were repaying their instalments regularly to the banks. Further, 19 families were found to be irregular in their repayments. This suggests that 22 families have benefited from the programme.

The on-going rural credit, cottage industries and dairy schemes have also been utilized for Antyodaya families. But the fact remains that in an area where the density of operations under these schemes is not adequate, the Antyodaya families do not get sufficient technical marketing and other assistance after loan disbursement. Therefore, the linkages of beneficiaries with technical agencies need to be urgently improved, so that the full income effects of the assets given are realised in a short period of time.

IMPACT OF THE TRIBAL DEVELOPMENT PROGRAMMES ON EMPLOYMENT, INCOME AND ASSET FORMATION IN BASTAR DISTRICT OF MADHYA PRADESH

Hanumant Yadav and C. S. Mishra*

The basic goal of economic planning in India is a rapid increase in the standard of living of the people through measures which also promote equality and social justice. Emphasis is placed on the common man, the weaker sections and the less privileged. It was recognized in the Fourth Plan that area and activity development planning would by itself not suffice to meet the needs of the less privileged or the weaker sections. These classes formed a large variety of categories whose problems and requirements were widely different. Hence special schemes were initiated to bring about improvement in the existing pattern of distribution of income. These schemes were: Small Farmers Development Agencies, Marginal Farmers' and Agricultural Labourers' Agency (MFAL), Comprehensive Area Development Programme (CADP), Pilot Projects for Hill and Tribal Areas, Integrated Tribal Development Programmes, etc. Under the pilot project schemes for the tribal areas the Government of India established six tribal development agencies during the period of Fourth Five-year Plan. Two such projects were sanctioned in Bastar district of Madhya Pradesh. These projects were located in Dantewada and Konta tahsils of the district. In this paper, an attempt has been made to assess the impact of the projects on employment, income and asset formation of the targetted tribal population.

METHODOLOGY

The paper is based on an empirical study of 50 families. Equal number

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2. Andhra Pradesh (Srikakulam)-1, Bihar (Singbhum)-1, Madhya Pradesh (Dantewada and Konta)-2, Orissa (Gunupur and Parihakhmundi)-2 = 6.
of beneficiary\textsuperscript{3} and non-beneficiary\textsuperscript{4} families have been selected. All the families were selected from the size-group of holdings below four hectares. After all, the very objective of initiating ‘tribal development projects’ was to develop all sections of the community in the area in general and the weaker and small size of holdings in particular. The beneficiary families were selected from five villages from the list supplied by the Tribal Development Agency (TDA), Konta. The non-beneficiary families were also selected from the same villages from the list of holdings obtained from patwaris (Village Record Keeper). Both the groups of families were selected on the basis of systematic serial sampling.

Data were collected regarding grants and subsidies given to the selected families during the years 1975-76 to 1977-78 (three years). Information on employment, income and asset formation of the beneficiaries and non-beneficiaries was collected for two years 1974-75 (a year before the grants were released) and 1977-78, the concluding year of the term of tribal development project.

The total value of inputs given in grants and subsidies to the beneficiaries came to Rs. 48,464. Nearly 43 per cent of the total value comprised the value of diesel pumps given on the basis of 75 per cent subsidy and the benefits accrued to only 5 families. Grants for poultry units ranked second and accounted for nearly 27 per cent of the total value of subsidies and grants, benefiting only 4 of the sample beneficiaries. However, paddy seeds and chemical fertilizers were availed by all the beneficiaries and their total value represented 8.13 per cent of the total value of grants and subsidies.

Before we discuss the impact of the programme on employment, income and asset formation of the participant families (beneficiaries), we should also keep in mind the pitfalls of the programmes. The sample beneficiaries were distributed fruit plants worth Rs. 2,500, but barely 20 of them survived. Secondly, though the agency spent Rs. 13,142 for the establishment of poultry units, not a single unit was found in operation at the time of survey.

\section*{IMPACT OF PROGRAMME}

\textit{Employment}

Overall employment opportunities of the beneficiary and non-beneficiary families increased during the period of study, the former, however, have gained more in terms of employment. The employment of the beneficiary families has increased by 26.17 per cent against 13.40 per cent for the non-beneficiaries during the period 1974-75 to 1978-79. During the same period, more employment has been generated in almost all operations/occupa-

\textsuperscript{3} Beneficiary has been defined as a tribal family cultivating less than four hectares unirrigated land or two hectares irrigated land and is not economically viable, was selected by the TDA to derive benefits from the project.

\textsuperscript{4} Non-beneficiary: A native family of the area cultivating less than four hectares unirrigated land and is not economically viable, but not identified as beneficiary by the TDA to avail benefits of the project.
tions though their magnitude differs for the beneficiary and non-beneficiary families. Crop production accounted for an increase of 20.57 per cent in employment days in the case of the beneficiaries against an increase of 5.05 per cent for the non-beneficiaries. The increased man-days required for the crop production of the former may be due to intensive cropping when irrigation facilities were extended. Secondly, where more crops are grown both due to application of fertilizer and irrigation, more labour is needed for weeding, harvesting operations, etc.

The increase in non-farm employment was 33 days (or 25 per cent) for the participant (beneficiary) families against 15 days (9.74 per cent) for the non-participant (non-beneficiary families). The increase has been due to the construction of link and arterial roads. The reason for the differences in non-farm employment days between the beneficiaries and non-beneficiaries is not that the former is preferred to the latter in the employment opportunities. The simple explanation is that an additional active member is available in the family of the beneficiaries for work as compared to the non-beneficiaries.

