

INCOME GENERATION FROM IRDP SCHEMES

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Abstract: A study conducted in Kannur district of Kerala revealed that only 66.2 per cent of the IRDP beneficiaries has positive income generation. The average net income before and after repayment of loan was highest in fisheries followed by tailoring and milch cattle schemes. The poorest income generator was forest-based industries, which was significantly inferior to all other schemes. The programme participation turned out to be the variable having highest positive and significant correlation with net income from IRDP schemes followed by entrepreneurial ability.

Keywords: Income generation, IRDP, schemes

INTRODUCTION

Integrated Rural Development Programme (IRDP), constitutes the forefront of India's assault on poverty. The objective of IRDP is to identify households below the poverty line and provide them with productive assets through a subsidized loan so that they can rise above the poverty line. The IRDP, being one of the largest anti-poverty programmes currently underway in India, there is an obvious need to find out whether the huge investments made on it can be justified in terms of its success. Keeping in view, a study was undertaken to assess the impact of IRDP on income generation and to explore the relationship between income generation and the selected personal, familial, situational and programme-related variables of IRDP beneficiaries.

MATERIALS AND METHODS

The study was conducted in Kannur district of Kerala state in India. To select IRDP beneficiaries a list of all the schemes implemented in the nine blocks of the district during 1989-90 indicating the number of beneficiaries assisted under each on those schemes was first prepared. The year, 1989-90 was purposively chosen so as to give sufficient time for the manifestation of results due to IRDP stimulus. From the list thus prepared. Three schemes from the primary sector, two from secondary sector and one from tertiary sector were purposively selected to ensure adequate coverage of sectors, sub-sectors, schemes and respondents for sampling. Based on the total number of beneficiaries assisted under each one of these selected schemes in the nine blocks of the district during the reference year 1989-90, five blocks were selected to ensure sufficient number of respondents for sampling. From

among the total 971 beneficiaries assisted in the five blocks, 210 respondents were randomly selected which constituted the final sample for the present study.

Dependent Variable

The net income from scheme (NIS) was the dependent variable. NIS was quantified as follows:

$$\text{NIS} = \text{GIS} - (\text{INC} + \text{ME}), \text{ where GIS} = \text{IMP} + \text{IBP}$$

GIS, INC, ME, IMP and IBP stand for gross income from scheme, input cost, miscellaneous expenses, income due to main product and income due to byproduct respectively

Independent Variables

Thirty-four independent variables comprising personal, familial, situational and programme-related variables were considered in the present study. The variables were selected after extensive review of literature and in consultation with experts.

Measurement of independent variables

Personal variables

- X₁ Age (Measured in terms of number of years completed)
- X₂ Education (Scores ranging from 1 to 5 for "can read and write to collegiate")
- X) Occupation (Scoring procedure developed for the study with scores of 1, 2, 3, 4 and 5 for fishing, labourers, handloom, tailoring and farming respectively)
- X₄ Caste (Scores of 1, 2 and 3 for Scheduled Caste / Scheduled Tribe, Backward Community and Forward Community respectively)

- X₅ Fatalism (Scale developed by Chattopadhyaya and Pareek, 1963)
 X₆ Level of aspiration (Self anchoring scale developed by Cantrill, 1965)
 X₇ Entrepreneurial ability (Comprehensive scale of entrepreneurship developed by Sharma, 1991)

Familial variables

- X₈ Family type (Scores of 1 and 2 for nuclear family and joint family respectively)
 X₉ Family size (Measured as the absolute number of members in the household)
 X₁₀ Dependency ratio (Measured as the ratio of number of non-earning family members to the total number of earning members in the family)
 X₁₁ Family education (Measured as sum of education scores obtained by all the members of the family)
 X₁₂ Mass media participation (Structured question)
 X₁₃ Family extension contact (Structured question)
 X₁₄ Family urban contact (Structured question and measured in terms of frequency and purpose of visits to urban centres)
 X₁₅ Political participation (Structured question)
 X₁₆ Deferred gratification (Scale developed by Sen, 1967)
 X₁₇ Family calorie intake (Measured in terms of total calorie intake that beneficiary family derived from the various items of food consumed by them in a day)
 X₁₈ Per capita calorie intake (Measured in terms of per head calorie intake beneficiary family derived from the various items of food consumed by them in a day)
 X₁₉ Net family income without scheme (NFIWOS) (Measured as the total net annual income of the beneficiary family from all sources prior to the receipt of IRDP assistance)
 X₂₀ Per capita income without scheme (PCIWOS) (Calculated by dividing the NFIWOS with corresponding family size)

