only certain cases of high financial risks, Government would have to provide finance directly to the farmers. The Government should continue making budgetary provisions increasingly in strengthening the cooperative resources. It recommended that the recovery of cooperative overdues would have a priority over the outstanding/overdues of taccavi loans. The committee desired effective steps to rationalise the central banking structure so that there would be one central bank for each district. The committee recommended that steps would be taken to create an agency of the land mortgage banks at a level below the district level wherever the primary land mortgage banks functioned at the district levels only.\textsuperscript{79} The Government of India generally accepted its recommendations.

\textsuperscript{79} \textit{Ibid.}, pp. 96-100.
Mirdha Committee

The committee on Cooperation was constituted by the Government of India in August, 1964, and it submitted its report in August, 1965. Open-membership, democratic control, distribution of surplus to members in proportion to their transactions, limited interest on capital, mutual aid, thrift and self-help, and promotion of education were suggested as sound criteria for the healthy growth of the cooperative movement. It felt that the cooperative movement is the best organization to protect the small man from the exploitation of the rich and that it is an instrument for promoting social justice.  

Nationalization of Commercial Banks

Owing to the insignificant flow of credit to the priority sectors like agriculture and small scale industries, the Government introduced "social control" in December, 1967 to give a radical orientation to commercial banking in the country. The National Credit Council was set up in February 1968 to advise the Government and the Reserve Bank of India in budgeting and planning the overall credit flow with due consideration to the hitherto neglected sectors of the economy. The policy of social control was given effect by the Banking Laws (Amendment) Act, 1968 which conferred

on the Reserve Bank of India new powers to reconstitute the Board of Directors of the commercial banks. As the social control over commercial banks was not functioning effectively, 14 major commercial banks in the country were nationalized in July, 1969. This marked the beginning of what had come to be known as the "multi-agency approach," involving commercial banks of the country to play a dynamic role in the development process of rural and backward areas of the country by providing additional credit (apart from the cooperatives which were already serving agriculture).

All-India Rural Credit Review Committee (1966)

This committee, headed by Venkatappiah, submitted its report in July, 1969. The committee observed that "except in a few areas, the predominance of non-institutional credit continued over the years, despite inroads made by the growth of cooperative credit" and suggested reorganization of cooperative credit. It desired that steps should be taken to introduce the crop loan system in areas where it was not in existence. Scale of finance should be fixed separately for as small an area as possible, preferably taluk and also separate scale of finance for irrigated and un-irrigated


82 Report of the All-India Rural Credit Review Committee (Bombay: Reserve Bank of India, Agricultural Credit Department, December, 1969), p. 405.
areas. There should be simplification of lending procedures that would also improve the recoveries.

It recommended the establishment of two new organizations namely the Small Farmers Development Agency (SFDA) and the Rural Electrification Corporation. The former was to identify the problems of small but potentially viable farmers and to ensure the supply of agricultural inputs, services and credit to them. The latter was to help rural electrification schemes through the State Electricity Boards. The committee observed that the role of commercial banks in the sphere of rural credit might be considered in six areas like "(i) production credit, (ii) investment credit, (iii) credit for the infrastructure (iv) distribution credit, (v) credit for activities jointly undertaken with agriculture and (vi) credit to cooperatives engaged in agricultural activities". But, it stressed that date should be fixed in each state beyond which no taccavi loan should be provided except to meet situations of widespread distress such as floods and famines. It felt that there should be expansion in the activities of the Agricultural Refinance Corporation. These recommendations had been implemented in the subsequent years. The Rural Electrification Corporation was set up in July, 1969. During the

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83 Ibid., p. 591.
84 Ibid., p. 1000.
IVth Plan, 46 Small Farmers Development Agencies’ Projects were started throughout the country.

The Study Group

In pursuance of the National Credit Council’s decision, the Study Group under the Chairmanship of Gadgil, was constituted in October, 1968 to study and recommend the appropriate Organizational Framework for the Implementation of Social Objectives of the Five Year Plans.

The group observed that the number of small banks came down from 566 in 1951 to 89 in June, 1969. While at the same time the number of commercial bank offices increased from 4151 to 8254. The group pointed that there was an uneven spread of commercial bank offices and that there was “a pronounced urban-orientation" in their functioning. It also pointed out the flow of resources from the smaller to the larger population centres and from the rural to the urban centres.85

The group pointed out that although the cooperative banking had penetrated into rural areas, it had main problems like overdueas, inefficient managements, domination of

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85 Study Group of the National Credit Council, on Organisational Framework For the Implementation of Social Objectives (Bombay: Reserve Bank of India, October, 1969), p.
vested interests, shortage of resources, lack of efforts to mobilise deposits, untrained staff and weak arrangements for link between credit and marketing. It also reported that there was "uneven distribution of credit to different economic sectors and virtual non-availability of credit to certain types of borrowers, particularly small borrowers and weaker sections of the community". It was estimated by the group that 38.6 percent of the total credit requirements of agriculture was met by institutional agencies in 1967-68. The report further revealed that the commercial banks' credit to agriculture including advances to plantations stood at the same level i.e., 2.1 percent of the total credit both as on the end of 1951 and 1967. The study group concluded that in view of drawbacks, poor performance, and ineffective functioning of cooperatives, it would be difficult to implement an all India policy through the cooperative system alone.

The group recommended for the adoption of an area approach to evolve plans and programmes. The central idea was that commercial banks should be assigned particular districts, based on their areas of operations and the locations, in which they should act as pace-setters for

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86 Ibid., p. 81.
87 Ibid., p. 37.
88 Ibid., p. 87.
providing integrated banking facilities. Since district was the main administrative unit of the country and for which also statistical data were available, the group suggested that the district should be the unit in an area approach. The group desired for formulating operational programmes for dynamic inter-relationships among the different agencies especially financing agencies. The group also suggested for the formulation of integration of credit and banking facilities with other activities. There should be coordination among agencies providing short, medium and long term credits. It desired the establishment of new institutions in the credit plan which would do the functions of supply, credit and marketing type. The group recommended that there must be a shift on the part of the credit institutions in the emphasis from tangible security to operational viability and it would be possible when the credit institutions would have continuous contact with the borrowers and their operations.\footnote{\textit{Ibid.}, p. 90.}

Committee of Bankers

After the nationalization of the major scheduled commercial banks, the Governor of the Reserve Bank of India appointed a committee called "Committee of Bankers" in August, 1969, with Nariman as its Chairman. In its report (1969), the committee recommended that each bank should
concentrate on certain districts where it should take the lead in surveying the potential for banking development, in extending branch banking, and expanding credit facilities.

