

IMPACT OF POVERTY ALLEVIATION PROGRAMMES ON SOCIO-ECONOMIC DEVELOPMENT OF RURAL POOR OF ODISHA- A STATISTICAL ANALYSIS

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ABSTRACT

A huge amount of money has been spent through different agencies for poverty alleviation programmes in Odisha State during the period of Sixth Five Year to Tenth Five Year Plan to improve the economic condition of the poor people of the State. This paper hypothesised the impact of Swarna Jayanti Gram Swarozgar Yojana (SGSY) implemented in Odisha over the last eight years. The study specified that the programme has a positive impact on the beneficiaries. The programme is not successful with regard to generation of employment as some activities created regular employment and some others created seasonal employment of the beneficiaries. It is observed that standard of consumption of food, clothing, education, health and other items etc., improved. It reveals that SGSY made an impact in developing the social awareness and living condition of the beneficiaries. The study also reveals that 43.86 per cent of the beneficiary households benefited in this programme as they increased their annual net income assets and savings etc. The incidence of poverty among the beneficiary households declined and the social empowerment of women improved significantly.

Introduction

Removal of poverty has been the central theme of planning in India. However, development implies an overall positive change in the physical quality of life. This positive change for the better encompasses economic as well as social aspects. During the Ninth Five Year Plan, the schemes, such

as Integrated Rural Development Programme (IRDP), Training of Rural Youth for Self-Employment (TRYSEM), Development of Women and Children in Rural Areas (DWCRA), Supply of Improved Tool-kits to Rural Artisans (SITRA), Million Wells Scheme (MWS) and Ganga Kalyan Yojana (GKY) were merged into a single scheme such as Swarna Jayanti Gram Swarozgar Yojana (SGSY) and it came

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into force on 01.04.1999 to overcome certain deficiencies like multiplicity of programmes, individual programme target approach, absence of desired linkages among them, lack of proper social intimation etc. In SGSY, the Government stressed more on sustainable income generation of the beneficiaries, cluster approach, project approach, lesser importance on subsidies, active participation of banker and line departments etc.

In spite of the implementation of the various anti-poverty programmes in different Plan periods, 37.3 per cent of the total rural population were living below the poverty line in Indian economy as per the estimate made by the Modified Export Group of Planning Commission, 1993-94. The ratio was highest in Odisha i.e. 49.7 per cent among all the States of India. In Odisha since past many years, the various self-employment and wage employment anti-poverty programmes are in operation, but still the incidence of rural poverty is found to be very high in the State.

The reasons for the high incidence of rural poverty in Odisha might be backwardness of the State in education and communication facilities etc., and the benefits of various rural developmental programmes and other developmental activities of the Government might not have reached properly to the core section of the society. Of course, the rural poverty ratio in the State declined from 57.64 per cent in 1987-88 to 49.72 per cent in 1993-94, but the decline was not substantial due to growth of population. The findings of many evaluation studies relating to anti-poverty programmes conducted by the different official and non-official agencies clearly show that the

participation rate of the poor in asset based income and employment generating programmes has not been as intended in the programme, but benefits have been converged by a sizeable number of better-offs among the poor belonging to the upper strata of the poverty stricken population and also the influential non-poor people of the rural society. Such studies further reveal that beneficiaries have not been benefited enough in terms of increase in income, employment, asset formation and the like.

Though much emphasis was given to eradicate poverty through various schemes, in the State of Odisha, around 44.9 per cent of people are living below the poverty line (BPL) in 1997 whereas 1,93,054 (62.71 per cent) and 131424 (59.89 per cent) families are living in rural areas of Kalahandi and Kendrapara district, respectively. In this context, it is observed that poverty is more vulnerable among people living in rural areas. Thus, it is appropriate time to find out the cause in implementing these schemes/programmes through monitoring and evaluation process.

It is difficult to find any unanimity among the scholars and researchers regarding the success of poverty alleviation programmes. The results vary from place to place and from programme to programme. There is, therefore, the need for evaluation of poverty alleviation programmes on the basis of region and local conditions.

In Odisha no study has been undertaken to evaluate the impact of poverty alleviation programmes like SGSY on poorer rural household in Kalahandi district of Western Odisha (i.e. Southern Division) and in Kendrapara district of Coastal Odisha (i.e. Central Division). The

proposed study relating to the income and asset position of the beneficiary households and execution of poverty alleviation programmes in Bhawanipatna block in Kalahandi district and Kendrapara block in Kendrapara district is an attempt, first of its kind, to enable us to gain certain insights into the working of rural poor. The study may throw some light on the problems, issues, constraints and limitations of rural development programmes and may indicate solutions to the twin problem of rural poverty and unemployment. And to that extent, the study may also help us in the formulation of better programme and in the implementation of such programmes in future.

Methodology

The specific objectives of the study are:

1. To study the coverage of the programme in Kalahandi and Kendrapara district and to find out socio-economic conditions of the beneficiaries and compare them using statistical techniques.
2. To assess the impact of the SGSY programmes in terms of following aspects.
 - (a) to assess the extent of income generated in the assisted households and percentage of families who have crossed poverty line.
 - (b) to assess the extent of net benefit derived by the beneficiaries through the assets acquired.

- (c) to study the overall impact of the SGSY on the socio-economic condition of the rural poor.

The hypothesis of the study is that the economic condition of the beneficiaries have been alleviated marginally.

A three-stage design is adopted for the study with first stage as the Gram Panchayat, the second as the village and the third stage as the household. Seven G.Ps were selected out of 33 G.Ps of Bhawanipatna block of Kalahandi district adopting purposive sampling method. The G.Ps selected in the process are (1) Madinpur, (2) Thuapadar (3) Gandabarajhola (4) Kutrukhamar (5) Malagaon (6) Risigaon (7) Duarsani. Again, 7 G. Ps were selected out of 27 G.Ps of Kendrapara block of Kendrapara district adopting purposive method. The selected G.Ps are (1) Kapaleswar (2) Ostapur (3) Kansar (4) Gulnagar (5) Syamsundarpur (6) Indupur (7) Dhumnta. These are well connected to the district headquarters.

