CHAPTER - II
REVIEW OF LITERATURE

Review of literature plays an important role in research. It narrates about the work already done on the same and similar topics. It also reveals as to what further work is possible on the topic and what remains to be done.

Agrawal and Shah (1970)\(^1\) studied the "Impact of new technology on the level of income, pattern of income distribution and saving of farmers in central U.P.", based on 120 progressive and 91 less progressive farmers in badaun district of Uttar Pradesh. Without using any measure of inequality they concluded that new technology and capital investment created inequitable distribution of income between progressive and less progressive farmers and also among different size groups of farm within each category of farmers.


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technology on rural employment in North Western U.P.", by using the data for 240 progressive and 161 less progressive farmers in selected areas studied the impact of new technology on rural employment. By using regression analysis, they concluded that per acre expenditure of labour was significantly higher at progressive medium as well as large farms compared to the less progressive farms. When mechanization is accompanied by the adoption of improved technology, its adverse impact on farm employment was found to be only marginal. But on the farms which did not switch to modern cultivation practices, mechanization resulted in a sizable decline in employment.

Chawla, et al. (1972) have presented a study on "Green revolution, mechanization and rural employment (A case study in district Amritsar)", based on 120 farmers during the pre-adoption year 1966-67 (adoption of HYV's) and the average situation during the three post-adoption years between 1968-69 and 1970-71. Using the regression analysis, this study indicates that, along with an increase in the gross returns per acre, the outlays on

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casual labour also increased, but more sharply than the farmer. According to this study the employment of family labour increased at almost the same pace as that of casual labour in both the small and large land holdings, but it increased to a much smaller extent on the medium holdings where the use of permanent hired labour appears to have increased to greater extent than on other holdings.

Garg, Prasad and Srivastava (1972) studied the impact of modern technology on rural employment, based on 100 farmers in Kalyanpur block of Kanpur district during the five years between 1966-67 and 1970-71. It indicates greater increase in the use of hired labour than in the use of family labour. The increased employment in the living conditions of wage earners in the HYVP areas.

Singh Katar (1972) concluded that as regard the impact of new agricultural technology on agricultural


wage rates and employment in the IADP district", the daily real agricultural wage rates declined during 1962-63 to 1967-63 in many of the IADP district and the hired labour employment per hectare increased in most of the IADP district. By using the regression analysis in the same study he further concluded that the index of area under improved varieties of crops had a significant positive effect on employment per hectare.

Singh, Kunwar and Ram (1972)\(^6\) made a study on "impact of new agricultural technology and mechanization on labour employment". They have reported that the seasonal variations in labour input are much smaller on the "progressive" and highly progressive farms than on the "traditional" farms.

Jain and Bisen (1977)\(^7\) conducted a study on "utilization and cost of term farm credit provided by a cooperative Bank in M.P.". The findings of the study emphasized the fact that whenever the loans were

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provided in cash to the farmers, it must not be more than the actual estimated cost of asset construction in a particular area on a realistic basis to check diversion of a proportion of a sanctioned amount to some other purpose. Further to check diversion of loans from the recognized purposes to other purposes, proper supervision of the purposes for which the loans were provided and the verification of the details given in the application farm before sanction of the loan should be done. Sometimes, the diversion of the loans occurred by the farmers to meet their genuine farm requirements. Hence provision should be made for meeting the requirements not only for farm business but also for consumption purposes by the credit agencies.

Lavania et al (1977) analysed the "impact of commercial Bank finance on - (1) adoption of modern technology, (2) yield of major crops, and (3) net income", based on a random sample of 75 borrowers 75 non-borrowers for the year 1972-73, and revealed that the farmers who obtained the short-term and medium-term bank loans from the commercial banks had higher level of adoption of improved technology, higher yields of major

crops as well as higher net income.

Singh, et-al (1978)\(^9\) concluded that, as regard the impact of bank credit on cropping pattern, farm income and employment, the borrower farmers devoted more area under high yielding crops, as compared to the non-borrowers. The credit advances on borrower farms resulted in bringing more area under irrigation and increasing the intensity of cropping, which, inturn, enhanced the level of income and employment in comparison to the non-borrower farms. The per-hectare net income (Crop+Milk) on borrower farms amounted to Rs. 1976.29 on an investment of Rs. 3077.78 per hectare, as compared to net of Rs. 1452.05 on non-borrower farms, which was obtained by an investment of Rs. 2658.22 per hectare.

