

having atleast 15 beneficiaries financed under IRDP, were selected and interviewed for this study. The objectives were : (i) to evaluate the impact on the economic status of the beneficiaries financed under IRDP, (ii) to study the financial viability of the selected schemes; and (iii) to identify the problems of beneficiaries and suggest suitable measures to solve them.

On account of adoption of IRDP, the average family income of sample beneficiaries increased from Rs. 3,202.67 to Rs. 5,945.26. All the selected schemes made positive contributions to the family income as a whole. The total mandays of employment increased from about 658 mandays in pre-assistance period to about 951 mandays in post-assistance period. On the whole, 39.06 per cent of sample beneficiaries were lifted above the poverty line and 42.19 per cent of sample beneficiaries generated their annual family income more than Rs. 3,500 but less than Rs. 6,400.

Financial viability analysis of the selected schemes pertaining to cash-flow statement of the schemes and the parameters of viability (viz., NPV, IRR and B/C ratio) indicated that all the schemes of IRDP selected for the study were financially viable. The analysis of problems related to the beneficiaries identification and operation of the scheme indicated that lack of proper infrastructural facilities, interference of influential persons and lack of supervision by the technical staff were the main drawbacks of the programme. However, inadequate knowledge of the programme to the beneficiaries, greater time lag between selection and delivery process, complicated and defective process of purchasing the assets were found to be other important drawbacks of the programme.

**Verma, R.K. 1987.** Impact of Crop Insurance on Cropping Pattern, Resource use and Income Level on Farms in Baheri Block of District Bareilly (U.P.). G B. Pant University of Agriculture and Technology. Pantnagar, Nainital. Major Adviser : S.K. Tewari.

Appreciating the risk in farming, Central Government launched Crop Insurance Scheme linked with institutional credit, for certain specified crops in 12 states and 2 Union Territories from *kharif* 1985. This study was conducted in Baheri block of district Bareilly (U.P.) where the scheme is operative from *kharif* 1985. The study was aimed at examining the actual implementation of the scheme in the background of provisions envisaged; evaluating the impact of crop insurance on cropping pattern, resource use and income level on farms; examining the financial feasibility of farmers' participation in crop insurance and finding out the weaknesses of the scheme if any. The study was based on the data collected for the scheme (1985-86) and the pre-scheme (1984-85) years from 32 participants and an equal number of non-participants.

It was found that credit-linked crop insurance scheme was implemented strictly according to the modalities envisaged and no deviations were reported by the banker or any of the sample participants. Impact of crop insurance on cropping pattern, resource use and yield levels was found to be insignificant in the first year of the scheme. However, there was an increase of about 3 per cent in net farm income which was found to be significant in case of marginal and small farmers.

The results regarding feasibility of crop insurance from view point of farmers showed that in the 18 years period (1966-67 to 1983-84), threshold yields (guaranteed yields) of wheat never fell below their respective actual average yields and, thus, Rs. 52 (Rs. 26 in case of marginal and small farmers) in terms of value in 1983-84 would have become payable as premia by the farmers while no indemnity have become receivable. In case of paddy, threshold yield fell below actual average yield only in one year (1979-80) during the 18 years period and, thus, Rs. 52 (Rs. 26 in case of marginal and small farmers) in terms of value in 1983-84 would have become payable as premia by the farmers and Rs. 59 in terms of value in 1983-84 would have become receivable as indemnity to the farmers. So while the crop insurance appeared to be financially unattractive in case of wheat, it was gainful in case of paddy for marginal and small farmers particularly, the gain being less to other size group of farms. The results suggest that crop insurance should not be implemented in a blanket basis rather it should be selective in terms of defined area and crops strictly on the basis of yield variability in the area.

Opinion survey of the banker and the participants pointed out that they wanted crop insurance to be optional so that those who do not perceive risk in growing wheat and paddy, are not denied institutional credit because of its compulsory linkage with crop insurance.

**Toor, J. S. 1987.** Growth Trends in Forest Area and its Impact on Rainfall in Different Divisions of U.P. G.B. Pant University of Agriculture and Technology, Pantnagar, Nainital. *Major Adviser* : V.K. Sharma

The study presents the growth trends in forest area and its impact on rainfall in different divisions of U.P. The linear, log linear and second, third and fourth degree polynomial functions were used for estimating the growth trends and linear regression was used for estimating impact of forest area on rainfall.

It was observed that during a period of 30 years (1951-52 to 1980-81) total forest area decreased in all divisions and U.P. state as a whole except kumaon division, afforested area increased in all divisions and U.P. state as a whole and deforested area showed a definite growth trend in only five divisions and state as