Lead Bank Scheme

After considering the recommendations of the Study Group led by Gadgil and the Committee of Bankers headed by Nariman, the Reserve Bank of India formulated the Lead Bank Scheme in 1969. This scheme had given concrete shape to the area approach to development. A Lead Bank in the district was to make a comprehensive survey of resources, number of industries, commercial units, marketing facilities for agricultural produce and industrial production, storage facilities and manpower resources available to advise small borrowers and farmers. Apart from the survey, the Lead Bank should work for dynamic relationship between the nationalized and non-nationalized banks, between commercial banks and cooperative credit institutions, between short and long term credit institutions and integrating credit and banking business with other activities.

Santhanam Committee

The Committee on Cooperation headed by Santhanam, in its report in 1969, recommended that "the scale of cultivation finance should include a reasonable amount
towards the consumption expenses of the member’s family".\textsuperscript{90}

It further recommended that village societies should be empowered to pursue action under the Land Revenue Recovery Act also to drive up recovery measures. In order to augment resources of the village societies, the committee recommended that the margin between its lending rate to members and its borrowing rate from the central banks should be three percent.

The Committee on Differential Rates of Interest (1970)

This committee headed by Hazari made further study and gave specific recommendations. Based on these recommendations, the Government of India introduced the Differential Rate of Interest Scheme in 1972. This scheme envisaged lending by banks at the concessional rate of four percent per annum for selected low income groups of people. The income ceiling would be Rs.3,000 and Rs.2,000 for urban/semi-urban, and rural areas respectively. Landless agricultural labourers, marginal farmers, village artisans, and members of the scheduled castes and scheduled tribes were the important categories of borrowers under this scheme.

Banking (Saraiya) Commission (1969)

This commission, in its report in 1972, recommended that indigenous bankers would be controlled by the Reserve Bank

of India through commercial banks by laying down suitable guidelines and thereby they could be linked with organized money market. Discount facilities could be given to the indigenous bankers who financed priority sector. Commercial banks should ensure that these discount facilities would be passed on to the borrowers in the priority sector through appropriate lower rates of interest.  

According to it, a rural bank might be described as a primary banking institution set up to serve a compact group of villages covering a population from 5000 to 20,000 generally working as a cooperative bank or as a subsidiary of a commercial bank. It advocated for the close coordination between cooperatives and commercial banks so that the total finance required would be met and properly utilized. It felt that the Agricultural Refinance Corporation and Agricultural Finance Corporation would be combined to serve the agriculture better. However, the Government had not accepted the recommendations of the Banking Commission.

Farmers Service Societies

The National Commission on Agriculture in their interim


92 T. Paranjothi, op.cit., p. 147.
report in December, 1971 recommended that the problem of 
agricultural credit would be not only the provision of 
credit but also the provision of facilities with which the 
credit extended would be meaningfully utilized and recommended 
the establishment of a new type of organization at the 
base-level called the Farmers Service Societies. The chief 
aims of these societies were: (i) to provide all types of 
credit, technical guidance and a full package of services 
especially to small farmers to develop their farms in an 
integrated manner; (ii) to cover effectively a large 
area of operation—say a block or population of 10,000 so 
that it could function as a viable unit; and (iii) to provide 
for a two-third representation to enable the weaker sections 
to control the society. Such societies could be either 
financed by commercial banks or by cooperative banks. The 
scheme had been in operation since 1973-74 in almost all 
the states.

Large-sized Adivasi Multi-Purpose Cooperative Societies

A special study group, under the Chairmanship of Bawa, 
(1971) recommended the organization of Large-sized Adivasi 
Multi-Purpose Cooperative Societies in tribal areas as the 
bottom level structure with the objectives of: (i) providing 
all types of credit under a single roof; (ii) providing 
technical guidance; and (iii) arrangement for marketing of 
agricultural and tribal based products and such Societies 
were established in tribal areas.
The Committee on Cooperative Land Development Banks (1973)

This committee headed by Madhava Das studied the structure of the land development banks in different states. It desired that both the existing unitary and federal system followed in different states to continue as such, as they had their own advantages and disadvantages. It suggested for strengthening the existing structure by setting up regional/divisional offices of the central land development bank with adequate technical and other staff to provide necessary support to the base level structure in the matter of the formulation of the schemes and their implementation. The committee recommended that "there should be close link between the state cooperative bank and the various Government departments."93 The committee stated that there was concentration of overdues in the case of farmers holding above 10 acres in almost all States except in Punjab and recommended for amendments to certain provisions of the existing Acts for enabling the banks to take prompt and effective measures against the defaulters.

Twenty Point Economic Programme

This programme announced in 1975 brought debt relief measures to the rural poor initiated by various State

Governments based on the guidelines provided by the Central Government. There was complete redemption in respect of small debts. In respect of other debts, there was moratorium. Interest rates on loans were also reduced to lower levels. Small and marginal farmers, landless agricultural labourers, and the weaker sections of the rural and urban areas stood benefitted by these measures.