The list of households who were assisted under the SGSY over the period under study (1999-2005) with their year of receiving the assistance and caste group-wise break-up was obtained for each village within each G.P in the block of Bhawanipatna and Kendrapara. A list is prepared on the basis of the register (year-wise / village-wise / scheme-wise) that are with Panchayat Samiti, Bhawanipatna and Kendrapara. The village and G.P "sizes" are obtained from this updated list. The distribution of the number of individual / group beneficiaries assisted under SGSY in all the 33 G.Ps and in selected 7 G.Ps in Bhawanipatna block were selected. But in Kendrapara block 7 G.Ps out of 27 G.Ps selected during 1999-2005 have been obtained as in Table 1.

Table 1 : Distribution of Number of Sample Beneficiaries Covered Under SGSY During the Year 1999-2005 in Kalahandi and Kendrapara Districts

S.No.	Name of District	Name of Block	No. of Individual Beneficiaries	No. of Group Beneficiaries	No. of Sample Villages	Total No. of Sample Beneficiaries	No. of Sample G.Ps
1	Kalahandi	Bhawanipatna	80	32	27	112 (49.12)	7
2.	Kendrapara	Kendrapara	50	66	21	116 (50.88)	7
Total			130 (57.02)	98 (42.98)	48	228 (100.0)	14

Note: Values in parentheses denote the percentage.

At the second stage, 27 villages in selected G.P.s are drawn in Bhawanipatna block and 21 village in selected G.P.s are drawn in Kendrapara block again according to the probability proportional to "size" scheme, the "size" of a village being defined by the total number of beneficiary households it contains.

The third stage of sampling procedure is that (a) Within each selected village, a year-wise allocation of the number of sample households received assistance in each year (b) For each year, caste group- wise (ST/SC/OC) allocated number of sample households is made proportionate to the total number of beneficiary households in each caste group- wise and (c) Selection of the required number of beneficiary households in each caste-group for each year within each sample villages by simple random sampling without replacement method. Year and caste-group wise allocation of the number of beneficiary households within each sample village was prepared.

As it is a comprehensive evaluation, two types of data were collected (primary and secondary) at three levels viz. district, block and village. The primary data

were collected canvassing schedules for beneficiary households. Out of 2917 assisted beneficiaries, 228 (i.e 7 per cent) sample beneficiaries were interviewed through these structured schedules. While secondary data regarding target achievements, source of finance etc., were collected from official records of the block/DRDA office, other important data like operational problems were collected with help of intensive discussion with field officers and staff. Specific case studies were undertaken in order to ascertain the concreteness and depth of some of the typical quantitative problems affecting the beneficiaries at the micro level during implementation of SGSY at the field level. Therefore, to have a closer look at how the programme operates at the ground level, in-depth interviews were conducted by an experienced investigator. These studies were carried out with a view to seeking clarifications and to enforce the quantitative data collected through well planned schedules. All the three techniques viz. survey method, personal in-depth interviews and case studies were followed in order to capture the type of information needed in keeping with scope of this evaluation of different aspects of study.

Socio-economic Status of the Beneficiaries status, occupational status and assisted economic activity (scheme) etc., of sample beneficiaries are shown in Tables 2 and 3.

Some important socio-economic characteristics, viz. age, sex, caste, educational

Table 2 : Distribution of Sample Beneficiaries as per Age, Sex, Caste & Educational Status

Name of District	Age Group				Sex		Caste			Educational Status	
	15-29	30-44	45-59	60 & above	M	F	SC	ST	OC	Literate	Illiterate
Kalahandi	26	44	35	07	78	34	17	26	69	42	70
Kendrapara	23	61	24	08	58	58	14	-	102	106	10
Total	49	105	59	15	136	92	31	26	171	148	80

Table 3 : Distribution of Sample Beneficiaries as per Occupational Status and Assisted Economic Activity (Scheme) Under SGSY

Name of District	Occupational Status					Assisted Economic Activity	
	MF	SF	AL	RA	Others	Name of Scheme	No. of Sample Beneficiaries
Kalahandi	44	06	35	04	23	1. Diary	37
						2. She-buffalo	2
						3. Goatery	26
						4. Sheep	1
						5. Land Devt.	3
						6. Diesel Pumpset	6
						7. Pottery	4
						8. Grocery	11
						9. Tea stall	1
						10. Mini Halar	1
						11. Mushroom Cultivation	10
						12. Tractor	10
Kendrapara	40	01	19	09	47	1. Diary	14

(Contd...)

Table 3 (Contd...)

Name of District	Occupational Status					Assisted Economic Activity	
	MF	SF	AL	RA	Others	Name of Scheme	No. of Sample Beneficiaries
						2. Poultry	6
						3. Fishery	16
						4. Diesel Pumpset	2
						5. HPP	5
						6. Grocery	5
						7. Stationery	5
						8. Cosmetic vending	1
						9. Variety store	2
						10. Sweet stall	1
						11. Chuda mudhi	6
						12. Betel shop	2
						13. Electric Repair	1
						14. Rickshaw	7
						15. Agarbati making	10
						16. Power tiller	10
						17. Tractor	12
						18. Wooden Furniture	11
Total	84	07	54	13	70		228

Statistical Analysis: To adopt following methodology for the analysis of sample data:

- i) Forecasting Model of per capita expenditure on food, clothing, education, health and other items before and after financing.

$$\text{i.e. } Y_1 = a_{10} + a_{11}X_1 + a_{12}X_2 + a_{13}X_3 + a_{14}X_4 + a_{15}X_5$$

- ii) Forecasting Model of per capita income in agriculture, wages, business, forest goods collection and others.

$$\text{i.e. } Y_2 = a_{10} + a_{11}X_1 + a_{12}X_2 + a_{13}X_3 + a_{14}X_4 + a_{15}X_5$$

- iii) Comparative study of poverty alleviation programme in Southern

Division and Central Division of Odisha.

- iv) Application of Chi-square Test of Goodness of fit which can be developed using the empirical data.