Jain and Jain (1979)\(^{10}\) carried out an investigation to study the impact of farm loans on farm technology, income and its effect on private borrowing. The

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objectives of their study were (1) to study the utilization of borrowed funds for improving technology, and (2) to measure the changes in farm business income of loan recipients. In order to assess the impact of changing in technology, the position of the different group of farmers before obtaining the funds from the bank and after utilization of these funds for improvement / change in area under the crops, area under irrigation, area under HYV, double cropped area, intensity of cropping and increases in farm assets on their farms was analysed.

Tiwari and Sharma (1980) studied the "impact of credit as a source of liquidity upon adoption of modern technology and income levels on small farms", which covers the behavioural response of small farmers with respect to the adoption of modern technology:

(a) When provision is not made for liquidity in the face of adverse production results, (b) when such provision is made but is non-dependable institutional credit, and (c) when the credit is dependable. It is evident from the results of the study that the small

farmers, who is really liquidity starved, can be benefitted by a programme of dependable institutional credit.

Roshan, B. and Singh, R. (1981) made a study on the "impact of Bank finance on cropping pattern and farm income in Agra district". The impact on intensity of cropping pattern, crop output and farm income of the borrower farmers through the installation of tube-wells is assessed. Data were collected from a sample of 59 farmers of Agra (U.P.), who had borrowed from the district branch of the Central Bank of India. Investment in tube-wells has enabled the borrowers to adopt double/multiple cropping pattern and to rise intensity of cropping, Bank finance helped to increase yield of the selected crops by 32 percent. The net return on investment in tube-well was estimated at 15.7 percent.


conducted a study on "financing agriculture by large size cooperative society, Midhapur of Agra district (U.P.)". This study concluded that:

(1) Although there has been more than three times increase in the loan advances by the society under study but considering the demand for credit of changing agriculture, such increase cannot be said satisfactory.

(2) An analysis of short-term and mid-term loans provided by the society under study showed that main emphasis has been given to the provision of short term finance.

(3) An analysis of loan advances to different categories of member farmers revealed that the share of small farmers in short term as well as medium term loan advances is higher than the large farmers. Thus society under study has been giving due emphasis to finance small farmers for short-term as well as medium term credit needs.

(4) The increase in the number of members (small and large farmers) during the period under reference is quite disappointing. Thus it can be said that the society has not made sincere efforts to bring the farming community under the activities of cooperative periphery in order to achieve the desired objectives. The
increase in the loan advance per member (both small and large farmers) has not been satisfactory during the period under reference.

(5) The recovery position of short-term loan as well as mid term loan advance by the society under study is satisfactory.

Nayak, et-al (1984) \(^{14}\) analysed the impact of credit on the cropping pattern in irrigated area of Karnataka - A case study in Malaprabha command area. The analysis of the data allows to measure the response of the small and medium farmers to the availability of credit in the adoption of new technology. It is found that provision of short term and long term credit with irrigation potential will result in the shifting of cropping pattern in favour of cash crops.

This effect of change in the cropping pattern with availability of increased credit was more between small and medium farmers and statistically different from the non-borrowing farmers. However, the cropping pattern when compared with the borrowers of crop loan and long term loan was found to be statistically not different.

May be the effects of long-term credit is yet to bear its effect on the cropping pattern. A credit reorientation system favouring small farmers seems to produce tangible results since, the credit was better utilized on small farms from the cropping intensity viewpoint. The advantage of such credit on the cropping intensity on small and medium farmers rather than large farmers have desirable effects on equity, provided the programme of the implementation of irrigation scheme is being expanded rapidly in order to benefit the small farm size group.

Lal, R.C. and Lavania, R.P. (1986)\textsuperscript{15} studied the Impact of cooperative credit on agriculture production and income. The main conclusions and suggestions of their study were:

(1) Major part of credit in agriculture is being met by cooperatives through the extent to which it is supplied, is not of satisfactory level,

(2) The farmers owning large holdings are generally the greatest beneficiaries of the cooperative credit.