Regional Rural Banks

The Working Group under the chairmanship of Narasingham (1975) recommended a new type of institution called as regional rural banks with modern outlook and at the same time quite capable of understanding the local feel and problems, mobilizing deposits and ensuring contact with the central money markets.94

The Government of India accepted the recommendation and promulgated the Regional Rural Banks Ordinance in September, 1975. The Ordinance was replaced by the Regional Rural Banks Act of 1976. Thus, the regional rural banks came to form the third component of the multi-agency credit system for agricultural and rural development.95

94 Reserve Bank of India - Functions and Working, op.cit., p. 46.

95 Report of the Committee to Review Arrangements for Institutional Credit for Agriculture and Rural Development, (GRAFICARD), op.cit., p. 106.
A regional rural bank would be jointly owned by the Government of India, the Government of the State in which the bank would be established and the bank which would sponsor it. They would confine their lendings only to the weaker sections. Generally, a regional rural bank would be allotted to cover an area of one to five districts within a State with homogenous agro-climatic conditions.

Hazari Committee (1975)

The Committee on Integration of Cooperative Credit Institutions concluded that there should be an integration of the short and medium term, and the long term wings of the cooperative credit institutions. This integration would (i) avoid splitting up of security; (ii) ensure a single contact point for farmers; and (iii) enhance the profitability of the primary societies.\(^{96}\) However, no consensus could be arrived at over the recommendations of this committee.

Kamat Working Group

The problems of overlapping and duplication of institutional agricultural credit that arose consequent upon the introduction of multi-agency approach to agricultural credit was studied by the working group in 1976. The group recommended that geographical demarcation rather than

\(^{96}\) T. Paranjothi, *op.cit.*, pp. 157-161.
functional jurisdiction for each credit agency would be appropriate and practical. It recommended that the future branch expansion of the commercial banks in rural areas would have to be viewed in the context of the multi-agency approach recognising the cooperatives as the primary channel of the rural credit. 97

All-India Debt and Investment Survey (1971-72)

This survey, undertaken by the Reserve Bank of India, revealed that Rs.3,848 crores were the total debts of the rural households as on June, 1971. This accounted for an increase of 96.73 percent in the total rural debts over the position in 1961. Rs. 3,374 crores were the total debts of the cultivators in 1971. This represented an increase of 102.04 percent as compared to their total debts in 1961.* In the report, it was found that "although the non-institutional agencies still occupy a dominant position in the supply of credit to the rural households, their predominance is steadily declining while the institutional agencies are forging ahead. Thus, debt owed to non-institutional agencies formed 68 percent of the total debt


*Worked out on the basis of the data found in page number 6 of the Report of the All-India Debt and Investment Survey, 1971-72 published by the Reserve Bank of India in 1977.
of cultivators in 1971 as against 82 percent in 1961. On
the other hand, there was a relative rise in the proportion
of debt owed to institutional agencies from 18 percent in
1961 to 32 percent in 1971".98

The (Dantwala) Review Committee on Regional Rural Banks
(1977)

The committee recommended that the new regional
rural banks could be established on a priority basis in
areas of weak central cooperative banks. It also suggested
that the Reserve Bank of India should be the share holder
instead of the Government of India. It recommended for
the phased transfer of the rural business of the commercial
banks in the respective areas to the regional rural banks.
It also recommended the financing of the large farmers to
the extent of 40 percent of the total loans in order to
diversify lending, improve viability and increase deposit
mobilization. It also recommended for the enlargement of
the banking services to be provided by the regional rural
banks.99

An Expert Committee

The Reserve Bank of India appointed this committee

98 "Indebtedness of Rural Households and Availability
of Institutional Finance" All-India Debt and Investment

99 B.N. Choubey, Agricultural Banking in India (New Delhi:
under the chairmanship of Gunvant Desai to go into the commercial banks' lending to agriculture. The committee, in its report, 1978, recommended that the agricultural credit schemes should be critically appraised by giving consideration to (i) economic viability of loans, (ii) repayment schedule of loans, (iii) availability of infrastructural facilities for linkage activities, (iv) scope of extending loans to the weaker sections, and (v) availability of staff. The committee recommended for the simplification of loan procedures and that the State Governments should share the responsibility with the commercial banks in the recovery of agricultural loans. 100

The Committee to Review Arrangements for Institutional Credit for Agriculture and Rural Development (1979)

The committee headed by Sivaraman, in its interim report submitted in November, 1979, recommended the establishment of a National Bank for Agriculture and Rural Development under the control of the Reserve Bank of India to decentralise its functions. The committee, in its final report, submitted in January, 1981, had made several recommendations for strengthening the rural credit system in the country. The committee felt that through (i) identification of target groups like small/marginal farmers, landless agricultural

100 S.S.M. Desai, op.cit., pp. 218-224.
labourers, rural artisans, scheduled castes and scheduled tribes, ii) simplification of terms and procedures of credit; iii) updating of land-records, iv) project-based lending, and v) creation of suitable infrastructure to ensure supply of inputs and services, the credit to the weaker sections could be quickly facilitated. It recommended that "the development agencies including the credit institutions have to plan and progress together and ensure that credit is tied up with development programmes and supported by appropriate backward and forward non-credit linkages."  

The committee strongly urged that in the matter of dispensing long term credit, primary agricultural credit societies should act as agents of land development banks. Regarding overdues, it did not favour the State Governments giving total exemption to all classes of defaulters. It desired that there should be strict observance of financial discipline by all concerned for sound and sustained growth of the cooperative credit system in India. It recommended for amending the Indian Penal Code to provide for deterrent punishment to wilful defaulters.


102 Ibid., p.362.

103 Ibid., p.138.
The Government of India accepted the committee's interim report for setting up a new National Bank for Agriculture and Rural Development and the same came into being from 12th July, 1982. Accordingly, several items of works carried out so far by the Agricultural Refinance and Development Corporation, and the different departments of the Reserve Bank of India like Agricultural Credit Department (except functions related to the operations of the primary (urban cooperative banks) and Rural Planning and Credit Cell had been transferred to the National Bank for Agriculture and Rural Development (NABARD). At a conference arranged by the Planning Commission in March, 1982, most of the recommendations of this committee had been endorsed by the representatives of the Central Government, State Governments, Reserve Bank of India, Agricultural Refinance and Development Corporation, financing banks and others concerned.  