RESULTS AND DISCUSSION

Tables 4 and 5 give us information on different aspects of the poverty alleviation programmes including the size of total funds spent on these schemes in the Bhawanipatna block of Kalahandi district in Southern Division and Kendrapara block of Kendrapara district in Central Division.

Table 4 : Loan and Subsidy Amount for the Sample Beneficiaries in Kalahandi District

S. No.	Name of Scheme	Beneficiaries' Households						Loan Components (in ₹)						Subsidy (in ₹)						Total Financial Assistance (in ₹)						Total Funds (in ₹)
		OC		SC		ST		OC		SC		ST		OC		SC		ST		OC		SC		ST		
		3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25		
1.	Dairy	27	3	7	460499	83920	174730	208536	30000	70000	669035	113920	244730	1027685												
2.	She-buffalo	1	1	-	26500	9000	-	7500	9000	-	34000	18000	-	52000												
3.	Goatery	13	5	8	324600	98200	190745	89400	45600	79000	414000	143800	269745	827545												
4.	Sheep	1	-	-	23240	-	-	7500	-	-	30740	-	-	30740												
5.	Land Devt.	-	2	1	-	19400	12900	-	16500	10000	-	35900	22900	58800												
6.	Diesel pumpset	5	1	-	95128	15000	-	33641	10000	-	128769	25000	-	153769												
7.	Pottery	-	-	4	-	-	32000	-	-	32000	-	-	64000	64000												
8.	Grocery	5	5	1	112500	100000	20000	37500	50000	10000	150000	150000	30000	330000												
9.	Teastall	1	-	-	9100	-	-	3900	-	-	13000	-	-	13000												
10.	Mini Halar	1	-	-	34500	-	-	7500	-	-	42000	-	-	42000												
11.	Mushroom cultivation	5	-	5	28080	-	28080	28080	-	28080	56160	-	56160	112320												
12.	Tractor	10	-	-	30000	-	-	100000	-	-	400000	-	-	400000												
Grand Total		69	17	26	141414	325520	45845	723557	161000	229080	1937704	486620	687535	3111859												
		(62)	(15)	(23)	7		5	(64.97)	(14.46)	(20.57)	(62)	(16)	(22)													

Figures in the brackets in column 12, 13&14 indicate percentage to the total in column 15.

Source : Block office.

Table 5 : Loan and Subsidy Amount for the Sample Beneficiaries in Kendrapara District

S. No.	Name of Scheme	Beneficiaries' Households						Loan Components (in ₹)			Subsidy (in ₹)			Total Financial Assistance (in ₹)			Total Funds (in ₹)			
		OC		SC		ST		OC		SC		ST		OC		SC		ST		
		3	4	5	6	7	8	9	10	11	12	13	14	15						
1.	Dairy	14	-	-	193050	-	-	94875	-	-	287925	-	-	287925	-	-	-	-	287925	
2.	Poultry	2	4	-	35000	58000	-	15000	35500	-	50000	93500	-	143500	-	-	-	-	143500	
3.	Fishery	16	-	-	225000	-	-	139500	-	-	364500	-	-	364500	-	-	-	-	364500	
4.	Diesel Pumpset	1	1	-	12530	9500	-	5370	9500	-	17900	19000	-	36900	-	-	-	-	36900	
5.	HPP	3	2	-	25200	12000	-	10800	12000	-	36000	24000	-	60000	-	-	-	-	60000	
6.	Grocery	4	1	-	36600	6000	-	14400	6000	-	51000	12000	-	63000	-	-	-	-	63000	
7.	Stationery	5	-	-	56100	-	-	21900	-	-	78000	-	-	78000	-	-	-	-	78000	
8.	Cosmetic vending	1	-	-	17500	-	-	7500	-	-	25000	-	-	25000	-	-	-	-	25000	
9.	Variety store	2	-	-	45000	-	-	15000	-	-	60000	-	-	60000	-	-	-	-	60000	
10.	Sweet stall	1	-	-	22500	-	-	7500	-	-	30000	-	-	30000	-	-	-	-	30000	
11.	Chuda Mudhi	2	4	-	16800	24000	-	7200	24000	-	24000	48000	-	72000	-	-	-	-	72000	
12.	Betel shop	2	-	-	16800	-	-	7200	-	-	24000	-	-	24000	-	-	-	-	24000	
13.	Electric Repair	1	-	-	8400	-	-	3600	-	-	12000	-	-	12000	-	-	-	-	12000	
14.	Rickshaw	6	1	-	35700	4250	-	15300	4250	-	51000	8500	-	59500	-	-	-	-	59500	
15.	Agarbati making	10	-	-	46500	-	-	46500	-	-	93000	-	-	93000	-	-	-	-	93000	
16.	Power tiller	10	-	-	150000	-	-	100000	-	-	250000	-	-	250000	-	-	-	-	250000	

(Contd...)

Table 5 (Contd...)

S. No.	Name of Scheme	Beneficiaries' Households			Loan Components (in ₹)			Subsidy (in ₹)			Total Financial Assistance (in ₹)			Total Funds (in ₹)
		OC	SC	ST	OC	SC	ST	OC	SC	ST	OC	SC	ST	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
17.	Tractor	12	-	-	330000	-	-	120000	-	-	450000	-	-	450000
18.	Wooden Furniture	9	2	-	49095	10910	-	49095	10910	-	981902	21820	-	120010
	Grand Total	101 (87)	15 (13)	-	1321775	124660	-	673540 (86.83)	102160 (1317)	-	2002515 (90)	226820 (10)	-	2229335

Figures in the brackets in column 12, 13&14 indicate percentage to the total in column 15.

Source : Block office.

Loan and Subsidy

Tables 4 and 5 give us three important aspects of the development strategy pursued in rural areas to create opportunities for the poor to participate in the growth process. These aspects are (i) different poverty reduction programmes as adopted by the beneficiary households, (ii) financial support provided to such households and (iii) the offer in terms of subsidies to the households. All these efforts and investments made by the government aim at generating higher income needed to reduce the number of households living below the poverty line. It may be seen from Table 4 (i.e. Kalahandi) that the OC households comprising the poor Mali, Goud, Weavers, Kumbhar and Oilman etc., availed of approximately 62 per cent of the funds including the subsidies followed by SC households and then by ST households who had access to 16 and 22 per cent of the total funds, respectively. In terms of composition of the beneficiary households, OCs constitute 62 per cent as against the SCs and STs who together constitute 38 per cent of the beneficiaries.