The standard errors of the difference between mean employment days for the two periods in respect of both, the beneficiaries and non-beneficiaries, have been calculated and 't' test has been applied to know the significant difference between the two means. The 't' test reveals that there is significant difference between the mean farm employment days of the beneficiaries for the two periods whereas the difference between mean farm employment days of the non-beneficiaries was not significant. On the other hand, the mean differences in the non-farm employment for the two periods are significant in respect of both the beneficiaries and non-beneficiaries. It indicates that grants and subsidies have made significant impact in the generation of farm employment.

Income

The total income of both the beneficiaries and non-beneficiaries increased during the period under reference. However, a higher percentage of increase was noticed in the case of beneficiaries. The total income of an average beneficiary increased by 36.87 per cent while that of the non-beneficiary rose by 20.99 per cent. More than two-thirds of the total income of both the beneficiaries and non-beneficiaries originated from farming activities. The farm income of the beneficiary increased by 31.45 per cent against an increase of 10.53 per cent in the case of the non-beneficiary. On the other hand, the rise in income from non-farm sources was almost alike for both the groups. The non-farm income of the beneficiary and non-beneficiary families rose by 49.66 and 47.99 per cent respectively.

The application of 't' test revealed that farm and non-farm incomes of the beneficiary and non-beneficiary families have significantly increased during the above period. Since there is perceptible rise in the income of the beneficiary vis-a-vis non-beneficiary from the farm sector, it can be concluded that the differences in income are due to the programmes of the TDA.
Assets

The total value of assets of an average beneficiary was Rs. 8,782 in the year 1974-75. It increased to Rs. 9,554 in the year 1978-79, showing a rise of 8.79 per cent during the reference period.\(^5\) On the contrary, the total value of assets of an average non-beneficiary was more than the beneficiary in both the years (Rs. 10,904 and Rs. 11,144). But its growth rate during the period of study was very poor. It increased barely by 2.20 per cent. Land, buildings and wells constituted the bulk of the (more than 77 per cent) value of total assets of both the beneficiaries and non-beneficiaries. The value of above assets of beneficiaries increased by 8.52 per cent as compared to a meagre increase of 1.90 per cent in the case of the non-beneficiaries.

In order to find out whether the increase in the value of assets of the two classes is significant, we applied \(t\) test. The standard errors of the difference between the means have been calculated to analyse the data. The difference between the mean value of assets of the beneficiaries during the two periods has been found significant, whereas the increase in the value of assets of the non-beneficiaries is not significant at 5 per cent level. Hence, it may be interpreted that the tribal development programmes positively contributed to the formation of assets of beneficiaries.

Regression Analysis

To measure the elasticities of subsidies given by the TDA on (i) employment, (ii) income and (iii) assets of the beneficiaries, we applied three constant elasticity functions. The functions were of the following form:

(i) \(Y_e = AX^{be}\)
(ii) \(Y_i = AX^{bi}\)
(iii) \(Y_a = AX^{ba}\)

where

- \(Y_e\) = increase in the number of employment days in crop production, dairying and poultry farming activities between 1974-75 and 1978-79,
- \(Y_i\) = increase in the income (Rs.) from crop production, dairying and poultry farming activities between 1974-75 and 1978-79,
- \(Y_a\) = increase in the value of assets of the beneficiaries between 1974-75 and 1978-79,
- \(A\) = constant (intercept) term,
- \(X\) = total value of subsidies and grants given to the beneficiaries during 1975-76 to 1978-79.
- \(b\) = elasticity coefficients.

Functions were fitted to the data on subsidies and grants, increase in employment days, income and assets of the selected beneficiary families. It is found that the elasticity coefficients for subsidies and grants were of low magnitude in all the cases. The elasticity coefficients of subsidies when placed

\(^5\) Calculated at the constant price of 1974-75. The rate of increase in farm harvest prices was the basis of adjustment.
in relation to increase in employment, income and assets were .1896, .2725 and .2758 respectively. All the coefficients were significantly different from zero at the probability level of 5 per cent. Though the elasticity coefficients of the subsidies on employment, income and assets were positive, they were not very encouraging.

CONCLUSION

It may be concluded that the pilot projects launched by the TDA in the tribal district of Bastar have produced favourable impact on employment, income and asset formation of the beneficiary families. The non-beneficiary families also witnessed some gains in these spheres due to overall development of the area. The elasticities of subsidies/grants were also found to be significant. However, there exists scope to widen employment and income opportunities of the tribal families by altering certain programmes. It was observed that more than 25 per cent of the expenditure was incurred on the establishment of poultry units, but not even one gave any return. The reason for the failure of the programme has to be probed and if sufficient conditions for scientific management of poultry units are not created the programme be kept in abeyance. In the beginning, attempts should be made to develop the agricultural sector alone. Expansion of irrigation facilities and distribution of seeds, fertilizers and pesticides would go a long way to expand employment and income opportunities.

Two other features of the programme are also disheartening. First, despite an increase in the budget of minor irrigation by Rs. 30 to 40 lakhs, none of the projects was completed in time. Secondly, there has been considerable diversion of the resources from the productive to non-productive uses. One would anticipate better results in future if some of the weaknesses are removed.

IMPACT OF PROGRAMMES ON TARGET GROUPS—CASE STUDY OF A REGIONAL RURAL BANK

L. K. Mohana Rao*

The Rural Credit Review Committee (1969) aptly pointed out that the weaker sections of the rural sector are out of the purview of co-operatives. The Banking Commission (1972) recommended the establishment of Rural

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6. "Tribal Development", Economic and Political Weekly, Vol. XV, No. 27, July 5, 1980 pp. 1115-1116: The advance Report of the Comptroller and Auditor General of India for the year 1978-79 revealed that much money was spent on several unapproved works and schemes relating to construction of office buildings and rest houses for all of which funds from development projects were diverted.

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