High Level Standing Committee

Recently, the Reserve Bank of India appointed a high level standing committee under the headship of Ojha to review the flow of institutional credit to the rural sector. The terms of reference of the committee were to review and assess: i) the requirements and availability of institutional

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credit for agriculture and rural sector; ii) the progress of flow of credit and complementary inputs to weaker sections; iii) the matters connected with delivery, timely recovery and regional imbalances related to the institutional credit; and iv) the coordination between credit institutions and the various State Government agencies. The committee is expected to make suitable recommendations to strengthen the rural credit system in India.105

Thus, rural credit structure had been strengthened on the basis of multi-agency approach and improved qualitatively on the basis of recommendations of various committees, commissions and working groups. However, its effective function required development of various other supporting institutions also. The progress in that direction is described below.

SUPPORTING INSTITUTIONS

Deposit Insurance and Credit Guarantee Corporation

The Deposit Insurance Corporation was established by an Act of Parliament on 1.1.1962 in order to provide insurance cover to bank depositors. It took over the undertaking of the Credit Guarantee Corporation of India Ltd., a public limited company on July, 15, 1978.

The Credit Guarantee Corporation of India Ltd, was promoted by the Reserve Bank of India from 14.1.1971 in order to guarantee credit facilities extended to small borrowers of the weaker sections of the society.

With the integration of the two organisations, the Corporation was renamed as the Deposit Insurance and Credit Guarantee Corporation. The corporation was a wholly owned subsidiary of the Reserve Bank of India. Its schemes included i) the Small Loans Guarantee Scheme, 1971 which covered credit facilities granted by commercial banks, regional rural banks to farmers and others, and credit facilities granted under the Differential Rate of Interest Scheme; and ii) the Small Loans (Cooperative Credit Societies) Guarantee Scheme, 1982 to cover advances granted by cooperative credit institutions at primary level for agricultural and allied activities. 106

These guarantee schemes provided cover for loans granted to small farmers. Otherwise, they might find it difficult to have access to institutional credit. The total number of insured banks was 1736 as on 31.12.1983, consisting of 83 commercial banks, 148 regional rural banks and 1505 cooperative

banks. The insured deposits rose to Rs. 37,746.39 crores. The guaranteed advances to non-industrial sector stood at Rs. 5773.83 crores as on 30th June, 1983.  

National Cooperative Development Corporation

This corporation was established in March, 1963. Its main functions were planning and promotion of programmes for the production, storage, processing and marketing of agricultural produce. It provided financial assistance to the cooperatives in the form of loans and subsidies for promotion of poultry, fisheries, minor forests, handloom, coir, sericulture and dairying in cooperative sector to the benefit of the weaker sections. A sum of Rs. 127 crores was provided by this corporation during the year, 1983-84.  

Agricultural Finance Corporation

This corporation was promoted by the Indian Banks' Association in April, 1968 to help the commercial banks in financing agricultural projects and to actively participate in the development of agriculture. This has been mainly functioning as a consultancy organisation for diversified  


agricultural activities. Projects were prepared by this corporation at the request of the member banks/Centre/State Governments/National Bank for Agriculture and Rural Development. This corporation had undertaken project works in backward areas with a view to promote the credit absorbing capacity of the weaker sections; to increase the productivity and to generate employment opportunities. This body was popular in recent years in getting international assignments. It had been providing experts to foreign countries. 109

Rural Electrification Corporation

This Corporation was set up in 1969. The main aim of this autonomous body under the Ministry of Irrigation and Power was to promote rural electrification especially in backward areas in collaboration with the State Electricity Boards. As on 30.6.1984, it had sanctioned 8105 schemes to electrify 3,07,929 villages at a cost of Rs 1728 crores. 110

The National Bank for Agriculture and Rural Development (NABARD)

This bank had come into existence from July 12, 1982 as an apex bank for the rural credit. Its main aim was


110 Ibid., pp. 224-225.
to pay undivided attention and forceful direction connected
with rural credit in the implementation of the Integrated
Rural Development Programme in the country. It would be a
coordinating agency linking the Central Government, Planning
Commission, State Governments and other national and state
level institutions in the development of agriculture, village
and cottage industries, small-scale industries, and rural
crafts.

The National Bank would provide short and medium term
refinance assistances to state cooperative banks, regional
rural banks and any approved financial institution. It
could extend refinance to state land development banks
(for a maximum period of 25 years), regional rural banks,
scheduled commercial banks, state cooperative banks and
other approved financial institutions. It would give
loans not exceeding 20 years to the State Governments to
contribute to the share capital of cooperative credit
societies. It would contribute to the share capital or
invest in securities of any institutions connected
with agriculture and rural development. The NABARD disbursed
Rs.3492 crores for various purposes under medium and long term
schemes and Rs.896 crores as short term loans as on
30-6-1983.\textsuperscript{111}

\textsuperscript{111}Annual Report, 1982-83 (Bombay : The National
Bank for Agriculture and Rural Development), p. 86 and
p. 72.
Rural Planning and Credit Department

The Reserve Bank of India had set up a new department called Rural Planning and Credit Department from July 12, 1982 after the creation of the NABARD. This department had taken over the functions of the erstwhile Rural Planning and Credit Cell and the Agricultural Credit Department relating to the district credit plans, statutory returns from the regional rural banks and state and central cooperative banks, statutory directives on deposits and interest rates on advances and issue of licences to the opening of new offices by the cooperative and regional rural banks. This department has taken over the entire work under Lead Bank Scheme and matters of banking policy relating to priority sectors from the Department of Banking Operations and Development. It would keep constant touch with the District Rural Development Agencies and coordinate functions among the state level financial institutions. It would conduct special studies for promoting Integrated Rural Development Programme and for framing the Reserve Bank's Policy on rural development. 112

The Indian Farmers' Fertilizers Cooperative Ltd (IFFCO)

This multi-unit cooperative society was registered in 1967 with the support of the cooperatives in the country and the Government of India. Its members came from about 27,000 cooperative institutions ranging from national and village level cooperative institutions. It had set up ammonia and urea producing plants.