But in Table 5 (i.e. Kendrapara district) it can be seen that the OC households comprising the poorer section of Brahmins, Khandayats, Rajputs, Carpenters and Muslims etc., availed of approximately 90 per cent of the funds including the subsidies followed by SC households who had access to 10 per cent of the total funds. But nil percentage of the funds were availed of by ST households due to non-availability of ST beneficiaries. In terms of composition of the beneficiary

households, OCs constitute 87 per cent as against the SCs who constitute 13 per cent of the beneficiaries.

As against the total funds available to the beneficiaries, the average amount of the financial support inclusive of subsidies per beneficiary comes to ₹ 27,784.46 in Kalahandi district. But in Kendrapara district, the average amount of the financial support inclusive of subsidies per beneficiary comes to ₹ 19,218.41.

Beneficiaries belonging to the OC households in Kalahandi district get larger financial assistance of ₹ 28,082.67 per household as compared to the OC households in Kendrapara district who get ₹ 19,826.88 per household. Also SC households get larger financial assistance of ₹ 28,624.71 per household in Kalahandi district as compared to the SC households who get ₹ 15121.33 per household which is very less in Kendrapara district and beneficiaries belonging to the ST households get financial assistance of ₹ 26,443.65 in Kalahandi district only.

As regards the provision of subsidies for the beneficiaries, it may be noted that out of ₹ 11,13,637.00 amount of subsidies, 64.97 per cent of the subsidy went to the OC households, 14.46 per cent to the SC households and 20.57 per cent to the ST households in Kalahandi district. The subsidy element, on an average, stands approximately at 36 per cent of the total funds available for implementing poverty reduction schemes. The average amount of subsidy provided per beneficiary stands approximately at ₹ 9943.00 as against ₹ 10,486.00 per OC household, ₹ 9471.00

per SC beneficiary household and ₹ 8811.00 per ST beneficiary household. It may thus be noted that per beneficiary financial assistance is the highest in case of OC households.

Further, in Kendrapara district, out of ₹ 7,75,700.00 amount of subsidies 86.83 per cent of the subsidy went to the OC households and 13.17 per cent to the SC households. The subsidy element, on an average stands approximately at 35 per cent of the total funds available for implementing poverty reduction schemes. The average amount of subsidy provided per beneficiary stands approximately at ₹ 6687.00 as against ₹ 6669.00 per OC

household and ₹ 6811.00 per SC beneficiary household. It may be noted that per beneficiary financial assistance is the highest in case of SC households.

Impact on Income Generation

Before assistance of SGSY out of 112 BPL families of Kalahandi district, 43 (38.39 per cent) families had a level of income 0 to ₹ 149 per month per individual of the family. In case of 51 (45.54 per cent) families, the level of income was ₹ 150 to ₹ 199 per month per individual. But in case of 18 (16.07 per cent) families, the level of income was ₹ 200 to below ₹ 250 as shown in Table 6.

Table 6 : Distribution of Respondent Beneficiaries According to Economic Position Before Assistance of SGSY in Kalahandi District

Name of G.P.	0-149	150-199	200-Below 250	Total
Medinpur	13	11	4	28
Thuapadar	10	9	1	20
Gandabarajhola	6	6	—	12
Kutrukhamar	3	5	1	9
Malagaon	4	8	3	15
Risigaon	5	7	6	18
Duarsani	2	5	3	10
Total	43(38.39)	51(45.54)	18(10.07)	112

Similarly, out of 116 BPL families of Kendrapara district, 59(50.86 per cent) families had a level of income 0 to 149 per month per individual of the family. In case of 40 (34.48 per cent) families, the level of

income was ₹ 150 to ₹ 199 per month per individual. But in case of 17 (14.66 per cent) families, the level of income ₹ 200 to below ₹ 250 as shown in Table 7.

Table 7 : Distribution of Respondent Beneficiaries According to Economic Position Before Assistance of SGSY in Kendrapara District

Name of G.P.	0-149	150-199	200-Below 250	Total
Kapaleswar	7	8	3	18
Ostapur	8	3	1	12
Kansar	29	11	2	42
Gulnager	4	4	2	10
Syamsunderpur	7	3	1	11
Indupur	1	6	5	12
Dhumanta	3	5	3	11
Total	59(50.86)	40(34.48)	17(14.66)	116

Out of 112 assisted families of Kalahandi district under SGSY during 1999-2000 to 2004-2005, 53 (47.32 per cent) households were found to be above the poverty line, the level of income was ₹ 250 per month per individual of the family. In case of 33 (29.47 per cent) families, the level of income was ₹ 200 to ₹ 249 per month per individual. These families form 29.47 per cent

of total investigated beneficiaries and are on the verge of crossing the poverty line in the near future if a second dose of assistance were to be given to them. The chances of crossing the poverty line can be stated as reasonably good only in case of the 23.21 per cent families (income range ≤ ₹ 199) who are struggling to cross the poverty line at the moment as shown in Table 8.

Table 8 : Distribution of Respondent Beneficiaries According to Economic Position After Assistance of SGSY in Kalahandi District

Name of G.P.	0-149	150-199	200-249	250 & above	Total
Medinpur	2 (7.14)	10 (35.71)	7(25.0)	9(32.15)	28
Thuapadar	-	-	7(35.0)	13(65.0)	20
Gandabarajhola	1(8.33)	3(25.0)	3(25.0)	5(41.67)	12
Kutrukhamar	-	-	4(44.44)	5(55.56)	9
Malagaon	-	5(33.33)	3(20.0)	7(46.67)	15
Risigaon	1(5.56)	1(5.56)	4(22.22)	12(66.66)	18
Duarsani	-	3(30.0)	5(50.0)	2(20.0)	10
Total	4(3.57)	22(19.64)	33(29.47)	53(47.32)	112

In Kendrapara district, out of total 116 assisted families under SGSY during 1999-2000 to 2004-2005, 47(40.52 per cent) households were found to be above the poverty line, define to imply the level of income of ₹ 250 per month per individual of the family. In case of 40 (34.48 per cent) families, the level of income was ₹ 200 to ₹ 249 per month per individual. These families form 34 per cent of total investigated

beneficiaries who are on the verge of crossing the poverty line in the near future if a second dose of assistance were to be given to them. The chances of crossing the poverty line can be stated as reasonably good only in case of the 25 per cent families (income range \leq ₹ 199) who are struggling to cross the poverty line of the moment as shown in Table 9.