(3) Major part of the credit is utilized for productive purposes in agriculture.

(4) The members of cooperative credit societies invest more on inputs and get better yield return as compared to non members.

Therefore in the light of this study it is suggested that there should be adequate financing to fulfil all the requirements of the farmers. So that they do not have to report to other sources, particularly non-institutional, specially to the weaker section of the farmers.

Singh, et-al (1986) carried out an investigation to study the "economic effect of Gramin Bank loaning on agricultural development in district Ballia U.P.". The following were the main conclusions: (1) Bank loaning facilitated the farmers to make an additional investment in post borrowing situation mainly on account of milch cattles and construction of irrigation structure; (2) Cropping pattern shifted towards adoption of more cash crops and cereal crops like Sugarcane, Wheat and Paddy respectively in post borrowing situation. The average

cropping intensity increased from 141.73 percent in pre
borrowing situation to 169.37 percent in post borrowing
situation; (3) the percentage of irrigated area to
cultivated area increased from 79.99 percent to 89.77
percent and (4) When crop and milk enterprises were
combined, the per farm additional gross income and net
income came to Rs. 3612.13 and 1429.12 respectively by
making an additional expenditure of Rs. 2183.01 per farm
as input cost. The average size of farm being 1.11
hectare.

Bhave (1987) 17 made a study on national objectives
and the role of financial institutions lending issue and
prospects with particular reference to the role of
NABARD. The paper of this study was presented at the
seminar and convention on financial institutions,
organized by the workers productivity council, held in
New Delhi on 8-10 November, 1986. Most Indian financial
institutions, except the National Bank for Agriculture
and Rural Development (NABARD), were set up to assist
industry. NABARD was established and allied activities,
and also for rural industries and other development

17. Bhave, G. P. "National objectives and the Role of
Financial Institutions lending issues and prospects
with particular reference to the Role of NABARD."
cited in World Agricultural Economics and Rural
activities in rural areas.

Narayan (1987) observed that the borrower farmers managed to improve the level of production per unit area. Because of the biased nature of banks against marginal farmers in extending crop loans, their yields are comparatively low. So they (banks) need to make available the short term loans along with the medium and long term loans which they have been disbursing through the subsidies schemes DRDA under IRDP.

As is evident from the survey data, the bank financing to agriculture has helped to raise the per acre net income of the borrower farmers substantially. Thus, the bank finance seems to have helped them to improve their standard of living in a very tangible manner. The policy implication of the study, therefore, is that the bank finance has a reckonable impact of cropping pattern, level of productivity and per acre net income in the area surveyed as such the bank should feel encouraged to enhance further the volume of credit to agriculture and accelerate its disbursement of needy ends so as to accomplish astounding growth in its priority sector.

Adinarayn and Lakshmi Narayan (1988) analysed the "impact of institutional production credit on farm productivity Kasinakota Panchayat Samiti of Visakhapatnam district (A.P.)". To assess the productivity, tabular and cobb-Douglas production function analysis were employed. The result of tabular analysis indicate higher productivity of crop loans both at per hectare as well as per farm level under commercial bank for all sizes of farms over that of cooperatives. Easy and timely availability of credit under commercial bank alone accounted for this phenomenon. However, per rupee gross productivity of credit turned out to be higher under cooperatives owing to its adequacy and strict adherence to scale of finance. The functional analysis showed that the quantum of loan in the case of small farms under cooperatives was not adequate while in all other farm categories it was just sufficient. The marginal analysis also revealed that it was not adequate in the case of small farms while the same was in excess in the case of large farms.

under cooperatives. So the loan amount has to be revised upward in favour of small farms even by relaxing lending regulations in order to increase the farm credit productivity significantly. But the small farmers may be suitable advised to reduce the use of borrowed capital, particularly the privately borrowed funds under cooperatives.

Balishter (1988)\textsuperscript{20} studied the dairy finance under IRDP; role of State Bank Of India in the Bichpuri block of Agra district. The Bank has only covered ten villages out of a total of 43 in Bichpuri block, during the three year period 1980/81-1982/83. A large proportion of the loan advanced was to poor families for dairy (mainly buffalo) farming. It is argued that the Bank loans enabled small farmers, marginal farmers and landless, labourers to increase their income by respectively 61 percent, 58 percent and 47 percent. The overall increase in the income among dairy farmers was about 56 percent.