The prime aim of this organization was to manufacture and market fertilizers to the advantage of the farmers of the affiliated institutions. This organization disseminated knowledge of modern farming technology through field demonstrations at village levels by well trained agricultural technologists.\textsuperscript{113}

Other Institutions

Apart from these institutions, Food Corporation of India, Central Warehousing Corporation, State Warehousing Corporations, National Seeds Corporation, State Farms Corporations, Agro-Industries Corporations in different states, Agro-Service Centres one in each State, the Indian Council of Agricultural

Research and Krishi Vigyan Kendras (Farm Science Centres) in Agricultural Universities in different states were other institutions in the country to help modernization of agriculture, which, in turn, would demand large amount of credit from institutional financing agencies.

Estimates

All-India Rural Credit Review Committee (1967) estimated the short term credit requirement by 1973-74 at Rs.2000 crores (Appendix II). But the actual supply of institutional credit for short term purposes amounted to Rs.859.30 crores, i.e., 42.97 percent of the estimated requirements (Appendix I)*.

A sum of Rs.2550 crores would be anticipated advances in 1979-80 as estimated by the Planning Commission of India (Appendix II) while the real advances extended by the Institutional sources was Rs.2928.10 crores (Appendix I), i.e., 114.83 percent of the anticipated advances.

The National Commission on Agriculture (1976) projected that the realistic/graduated requirement of credit for agriculture would be Rs.9400 crores (Appendix II) by 1985. But the Planning Commission's targets for 1984-85 was Rs.5415 crores, while the actual disbursement of credit in

*Anticipated credit requirements and actual disbursement of direct finance in the respective years were considered.
1984-85 was Rs. 5810 crores as reported in the Seventh Plan Draft. Although Planning Commission's anticipated target of credit for 1984-85 was surpassed by actual disbursement in 1985, the National Commission on Agriculture's Credit estimate for 1984-85 was not fulfilled.

A sum of Rs. 6180 crores would be the total credit requirement of agriculture by 1989-90 as per Sivaraman Committee's estimates and it could be achieved if the present trend in supply of institutional credit continued. But it would be doubtful whether the financial institutions could meet the Seventh Plan's target of Rs. 12,570 crores for agriculture by 1989-90 (Appendix II).

Section III: Past Empirical Studies

Singh et al., attempted to study the level of use of credit and the rationale in its allocation between farm inputs with reference to progressive and less progressive farms in Varanasi district. They found that investment on irrigation and fertilizers had significant and positive impact on the level of total credit availed by progressive


farms, while investment on draught cattle influenced the level of total credit in less progressive farms. It also revealed that credit had significant and positive impact on returns from crops.

Sharma and Prasad\textsuperscript{116} studied the credit needs farm sizewise and regionwise at different stages of technological development in agriculture. Linear programming technique was used to estimate credit requirements and its impact on cropping pattern and incomes. The study revealed that there was need for more credit on irrigated farms. With improved technology, there was need for more credit. Even at the prevailing state of technology, adequate credit increased income substantially.

Singh and Jha\textsuperscript{117} studied the impact of capital availability on farm income and demand for short-term credit on farms in Delhi and found that additional credit helped augmenting farm incomes and that shortage of credit caused loss of potential income to the progressive farmers.


Mukhopadhyay\textsuperscript{118} in his study in three districts of Punjab, found that the repayment capacity of a farmer was reflected by the positive net present value of a loan financed investment.

A study by Ray,\textsuperscript{119} revealed that i) village cooperatives were the most successful source of institutional credit; ii) institutional loan was largely used for purchase of current inputs among lower size-groups; iii) big farmers with 10 acres of land invested largely on land development, irrigation and agricultural tools and implements; and iv) the modern technology could be followed by big farmers who could provide self-finance for the same.

The study by Murthi\textsuperscript{120} revealed that the need for credit would increase in the early stages of development but it would decrease later, as farmers would gain control over resources.


\textsuperscript{120} Ram Murti, "Estimation of magnitude of credit needs of the farmers in block Kalyanpur, Kanpur (U.P.)." Indian Journal of Agricultural Economics, Vol.XXVI, No.4 (October-December, 1971), pp. 568-570.
Pandey concluded that use of credit increased the incomes of the farmers even at the existing level of technology. Introduction of improved technology without credit would not have significant impact on the income of the farmers.

Lal attempted to evaluate the respective roles of the institutional as well as non-institutional credit agencies in financing agriculture in the region of Eastern Uttar Pradesh. It was found that 65.7 percent of the sample households was in debt. Further, 66.2 percent of credit was unproductive and went for consumption. Institutional agencies did not solve the credit needs of the agriculture. The study concluded that the credit provided fell short of right quantity; was not of right type; and did not serve the right purpose.

Rao made a comparison between traditional agriculture (livestock farms) and mechanized crop farms in Brazil and found that credit needs of traditional farming were limited and therefore substantial credit was required to transform the traditional farming into modern farming. It also brought


123 B. Prasada Rao, The Economics of Agricultural Credit Use in Southern Brazil (Waltair: Andhra University, September, 1973).
out that gross farm output was much influenced by operating expenses and working assets. It might be said that substantial part of credit was used for operating expenses, while very little was spent on consumption expenditures. The study found that there were opportunities for productive investment of capital in small-farm agriculture.

Misra in his study in U.P. found that the proportion of loan obtained from government was highest in the case of large sized farms. Short term credit had created a favourable impact on the output of major crops like paddy, wheat and sugarcane. It revealed that there was considerable scope for increasing medium and long term advances.

According to Banerjee credit was the heart of the agrarian system in India. The demand for credit for farm operation was mixed up with that for consumption purposes. Hard-pressed farmers failed to control their consumption expenses which were mostly on the subsistence level.


Venkataraman observed that average farmers could not meet their foodgrain and other family expenditure without the support of external finance. He observed crop loan limits handicapped the adoption of new technology and suggested 50 per cent increase in the loans over the existing levels to help farmers in the adoption of new technology.