Table 9 : Distribution of Respondent Beneficiaries According to Economic Position After Assistance of SGSY in Kendrapara District

Name of G.P	0-149	150-199	200-249	250 & above	Total
Kapaleswar	-	6(33.33)	7(38.89)	5(27.78)	18
Ostapur	2(16.67)	2(16.67)	6(50.0)	2(16.67)	12
Kansar	4(9.52)	9(21.43)	16(38.1)	13(30.95)	42
Gulnagar	-	2(20.0)	2(20.0)	6(60.0)	10
Syamsundarpur	-	1(9.09)	2(18.18)	8(72.73)	11
Indupur	-	-	1(8.33)	11(91.67)	12
Dhumanta	-	3(27.27)	6(54.55)	2(18.18)	11
Total	6(5.17)	23(19.83)	40(34.48)	47(40.52)	116

In order to assess income generation through the scheme provided to the beneficiaries, the position of the sample beneficiaries in different income levels (income range) before assistance of SGSY scheme (base year) and after assistance of SGSY scheme (after disbursement) is analysed in Table 10. There is a significant change in economic level of people. The three G.Ps (i.e. Medinpur, Thuapadar and Kutrukhamar) in Kalahandi district have shown downward trend before assistance of SGSY scheme in income generation. But other three G.Ps (i.e. Malgaon, Risigaon and

Duarsani) in this district have shown upward trend because of better communication and other facilities and Gandabarajhola G.P. neither upward nor downward trend before assistance of the scheme. However, in the combined G.P., the trend was downward before assistance of the scheme. Again, six G.Ps (i.e. Medinpur, Thuapadar, Gandabarajhola, Kutrukhamar, Malgaon and Risigaon) have shown upward trend and Duarsani G.P have shown downward trend after assistance of SGSY scheme in Kalahandi district. However, in combined G.P the trend is upward.

Table 10 : Comparison of Economic Position Before and After the Assistance of SGSY in Kalahandi District

Income Group	0-149	150-199	200-249	250 & above	Total
Economic position before the assistance of SGSY	43 (38.39)	51 (45.54)	18 (16.07)		112
Economic position after the assistance of SGSY	4 (3.57)	22 (19.64)	33 (29.47)	53 (47.32)	112

In order to assess income generation through the scheme provided to the beneficiaries, the position of the sample beneficiaries in different income levels (income range) before assistance of SGSY scheme (base year) and assistance after of SGSY scheme (after disbursement) is analysed in Table 11. There is a significant change in economic level of people. The five Gram Panchayats (i.e. Kapaleswar, Ostapur, Kansar, Gulnagar and Syamasundarpur) in Kendrapara district have shown downward trend before assistance of SGSY scheme in income generation because of lack of communication and other facilities. But other

two G.Ps (i.e. Indupur and Dhumanta) have shown upward trend before assistance of SGSY scheme. However, in the combined G.P the trend was downward before assistance of the scheme. Again, five G.Ps (i.e. Ostapur, Kansar, Gulnagar, Syamsunderpur and Indupur) have shown upward trend and two G.Ps (i.e. Kapaleswar and Dhumanta) have shown downward trend after assistance of SGSY scheme in Kendrapara district, there is no initiative from different agencies. However, in the combined G.P the trend is upward. This shows that there is overall economic growth of beneficiaries due to financial assistance.

Table 11 : Comparison of Economic Position Before and After the Assistance of SGSY in Kendrapara District

Income Group	0-149	150-199	200-249	250 & above	Total
Economic position before the assistance of SGSY	59 (50.86)	40 (34.48)	17 (14.66)		116
Economic position after the assistance of SGSY	6 (5.17)	23 (19.83)	40 (34.48)	47 (40.52)	116

Regression Analysis

- (1) Suppose Forecasting Model of per capita expenditure on food, clothing, education, health and other items before financing of SGSY Scheme

in Kalahandi district is $Y_1 = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5$ and its estimated value using the sample values is $Y_1 = a + b_1 x_1 + b_2 x_2 + b_3 x_3 + b_4 x_4 + b_5 x_5$

Table 12 : Computation of Regression Co-efficients

Variable	B	SEB	t
F	1.084617	.059104	18.351
C	.303512	.344328	.881
E	.752611	.294326	2.557
H	1.2594206	.355684	3.541
O	.831740	.288932	2.879
Constant	-1.047349	7.509106	-.139

Let the linear equation is $Y_1 = a + b_1 x_1 + b_2 x_2 + b_3 x_3 + b_4 x_4 + b_5 x_5$,

Where a = constant = -1.05

$X_1 = F = \text{Food}$ $b_1 = 1.08$

$X_2 = C = \text{Clothing}$ $b_2 = 0.30$

$X_3 = E = \text{Education}$ $b_3 = 0.75$

$X_4 = H = \text{Health}$ $b_4 = 1.26$

$X_5 = O = \text{Other items}$ $b_5 = 0.83$

Then $Y_1 = -1.05 + 1.08x_1 + 0.30x_2 + 0.75x_3 + 1.26x_4 + 0.83x_5$ (1)

The corresponding t value is given in Table 12.

The multiple correlation coefficients for the given data are as follows:

R	R ²	St. Error of the Estimate	F-Value
.912	.831	17.6355	86.05

$H_0 : R^2 = 0$ is rejected, i.e. R is significant.