Jain (1988)\textsuperscript{21} made a study on "impact of


Institutional credit on tribal and non-tribal farms in Mandla district of M.P.". In this study an attempt has been made to investigate the impact of farm credit on the income of the tribal farmers through increase in production and employment in selected survey area. The findings are based on the five adopted villages of a block by the farm credit agencies. The impact on operational and structural aspects of farm business is compared between the borrower and non-borrower tribal farmers at a point of time. The findings of this study reveal that the percentage increase in crop production in the case of tribal borrower farmers was about 43 as compared to about 18 for other non-borrower tribal farmers. The small size group of borrowers farmer got the maximum benefit in term of crop production as compared to other categories. As a result of borrowed funds, the increase in the net-income of borrower tribal farmers was 28 percent as compared to 20 percent for the non-borrower tribal farmers.

The comparison of human labour requirements in pre loan/post loan periods between the borrower and non-borrower tribal farmers in crop production and allied activities also shows significant increase in labour days of family/hired labourers in the case of tribal borrower farmers as compared to non-borrower tribals. Hence the farm credit support to the tribal cultivator beneficiaries should be followed for a
longer period perspective to ensure its fruitful use and sustained income generating capacity of the tribals.

Kumar, et-al (1989) conducted a study on "Impact of Institutional credit on income and employment - An economic evaluation of two farmer's service societies in Dakshina Kannada District (Karnataka)". The study revealed that credit and owned capital are the two important factors influencing gross returns and employment level. Further, the study analysed that borrowers from Institutional source (Farmer's service societies) were better placed that the non-Institutional borrowers. The study also emphasises on the need to integrate credit in order to generate higher returns per unit area of cultivation. This particular finding of the study in a line with the latest guidelines given by the NABARD that each family should be provided with more than one type of assistance.

Singh and Gupta (1991) analysed the "Growth

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trends in agricultural credit in Punjab". It indicates that the loan advanced by Commercial Banks have grown at a much faster rate as compared to primary agricultural credit societies and Land Development Banks. However, the record of performance of the Commercial Banks as far from the percent of overdues to outstanding has been worst from primary credit societies and Commercial Banks as compared to Land Development Banks.

Nagaraja and Venkataram (1991) concluded "an examination of rural delivery system vis-a-vis cropping pattern by peasant farmers in India - A case study application of linear programming technique". This study reveals that the increased loan funds by 50 percent and 100 percent over the existing limit did not show any impact on cropping pattern, borrowing and net farm returns and was obvious because of adequacy of loan funds at the existing level.

The short term loan facilities provided to farmers by cooperatives and Commercial banks in the study region were fund adequate and this reflects the performance

Institutional agricultural lenders in Doddaballapur Taluk. There was no significant difference in the total short term loan amount required from the cooperatives and Commercial banks for small and large farmers (Rs. 939.72 and Rs. 962.60, respectively). This is probably because of credit assessment based on need rather than security of size of land holdings and is a laudable phenomenon.

Murgai Ripan (1992) carried out an investigation on "characteristics and motivation of rural weaker section's borrowing from the Nationalized Banks". The main findings of this investigation have been that, as a consequence of bank's advance to these weaker sections several direct and indirect changes have taken place in their occupational and living patterns. However, friends and relatives still continue to be the main source of informations for the marginal farmers and small farmers while for the landless labourers, agricultural offices of the bank constituted the main source of information. The borrowers sought to increase their income through dairing and were keen about new banking schemes to expand their avenue base.

Rao and Dr. Satyanarayanan (1992) made a study on "profitability of crop loans under Regional Rural Banks". They concluded that Regional Rural Banks playing an important role in increasing the crop production and income of the beneficiaries by providing the crop loans in time and at low rate of interest. However, it was understood during the investigation that technical information regarding improved crop production practices is not providing by the bank personnel, which helps the beneficiaries for proper utilization on crop loan in adoption of latest technology; which, in turn, gives good yield and more profit. Hence it needs to be considered by the concerned to provide the information about modern farm technology to its beneficiaries.


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