A study by Arputharaj on farm financial management in Ramanathapuram district indicated that all the sample farms suffered from inadequate availability of resources. The variation in the credit gap was mainly due to the type and number of crops grown.

Chaplot showed that farmers with 15 acres and above were benefitted most in Commercial Banks' lending. The repayment period was fixed without considering the borrower's capacity and profitability of the amount of loan. Inadequate post-lending supervision, lack of communication and conveyance facilities were responsible for misutilization of loans. It revealed that 83 per cent of the total overdrafts


stood against small and medium size farmers.

Reddy's study in Andhra Pradesh revealed that crop failures caused low turnover of loans; credit worthiness of the loan was low; and cash crops covered small area. The management of the defaulting credit societies was vested in the hands of the big landlords. The repayment was poor due to unforeseen family expenses, inadequate farm incomes and slow recovery procedures.

Saini and Sidhu analysed the existing resource use pattern on different farm situations and estimated credit needs and impact of new technology on farm incomes. They concluded that the introduction of improved technology caused a tremendous increase in credit needs.

Salunke attempted to critically study Small Farmers Development Agency (SFDA) in Maharashtra. The study brought out that the criteria to be followed in identifying small farmers were not strictly followed. The benefits of SFDA were


derived by relatively better-off small farmers. Only 26.32 per cent of the non-beneficiaries were aware of the existence of SFDA. Majority of the beneficiaries reported that their income and employment increased due to SFDA assistance.

Sharma and Prasad\textsuperscript{132} estimated the credit needs per acre for different types of farmers and found that the credit need would increase at a faster rate in the Rampur district as a result of technological development.

Dadhich\textsuperscript{133} studied the overdues in farm cooperative credit in Rajasthan. The percentage of overdues increased from 17 in 1955-56 to 44 in 1967-68. It further revealed that there was strong association between repayment and caste, crops, fertilizer, occupation and irrigation. It showed that 23.5 per cent of overdues was due to wilful default.

Shukla et al.,\textsuperscript{134} observed that farm credit was inadequate in comparison to requirement under modern technology.


the extent of credit gap was higher in small farms and that if the gap was bridged, farmers could progress through modern technology.

Lavania et al. studied the impact of bank finance on agricultural incomes and yields in Andhra Pradesh and indicated that farmers, who availed short and medium term loans, had adopted improved technology resulting in increased yields and net incomes of major crops.

Kulkarni, who studied the policies and procedures of cooperatives and commercial banks separately and comparatively, indicated that complicated loan procedures of the Commercial banks could be eased and that timeliness of credit was affected by procedural lapses. The author felt that commercial banks and cooperatives should learn from each other's experience and evolve a system of complementarity.


Kurulkar\textsuperscript{137} conducted a study on cooperative long term finance covering 18 villages in three taluks of Aurangabad. He concluded that the cooperative long term credit advanced by the Land Development Banks, was neither efficient nor cheap.

Jha\textsuperscript{138} studied agricultural finance in Nepal. The study revealed that 60 per cent of farmers borrowed. A large part of borrowings was for family expenditure. Agriculture had not reached the stage where farmers could make a productive use of credit. He suggested that credit institutions should meet all legitimate credit needs of farmers subject to the repayment capacity of farmers.

Jain\textsuperscript{139} assessed the role of commercial banks in promoting rural economy in Bhilwara district. The study revealed that agricultural advances of the nationalised banks increased by 136 per cent from 1971-72 to 1975-76; there was


\textsuperscript{139} Ajit Kumar Jain, "Nationalized Banks and Rural Credit A Study of Bhilwara district" (unpublished report, New Delhi: Indian Council of Social Science Research, January, 1978).
70 percent automatic recovery, medium-sized farmers had an easy access to bank credit and 75 percent of the loan was properly utilised. It was also shown that productivity of borrower and non-borrower farmers increased by 76 percent and 45 percent respectively. The incremental income of the borrowers was mainly used for agricultural development.

Basu\textsuperscript{140} undertook a study with special reference to Comprehensive Area Development Plan (CADP) in West Bengal. The study revealed that the plan helped to mobilise Rs 350 lakhs from commercial banks to benefit the farmers. It was reported that there was increase in the use of fertilizers and pesticides due to the delivery of credit in kind. The programme did not cover all the small and medium farmers. The study concluded that it was still premature to talk about replacement of moneylender's credit by institutional credit.

Jacob\textsuperscript{141} studied the role of nationalized banks in agricultural lending and found that there was satisfactory banking development in rural and semi-urban areas after

\textsuperscript{140}Subhas K. Basu, "Institutionalization of Rural Credit, Technological Change, and Factor-Pricing - A Case Study of CADP areas of West Bengal" (New Delhi : Indian Council of Social Science Research, 1978).

nationalization. Due to lack of mutual understanding, commercial banks' financing of agricultural credit societies was almost a failure. It revealed that the small and marginal farmers were left to the mercy of the private money lenders. Agricultural credit was found concentrated in areas where there were better infra-structural facilities. The study suggested that the principle of one farmer, one account and one source would benefit both the farmers and institutions.

Padki\textsuperscript{142} brought out that the authorities did not take realistic view of cost of production in fixing normal limit for well-digging purpose. It indicated that the Land Development Banks were concentrating more on the relatively small farmers. Based on information from 820 schedules from the irregularly repaying borrowers in eight districts of the Maharashtra State, the study found that about 70 percent of the defaulters were unable to achieve net production worth of ₹ 2,000/- from the benefiting acres and as such returned a negative repayment capacity. It suggested for fresh consideration of policy and implementation of long term finance to help the deserving middle size group farmers.

Dhawan and Kahlon\textsuperscript{143} indicated inadequacy of institutional credit even at the existing level of technology. The functional analysis of this study revealed that the small farmers were rational in making investments on implements and machinery, milch animals, seeds, manures and fertilizers because marginal value productivities of these resources to their costs were significantly greater than unity. Therefore, they could further increase their income by curtailing expenses on labour and draught animals.