The ANOVA for the analysis of the regression line (1) has been computed as follows:

Source	D.f.	Sum of Squares	Mean Square	F	Sig.
Regression	5	162508.416	32501.683	104.503	.000
Residual/Error	106	32967.213	311.011		
Total	111	195475.629			

F- value is significant and hence H_0 : the regression co-efficient are zero is rejected. Therefore, the line (1) is best fit for the given data.

- (2) Similarly, suppose Forecasting Model of per capita expenditure on food, clothing, education, health and other items after financing of SGSY scheme in Kalahandi district is

$Y_2 = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5$ and its estimated value using the sample values is $Y_2 = a + b_1 X_1 + b_2 X_2 + b_3 X_3 + b_4 X_4 + b_5 X_5$.

Table 13 : Computation of Regression Co-efficients

Variable	B	SEB	t
F	.580008	.093576	6.198
C	.885858	.544453	1.627
E	.392426	.265602	1.477
H	.846632	.435525	1.944
O	1.255403	.092918	13.511
Constant	54.347440	14.204200	3.826

Let the linear equation is

$$Y_2 = a + b_1 X_1 + b_2 X_2 + b_3 X_3 + b_4 X_4 + b_5 X_5$$

Where $a = \text{constant} = 54.35$

$$X_1 = F = \text{Food} \quad b_1 = 0.58$$

$$X_2 = C = \text{Clothing} \quad b_2 = 0.89$$

$$X_3 = E = \text{Education} \quad b_3 = 0.39$$

$$X_4 = H = \text{Health} \quad b_4 = 0.85$$

$$X_5 = O = \text{Other items} \quad b_5 = 1.26$$

$$\text{Then } Y_2 = 54.35 + 0.58X_1 + 0.89X_2 + 0.39X_3 + 0.85X_4 + 1.26X_5 \quad (2)$$

The corresponding 't' value is also given in Table 13.

The multiple correlation coefficient for the given data is as follows.

R	R ²	Standard Error of the Estimate	F value
.879	.771	31.3906	58.919

$H_0 : R^2 = 0$ is rejected i.e. R is significant.

The ANOVA for the analysis of the regression line (2) has been computed as follows:

Source	D.f.	Sum of Squares	Mean Square	F	Sig.
Regression	5	351969.176	7097.835	71.443	.000
Residual/Error	106	104449.119	985.369		
Total	111	456438.295			

F – value is significant and hence H_0 : the regression coefficients are zero is rejected. Therefore, the line (2) is best fit for the given data.

- (3) Suppose Forecasting Model of per capita expenditure on food, clothing, education, health and other items before financing of SGSY scheme in Kendrapara district is

$$Y_3 = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 \text{ and its estimated value using the sample values is } Y_3 = a + b_1 X_1 + b_2 X_2 + b_3 X_3 + b_4 X_4 + b_5 X_5 .$$

Table 14 : Computation of Regression Co-efficients

Variable	B	SEB	t
F	0.836808	.051948	16.109
C	1.249476	.371946	3.359
E	0.826022	.158215	5.221
H	0.871124	.288762	3.017
O	1.362173	.190665	7.144
Constant	5.914044	5.866342	1.008

Let the linear equation is

$$Y_3 = a + b_1 X_1 + b_2 X_2 + b_3 X_3 + b_4 X_4 + b_5 X_5$$

Where $a'' = \text{constant} = 5.91$

$$X_1 = F = \text{Food} \quad b_1'' = 0.84$$

$$X_2 = C = \text{Clothing} \quad b_2'' = 1.25$$

$$X_3 = E = \text{Education} \quad b_3'' = 0.83$$

$$X_4 = H = \text{Health} \quad b_4'' = 0.87$$

$$X_5 = O = \text{Other items} \quad b_5'' = 1.36$$

$$\text{Then } Y_3 = 5.91 + 0.84X_1 + 1.25X_2 + 0.83X_3 + 0.87X_4 + 1.36X_5 \quad (3)$$

The corresponding 't' value is also given in Table 14.

The multiple correlation coefficient for the given data is as follows :

R	R ²	Standard Error of the Estimate	F value
.943	.890	13.3713	146.98

$H_0 : R^2 = 0$ is rejected i.e. R is significant.

The ANOVA for the analysis of the regression line (3) has been computed as follows:

Source	D.f.	Sum of squares	Mean Square	F	Sig.
Regression	5	159135.779	31827.156	178.012	.000
Residual/Error	110	19667.180	178.793		
Total	111	178802.960			

F – value is significant and hence H_0 : the regression coefficients are zero is rejected. Therefore, the line (3) is best fit for the given data.

- (4) Similarly, suppose Forecasting Model of per capita expenditure on food, clothing, education, health and other items before financing of SGSY scheme in Kendrapara district is

$$Y_4 = \alpha' + \beta_1'' X_1 + \beta_2'' X_2 + \beta_3'' X_3 + \beta_4'' X_4 + \beta_5'' X_5 \text{ and its estimated value using the sample values is } Y_4 = a'' + b_1'' X_1 + b_2'' X_2 + b_3'' X_3 + b_4'' X_4 + b_5'' X_5 .$$

Table 15 : Computation of Regression Co-efficients

Variable	B	SEB	t
F	.808770	.120512	6.711
C	2.015335	.874288	2.305
E	.838611	.355334	2.360
H	1.123463	.640937	1.753
O	.992914	.088137	11.266
Constant	8.970380	19.653974	.456

Let the linear equation is

$$Y_4 = a + b_1 X_1 + b_2 X_2 + b_3 X_3 + b_4 X_4 + b_5 X_5 .$$

Where $a = \text{constant} = 8.97$

$X_1 = F = \text{Food}$	$b_1 = 0.81$
$X_2 = C = \text{Clothing}$	$b_2 = 2.02$
$X_3 = E = \text{Education}$	$b_3 = 0.84$
$X_4 = H = \text{Health}$	$b_4 = 1.12$
$X_5 = O = \text{Other items}$	$b_5 = 0.99$

$$\text{Then } Y_4 = 8.97 + 0.81X_1 + 2.02X_2 + 0.84X_3 + 1.12X_4 + 0.99X_5 \quad (4)$$

The corresponding 't' value is also given in Table 15.