Situational variables

- X₂₁ Land holding (Measured as area of land in cents)
 X₂₂ Family labour availability (Measured as number of able bodied members in a beneficiary family)
 X₂₃ Programme participation (Structured questions)

- X₂₄ Programme awareness (Structured questions)
 X₂₅ Man days lost (Measured as number of days spent in pursuing application for assistance)
 X₂₆ Wages lost (Measured as wages (in rupees) that the beneficiary has to forgo by not attending his / her work for getting IRDP assistance)
 X₂₇ Other expenses (Measured as incidental expenses that a respondent incurred while pursuing his / her application for IRDP assistance)
 X₂₈ Distance from the block headquarters (Measured as distance in km to the Block Development Office from the respondent's village)

Programme related variables

- X₂₉ Total assistance received (Measured as total assistance received in rupees by a beneficiary family)
 X₃₀ Loan amount (measured as the loan (in rupees) portion of the total assistance received)
 X₃₁ Subsidy (Measured as the subsidy portion of the total assistance in rupees)
 X₃₂ Pre-implementation visit (Measured as frequency of pre-implementation visit by the official to the respondent's house)
 X₃₃ Follow up visit (Measured as frequency of visits made by the officials to the respondent's house after the grounding of the scheme)
 X₃₄ Time lag (Measured as time lapse in months for receiving assistance)

The data were collected by direct interview method using pre-tested schedule and were analyzed using product moment correlation.

RESULTS AND DISCUSSION

The data presented in Table 1 show that out of 210 households studied, 139 (66.2%) alone had positive income generation. A good number of beneficiaries (99) had generated net income of more than Rs.1000 of which 10 households could generate a net income above Rs.5000. It could also be seen that the type of scheme had a great influence on the additional income. For instance, in the land development scheme more than 50 per cent of the beneficiaries generated a net income ranging from Rs. 250 to Rs.2000 whereas in the forest-based industries, more than 70 per cent of the beneficiaries could not generate any income at all. In the fisheries scheme, however, income generated was relatively much higher and ranged from Rs.501 to more than Rs 5000.

bring (Rs.2290), milch cattle (Rs.1750) and handloom (Rs.1650). The lower income was in forest-based industries (Rs.130) and land development (Rs.900) schemes. So also the average net income generated after repayment of loans was the highest in fisheries (Rs.1730) followed by tailoring (Rs.1470) and milch cattle (Rs. 680) schemes. The forest-based industries sustained an income loss of Rs. 80 per scheme. The low average net income has resulted in a low ratio of net income after repayment of loan to net income before repayment, which was well below 50 per cent in respect of milch cattle, handloom and forest based industries (Table 2). The ratio was negative (-61.5) and lowest in forest-based industries.

Table 3 reveals that variation exists in the net income generated from different schemes since the F-ratio was found to be significant. Comparing the average net income generated from selected schemes of IRDP (Table 4) with the computed values of critical difference revealed that the fisheries scheme (Rs.2730) followed by tailoring scheme was significantly superior to all other schemes in terms of net income generation. Even after making the repayment due, these two schemes retained their significant superiority over all other schemes. There was no significant difference between milch cattle (Rs.1750) and handloom (Rs. 1650) with respect to their net income generation before meeting repayment liability. However, due to the high repayment due the income generation from handloom (Rs.400) and milch cattle (Rs.680) plummeted to an amount comparable to that from land development (Rs.520) scheme after repayment.

Table 4. Comparison of average net income generated from different schemes of IRDP

Name of the scheme	No. of respondents	Average net income, Rs
Land development	32	900d
Milchcattle	40	1750c
Fisheries	34	2730a
Handloom	33	1650c
Forest based industries	38	130e
Tailoring	33	2290b
Overall	210	1550

CD (0.005) = 230; Average values with the same superscripts do not differ significantly at 0.05 level

Table 5. Correlation between net income generated from scheme and selected personal, familial, situational and programme related variables

Notation	Variable	r-value
Personal variables		
X1	Age	-0.082 NS
X2	Education	0.280**
X3	Occupation	0.118NS
X4	Caste	0.212*
X5	Fatalism	-0.395
X6	Aspiration	0.308**
X7	Entrepreneurial ability	0.567**
Familial variables		
X8	Family type	-0.085 NS
X9	Family size	0.176 NS
X10	Dependency ratio	0.169 NS
X11	Family education	0.169 NS
X12	Massmediaparticipation	0.264**
X13	Family extension contact	0.087 NS
X14	Family urban contact	0.396**
X15	Political participation	0.159 NS
X16	Deferred gratification	0.387**
X17	Family calorie intake	0.140 NS
X18	Per capita calorie intake	0.047 NS
X19	Net family income without scheme (NFIWOS)	0.115 NS
X20	Per capita income without scheme (PCIWOS)	0.063 NS
Situational variables		
X21	Land holding	-0.018
X22	Family labour availability	0.156 NS
X23	Programme participation	0.617**
X24	Programme awareness	0.447**
X25	Man days lost	0.178 NS
X26	Wages lost	0.208*
X27	Other expenses	0.230*
X28	Distance from block headquarters	0.183 NS
Programme-related variables		
X29	Total assistance received	0.359**
X30	Loan amount	0.364**
X31	Subsidy	0.333**
X32	Pre-implementation visit	0.206*
X33	Follow-up visit	0.379**
X34	Time lag	0.058 NS