Desai's\textsuperscript{144} study threw light on the flow of funds; forms of farm loans; and factors affecting farm loans. The impact of credit had been measured by employing the concept of elasticity of credit demand. It revealed that rise in prices, change in the character of inputs; and the intake of inputs affected the demand for farm loans.

Haque and Maji\textsuperscript{145} studied structure and flows of agricultural cooperative credit in India. The study revealed


that the non-productive items of expenditure declined from 76.1 percent in 1965-66 to 5.5 percent in 1974-75; credit advanced for fertilizer had increased considerably; cooperative credit augmented the consumption of nitrogenous fertilizers in the states concerned that resulted in increased agricultural production; and marginal and small farmers received 32 percent of the medium and long term advances provided by the land development banks. The study concluded that the new agricultural production technology had changed the structure and composition of short, medium and long term credits.

Sharma and Prasad\textsuperscript{146} made an attempt to forecast the demand for short term farm credit in the districts of East Godavari. Economic and technological variables were considered in the determination of demand for credit. In the estimation of demand for farm credit, technological variables had dominated the economic variables. It was found that more productivity would not determine the demand for credit at macro level.

Singh and Singh\textsuperscript{147} highlighted the pattern of credit allocation, farm assets, farm cash expenses and use of fertilizers among different farm-size groups in Punjab. There was concentration of institutional credit in favour of big farmers in terms of credit allocation. But institutional credit was evenly distributed in terms of land-owned, farm assets, farm cash expenses and gross farm income.

Suryawanshi \textit{et al.},\textsuperscript{148} attempted to examine the credit gap between the requirement and its availability in Maharashtra. The study revealed that the farmers in underdeveloped region used relatively larger quantities of inputs that resulted in higher per hectare costs. Among the different agencies the cooperatives disbursed the largest volume of credit followed by nationalized banks, money lenders and Government in that order. In underdeveloped regions, private money lenders played an important role in the supply of rural credit. Nationalised banks did not make much impact on small farmers and farmer-cum-labourers especially in underdeveloped regions.

\textsuperscript{147}\textsuperscript{147} Prabhjit Singh and Gurbachan Singh, "A Study into the Pattern of Distribution of Institutional Credit among Different Categories of Farmers," \textit{Financing Agriculture}, Vol. IX, No. 3 (October-December, 1978), pp. 8-11.

Basu's study pointed out that the financing of agriculture by commercial banks had not been regionally equitable, though they had successfully increased the share of agriculture in their total outstanding credit several-fold. As revealed by the study, the significant determinants of the level of agricultural credit per hectare of net sown area were per capita bank credit, central cooperative banks' outstanding credit per hectare of net sown area, number of bank offices per lakh population, per capita bank deposit, degree of urbanization and intensity of cultivation.

Ravindranath in his study found that the farmers with irrigation facilities accounted for a major share in the institutional and non-institutional credit. The small and marginal farmers could not avail dairy and sheep loans because they were not available in the village cooperative societies.


A project study undertaken by Venu et al.,\textsuperscript{151} in Karnataka and Tamil Nadu revealed that underfinancing was the major reason for farmers to borrow from more than one agency. Farmers still preferred private credit due to proximity, timely supply and unlimited quantum. It found that there were differences among the systems and procedures of the commercial banks even though they had systematic and planned approach to the rural credit.

Rao\textsuperscript{152} pointed out that the scale of finance followed by commercial banks was inadequate in relation to cost of production of some important crops and that, in general, credit made available fell short of farmers' credit needs. There had been significant impact of the credit of commercial banks on cropping pattern, improved technology, yields of major crops and the efficiency of resource use. It highlighted that the productivity of working capital provided by commercial banks was higher when compared to the same from other sources.


Patel and Patel\textsuperscript{153} clearly established the coincidence of borrowing and repayment during May-June indicated that there was a regular practice of adjusting loan repayment from borrowing.

The study by Rajput et al.,\textsuperscript{154} found out that the average borrowings per family in case of small farm size group was higher than comparatively other farm size groups. It revealed that the non-institutional agencies were still largely financing and they dominated in financing to small and marginal farmers. It found that marginal and small farmers needed credit for consumption purpose also. Due to a small piece of land, marginal farmers were not able to use the investment credit more profitably.

Ramadass\textsuperscript{155} studied demand for and productivity of farm credit in Pondicherry Region. The study revealed that the operational area of the farm, farm assets and irrigated areas


of the farm were the significant determinants of the demand for credit for large, medium and small farms respectively. Besides, family consumption expenditure exerted positive and significant influence on the demand for credit of the small farms. Percentage of institutional credit had great influence on the demand for credit of large and medium farms, while it exerted lesser influence on demand for credit of small farms. It showed that credit was interest elastic and interest inelastic for large and other farms respectively. While borrowed finance greatly influenced investment, own finance had no influence on farm investment. It also found that credit had positive and significant impact on the productivity of small and medium farms and the same was negative on large farms.

Bandyopadhyay\textsuperscript{156} analysed agricultural credit with special reference to small farmers in Gangetic plains of West Bengal. The study revealed that the rate of interest could not be accurately calculated due to inadequate information from the borrowers and complicated loan contracts. It brought out the co-existence of multiple systems of loans was the result of varying degree of bargaining powers

of landers and borrowers in the agricultural credit market. According to him, imperfections of agricultural credit market rested with the lenders and multiplicity of their hold over borrowers resulted in charging high rate of interest on loans given to farmers. It concluded that small farmers did not have access to organized sector due to unfavourable terms and conditions and hence forced to borrow from informal sources.

Singh and Ramanna\textsuperscript{157} made a study with the objectives of assessing the role of credit and technology for increasing income and employment, and found that increase in income could be realised by effectively following new technology without even using borrowed funds. It suggested that income and employment could be increased in all types of farms under both the technology conditions with the use of adequate capital. The best result of income and employment would come about in the adoption of improved technology combined with adequate credit in solving the problems of small farmers and labour in agricultural sector. The study emphasized the need for close coordination between credit and extension institutions to revitalise the farming sector.