The multiple correlation coefficient for the given data is as follows:

R	R ²	Standard Error of the Estimate	F value
.879	.772	43.0151	61.51

$H_0 : R^2 = 0$ is rejected i.e. R is significant.

The ANOVA for the analysis of the regression value (4) has been computed as follows:

Source	D.f.	Sum of Squares	Mean Square	F	Sig.
Regression	5	691098.123	138219.625	74.701	.000
Residual/Error	110	203533.013	1850.300		
Total	115	894631.136			

F – value is significant and hence H_0 : The regression coefficients are zero is rejected. Therefore, the line (4) is best fit for the given data.

Chi-Square Test

Chi-square test is done for testing the significance of the discrepancy between theory and experiment. It enables us to find if the deviation of the experiment from theory is just by chance or it is really due to the inadequacy of the theory to fit the observed data.

If O_i ($i = 1, 2, \dots, n$) is a set of observed or experimental frequencies and E_i ($i = 1, 2, \dots, n$) is the corresponding set of expected or theoretical frequencies, then Karl Pearson's Chi-square is given by

$$\chi^2 = \sum \frac{(O_i - E_i)^2}{E_i}$$

follows the Chi-square distribution with $n-1$ degrees of freedom.

Table 16 : Disbursal of Loan Among the Beneficiaries in Kalahandi District

Category of Beneficiary	Full Amount of the loan	50% - 70% of the loan	30% - 50% of the loan	Total
OC	36	30	2	68
SC	13	2	1	16
ST	21	5	2	28
Total	70	37	5	112

Let us take the null hypothesis that the disbursal of loan among the different categories of beneficiaries are equal, i.e. there is no difference between the other castes, scheduled castes and scheduled tribes beneficiaries in Table 16.

Applying χ^2 - test of significance it was found that calculated value of

$$\chi^2 = \sum \frac{(O_i - E_i)^2}{E_i} = 10.05$$

for 4 degrees of freedom at 5 per cent level of significance is

9.488. Since the calculated value of χ^2 i.e.

10.05 is greater than tabulated value of χ^2 i.e. 9.49 at 5 per cent level of significance, the hypothesis does not hold good (i.e. rejected). This means that the disbursal of loan amount among the three categories of beneficiaries i.e. other castes, scheduled castes and scheduled tribes differ significantly. In Kalahandi district, other caste beneficiaries have more utilised financial assistance than that of the scheduled caste and scheduled tribe beneficiaries.

Table 17 : Disbursal of Loan Among the Beneficiaries in Kendrapara District

Category of Beneficiary	Full Amount of the loan	50% - 70% of the loan	30% - 50% of the loan	Total
OC	66	14	21	101
SC	12	-	3	15
Total	78	14	24	116

Let us take the hypothesis that the disbursal of loan among the different categories of beneficiaries are equal, i.e. there is no difference between the other castes and scheduled castes in Table 17.

Applying χ^2 - test of significance it was found that calculated value of

$$\chi^2 = \sum \frac{(O_i - E_i)^2}{E_i} = 2.16. \text{ Tabulated value}$$

of χ^2 for 2 degrees of freedom at 5 per cent level of significance is 5.99. Since the calculated value of χ^2 i.e. 2.16 is less than the tabulated value of χ^2 i.e. 5.99 at 5 per cent level of significance, the hypothesis is accepted. This means that the disbursal of loan amount among the two categories of beneficiaries i.e. other castes and scheduled castes are insignificant. Then the category of other castes beneficiaries are identical with the scheduled castes beneficiary in Kendrapara district. In this district, majority of other caste people have not utilised financial assistance whereas majority people belonging to scheduled castes group have utilised financial assistance.

Conclusion

The major observations and findings of the study are as follows :

- I. As we have already examined the issue, it may be mentioned that there is wrong identification of beneficiaries by the implementing agencies. In certain cases, ineligible households taking the help of the politicians or offering bribes to the concerned authorities at the block level have availed of the benefits of anti-poverty programmes.
- II. Complaints were made that schemes provided to the sampled beneficiaries, in many cases, do not match their entrepreneurial talents. Beneficiaries were not consulted about the allotment of programmes. Schemes are sometimes, thrust upon them against their willingness. Sometimes, the beneficiaries are persuaded to adopt a scheme which they later on find to be non-remunerative. These complaints were genuine as many of the programmes were non-acceptable to the beneficiaries and were ultimately abandoned, sometimes schemes are also unsuitable to the

- socio-economic geophysical context of the villages and of the beneficiary households. Some beneficiaries in the block who prefer to adopt dairy were given goatery are such example in our study.
- III. Rural Development programmes lack proper implementation. The concerned officials, who have been assigned the responsibility to implement the programmes at the block level, are indifferent and callous, while allotting programme to the beneficiaries. Inadequate supervision of schemes by the officials on the one hand and wrong allotment of schemes to the beneficiaries on the other lead to the ultimate abandonment of programmes by the concerned households.
 - IV. Majority of the households expressed their dissatisfaction regarding the activities of the bank and block officials. The beneficiaries have to go to the block and banks as many as 7/8 times and more before final loans. They have to forego their days wages.
 - V. Rural poverty in Odisha is linked to landlessness, low productivity, illiteracy and lack of functional diversification. Added to this, there is inequality in the distribution and ownership of landholdings. The study reveals that as many as 55.35 per cent of the households are landless agricultural labour, rural artisan and other households. The marginal farmers and small farmers constitute 44.65 per cent of the total beneficiary households in Bhawanipatna block of Kalahandi district. Again, this study reveals that 64.66 per cent of the households are landless agricultural labour, rural artisan and other households. The marginal farmers and small farmers constitute 35.34 per cent of the total beneficiary households in Kendrapara block of Kendrapara district. It may in this connection be mentioned that, while beneficiaries who belong to other castes have some land to their credit, a large majority of ST and SC households have very insignificant landholdings or have no land at all. It is therefore, not surprising that poverty in rural areas is concentrated among the ST and SC households in both the districts.
 - VI. Majority of the households, that is 42 per cent of them, would like to receive the sanctioned amount of the loan in cash only and make their own decision regarding the source of acquiring the assets such as cow, bullock, buffalo, goatery, sheep, pumpsets and poultry. They expressed doubts about the quality of goods supplied to them against the sanctioned loan.
 - VII. Among the different programmes adopted, schemes like agarbati making, tractor, wooden furniture, pumpset, pottery, grocery shop, rickshaw, dairy, goatery, fishery have been more enduring than others. These programmes could be sustained. These activities have formed a part of rural life. Development of agriculture raises the demand for pumpset for irrigation.