NS = Non-significant; Significant at 0.01 level

Table 1. Scheme-wise distribution of beneficiaries according to net income from schemes

Name of the scheme	Net income from scheme (rupees)										Total
	0	1-250	251-500	501-750	751-1000	1001-2500	2500-3000	3000-4000	4001-5000	>5000	
Land development n=32	11 (34.4)	-	4 (12.5)	3 (9.4)	4 (12.5)	7 (21.9)	-	3 (9.4)	-	-	32 (100)
Milch cattle n=40	5 (12.5)	1 (2.5)	2 (5.0)	1 (2.5)	6 (15.0)	11 (27.7)	10 (25.0)	3 (7.5)	-	1 (2.5)	40 (100)
Fisheries n=34	7 (20.6)	-	-	1 (2.9)	2 (5.8)	4 (11.8)	7 (20.6)	4 (11.8)	5 (14.7)	4 (11.8)	34 (100)
Handloom n=33	13 (39.4)	1 (3.0)	-	-	1 (3.0)	8 (24.2)	4 (12.1)	2 (6.1)	2 (6.1)	2 (6.1)	33 (100)
Forest based industries n=38	27 (71.1)	5 (13.2)	5 (13.2)	-	-	1 (2.6)	-	-	-	-	38 (100)
Tailoring n=33	8 (24.2)	-	2 (6.1)	1 (3.0)	1 (3.0)	4 (12.3)	7 (21.2)	3 (9.1)	4 (12.1)	3 (9.1)	33 (100)
Total	71 (33.8)	1 (3.3)	13 (6.2)	6 (2.9)	14 (6.7)	35 (16.7)	28 (13.3)	15 (4.8)	11 (5.2)	10 (4.8)	210 (100)

Table 2. Scheme-wise distribution of net income from schemes before and after meeting repayment liability

Name of the scheme	Average net income before repayment of loan, Rs	Average amount due for repayment, Rs	Payment liability as % of net income	Net income after making the due amount for repayment, Rs	% net income after repayment of loan to net income before repayment
Land development n=	900	380	42.2	520	57.8
Milch cattle n=32	1750	1070	61.1	680	38.9
Fisheries n=40	2730	1000	36.6	1730	63.4
Handloom n=34	1650	1250	75.8	400	24.2
Forest based industries n=38	130	210	161.5	-80	-61.5
Tailoring n=33	2290	820	35.8	1470	62.2
Average N = 210	1550	780	50.3	770	49.7

Table 3. Analysis of variance of level of net income generated from selected schemes of IRDP

Source of Variation	Degrees of freedom	Sum of squares	Mean sum of squares	F-ratio
Between schemes	5	157.34	31.47	10.76*
Within schemes	204	596.58	2.92	

*Significant at 0.01 level of probability

Scheme-wise distribution of net income from schemes before and after meeting repayment liability is given in Table 2. The average income from the selected schemes prior to the repayment of loan was only Rs.1550, which

works out to Rs.120 per month. The net income per scheme after meeting repayment liability of Rs.780, was only Rs.770. The average net income prior to repayment was highest in fisheries (Rs. 2730) followed by tai-

It is observable from Table 5 that education, aspiration and entrepreneurial ability, mass media participation, family urban contact and deferred gratification, programme participation and programme awareness, total assistance received, loan amount, subsidy and follow-up visit were positively significant at one per cent level. Fatalism, however, was negatively significant at one per cent level.

It is to be highlighted that the programme participation turned out to be the variable having highest positive and significant correlation at one per cent level with net income from scheme. Hence it is imperative to increase the participation of beneficiaries. The functionaries concerned at all level should be made aware of its importance and the mechanism by which it can be ensured should be chalked out. It was the forest-based industries, which made the least impact on income generation.

The major reason for the failure of the scheme, which was dominated by the scheduled cast / scheduled tribe beneficiaries was lack of raw materials and skills. It implies that the formulation of production schemes in

IRDP should be based on a realistic assessment of local resources and skills.

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