\textsuperscript{157} Shiv Karan Singh and R. Ramanna, "The Role of Credit and Technology in increasing Income and Employment on Small and Large Farms in Western Region of Hyderabad District, Andhra Pradesh", \textit{Indian Journal of Agricultural Economics}, Vol.XXXVI, No.3 (July-September, 1981), pp. 41-51.
A study by Mohanan\textsuperscript{158} showed that commercial banks lagged behind cooperatives in terms of population coverage and area spread. There was significant positive correlation between investment and production credit in respect of overall situation. The study suggested mass scale introduction of medium term loans with flexible repayment schedule. The dry farming technology for marginal and small farmers should be improved upon.

Rao and Rao\textsuperscript{159} undertook a study with the objective of examining the role played by informal and institutional agencies in the supply of credit for financing modern inputs. The study revealed that institutional sources met 39 percent of the borrowings. All but medium farms diverted borrowed funds. Marginal and small farmers possessed potentialities for further investment and productivity of land could be improved, if additional capital was given.


\textsuperscript{159}B. Prasada Rao and R. Mohana Rao, "The Economics of Farm Credit use and Source of Finance in Changing Agriculture" (unpublished report, New Delhi : Indian Council of Social Science Research, 1982).
Tyagi and Pandey\textsuperscript{160} used profit function for the estimation of demand for crop loans (credit) on different categories of mechanized farms. The study highlighted that the estimated demand for credit was highly elastic with respect to prices of inputs and outputs but inelastic in relation to rate of interest. The input prices were more important than the output prices in making an impact on the demand for credit. The institutional credit was inadequate in meeting the credit demanded by the farmers. The study suggested that supply of adequate institutional credit at the right time without lowering interest rate was important.

Arunugam \textsuperscript{161} undertook a study to identify the problems of the lenders at the institution level and borrowers at the farm level and also to identify the factors contributing to better farm credit management. The study revealed that the rural financial institutions supplied 28 percent of the credit needs of the farmers. The repayment was influenced by family size, total assets, total expenses, total income and imputed income. There were varying degrees of credit


gaps among different farm size groups, while the gap was the highest for the smallest farm size group. The problems faced at the farm level were inadequacy of crop loan, non-availability of loan in time, non-availability of required kind components from cooperatives, absence of consumption loans and absence of jewel loans round the year. The problems faced at the lender's point of view included low interest rates discouraging farmers to repay in time, frequent transfer of officials affecting collection, urban natured officials unwilling to mix with the rural people and difficulty in auctioning the property of defaulted persons in the villages.

Deevi studied bank financing of agriculture in Andhra Pradesh. The study revealed that 71 percent of the branches of the Andhra Bank spread over rural and semi-urban areas and that gold loans were more than crop loans. Big farmers were the major beneficiaries in respect of crop and term loans. It showed that Andhra Bank's performance, in terms of branch expansion, deposit mobilization, credit deposit ratio and assistance to priority sectors, was satisfactory in comparison with nationalised banks. It desired a careful handling of the dairy scheme by the bank for the weaker sections.

A study of small-farmer reachdown in Tamil Nadu under ARDC (NARARD) Lending\textsuperscript{163} carried out in Madurai District revealed that a major share of the total loans provided went to the target groups. As a result of this, the gross income of small farmers increased from Rs. 7,800 to Rs. 10,100/- and thus the scheme had definite impact on the small farmers. The scheme covered only 10 percent of the weaker sections. Their very weak asset base and insistence of security denied them the benefits of institutional finance. However, there was no wilful defaulter. Milch animals and sheep rearing programmes registered good repayment due to tie-up arrangement for marketing.

The National Bank for Agriculture and Rural Development survey revealed, as pointed out by Rengan, \textsuperscript{164} that there had been a 20 percent leakage in lending connected with the Integrated Rural Development Programme and 15 percent of its beneficiaries was not poor.

\textsuperscript{163} "Notes for Discussion for Scientific Workers's Conference, 1985" (Coimbatore-3: Tamil Nadu Agricultural University, 11th April, 1985), pp. 101-102.

The Programme Evaluation Organization (PEO) of the Planning Commission\textsuperscript{165} conducted a study during 1983-84 covering 1170 households from 132 villages in 16 states including Andhra Pradesh, Karnataka, Kerala and Tamil Nadu to evaluate the Integrated Rural Development Programme. The study showed that 88 percent of the sample households reported increased income, 37 percent reported increase in family assets, 77 percent reported increase in consumption and 64 percent felt that their overall status in the village society had gone up. About 26 percent of the sample households was already above the poverty line. About 41 percent of the sample households reported overdues in respect of the loans advanced to them because returns from schemes were not adequate and income realized was spent for unforeseen purposes like marriages, illness and deaths.

The survey pointed out that the frequent transfers of key officials connected with the programme at the district level greatly affected the efficiency and effectiveness of the administrative set up. The block machinery was weak for providing appropriate and integrated delivery system. Therefore, the report suggested the strengthening and unification of the administrative structure at various levels.

\textsuperscript{165}"IRDP (Integrated Rural Development Programme) brings some cheer to Rural Poor," \textit{The Hindu}, (Coimbatore) June, 27, 1985, p. 6.
The National Bank for Agriculture and Rural Development (NABARD) undertook a survey with the sample of 1498 beneficiaries of the Integrated Rural Development Programme (IRDP) covering 122 branches of the financing banks spread over 60 blocks in 30 districts of 15 States. The survey revealed that the provision of credit for a single activity, financing of defective and substandard assets, undue stress on financing animal husbandry programmes, and lack of supervision on the end use of credit were the defects in the implementation of the IRDP. The survey suggested that the targets of the diversified investment activities for a block should be fixed keeping in mind the resource potential, availability of infrastructural facility, and agro-climatic conditions of the area concerned. The programme could be made effective if the family would be treated as the basic unit in the identification of beneficiaries and a package of activities would be financed rather than confining to a single activity.

166 "NABARD finds flaws in IRDP Implementation."