Given the constraints and peculiarities of the village economy, schemes like power tiller, poultry, stationery shop, sheepery, mushroom cultivation etc., could not perhaps be sustained. While giving the various anti-poverty programmes to the beneficiary households, their inclination and capacity to handle the schemes should be taken into consideration, geo-physical conditions prevailing in the villages may also be considered to judge the suitability of the programmes.

- VIII. It may be mentioned that it is the poverty and deprivation of the beneficiary households which compel them to divert the allotted money to consumption and to other use. Most of the beneficiaries take the subsidy as a simple grant from the government without realising that it is a part of total loan component in the scheme. Most of the beneficiaries have an impression that the loan repayment will be waived in future.
- IX. The study also reveals that the amount of loan and subsidy sanctioned and disbursed to the beneficiaries is much less than the required amount to finance the programme given to them. In many cases, the sanctioned amount is not paid fully. In certain cases, the subsidy amount is deducted from the sanctioned loans at the time of loan disbursement. This is done with a view to avoiding the possibility of non-repayment of loan by the beneficiaries.
- X. Notwithstanding the failure of poverty alleviation schemes, there is a visible improvement in the poverty

and deprivation have also helped the very poor households, specially the agricultural labour and rural artisans households. They are less poor now, because of the increased availability of Mahatma Gandhi National Employment Guarantee Scheme (MGNREGS) and Watershed Development programme related wage employment and increased income from other sources like sale of vegetable, goats and chuda mudhi etc.

Poverty analysis in the study is limited to 228 households. Though the micro level data do not fully capture the complexity of poverty, this may give us clues to fight mass poverty. Successful socio-economic empowerment of the poor will bring development closer to the hearts and minds of the people.

In conclusion, the study reveals that 43.86 per cent of the beneficiary households have been benefited from the poverty alleviation programmes as they have increased their income level and their monthly income to more than ₹ 250 per member per family. Around 51.75 per cent of the beneficiary households however marginally benefited from the programmes. Their progress is slow. Their income level ranges from ₹ 150 to ₹ 249 per member per family, 4.39 per cent of the beneficiary households did not at all benefit from the poverty alleviation programmes.

So the study specified that the programme has a positive impact on the beneficiaries. The programmes is not successful with regard to generation of employment as some activities created regular employment and some others created seasonal employment for the

beneficiaries. It is observed that standard of consumption of food, clothing, education, health and entertainment etc., improved. During the course of survey it was found that the beneficiary households improved with regard to food, clothing, education, health and entertainment, respectively in Kalahandi district. Similarly, in Kendrapara district it was found that the beneficiary households improved with regard to food, clothing, education, health and entertainment, respectively. It reveals that SGSY has made an impact in developing the social awareness and living condition of the beneficiaries.

Recommendations

The following recommendations are made on the basis of the findings of the study to improve the performance of the programme:

1. The investigation shows that there is high percentage of change in food, clothing and health. But the improvement of educational standard is not significant which may be one of the causes of low improvement of BPL to APL (i.e only 43.86 per cent). Due to lack of proper education, they are not aware of any government and non-government programmes which are meant for their improvement in economic standard. Moreover, the beneficiaries mostly depend upon agriculture and forest products, very few of them have additional business. The landless beneficiaries mostly depend on agricultural wages. Paddy is the main product in this area but non-irrigation and under-irrigation is the main handicap for the agricultural production.

- a. Landless people do not have the ownership of the land as per law which they are cultivating as per prevailing law.
- b. They do not have technical knowledge to get high yield from the land.
- c. Lack of irrigation facility in cultivable land.
- d. Traditional method of cultivation.
- e. High degree of poverty of the beneficiaries.
- f. High degree of illiteracy, poor communication facility, under-development of transport sector etc.

Proper education and distribution of cultivable Government land on long term lease basis shall help the beneficiaries to come up above the BPL level.

2. For the selection of members of the group, proper method as per Government guidelines should be followed so that, the right person can get the benefit of the programme and there will exist better unity and cooperation among the members.
3. The respondent beneficiaries should actively involve in the Pallisabha / Gram Sabha and take part in the decision making process which would indirectly create quality of leadership and sense of unity and inspire to form the Village Organisation. This practice may also help to take right decision as

-
- and when required to weed out the bottleneck of the group.
4. In order to avoid wrong selection and timely sanction and disbursement, the functionaries of financing institutions should be involved in the identification/ selection process.
 5. Activities under the scheme should be selected keeping in view the local needs and maximum utilisation of local resources subjects to the inclination, managerial capabilities and skill of the household.
 6. As per needs and choice of beneficiaries, adequate training should be provided to all the members of the groups for skill upgradation.
 7. After the sanction of the bank officials/block officials should be made to look after day-to-day operation of the business of the group.
 8. Strong marketing support makes SHG's income generating activities viable and sustainable. The groups may also take advantage of various Government Line Departments for marketing of the products of SHGs. Again, suitable marketing linkages may be established with Private Sector Organisation/ Companies, wholesalers and retailers etc.
 9. The people should be motivated to organise themselves on cooperative lines of various economic activities, i.e. provision of inputs processing and marketing facilities.
 10. In order to involve a responsive receiving system, the beneficiaries should be made aware of their own problems and given strength to organise themselves and finally enable them to participate in development process.
 11. Monitoring and concurrent evaluation on regular basis needs to be conducted by the grassroot level Government official/ facilitators of the sponsoring organisation. This would help in removing any discrepancy in implementation of the scheme, like misuse of assets, delay in sanctioning and disbursement of loan, non-release of subsidy in time, non-cooperation among the members and after all, repayment of loan.

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