

Village Income Dynamics in Odisha- An Insight from VDSA Villages

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Abstract

Odisha has been one of the poorest states in India. The data analysis under the village dynamics studies project reflect different income scenarios in the study districts which are endowed differently with respect to the resources as well as agro ecological scenario. The analysis of income for all category of farmers in the study villages reflect that the relatively interior villages in Bolangir districts experience higher percapita income as against the relatively less interior villages in Dhenkanal district. When the per capita income of the study villages are compared, it was observed that Bilaikani village under Bolangir district recorded highest per capita income of more than INR. 12000 followed by Sogar village under Dhenkanal district recorded per capita income of INR 11800 during the year 2010-11 as against INR 10316 for Chandrasekharpur and the lowest income of INR 6884 in Ainlatunga in Balangir district which still suffers from poverty inspite of watershed development in the village. The variation in the percapita income level is observed due to the diversification in the agriculture in the study villages. Bilaikani Village which has vegetable production during Rabi as watershed development has ensured water availability for a second crop. The typically tribal dominated villages are yet to capitalize on fruits of development schemes. The income differential between two villages in Bolangir district was found to be more than 100 percent. The income differential between two villages of less interior district of Dhenkanal was found to be only about 10 percent which reflects that the two villages are comparably in equal footing with respect to utilization of income potentials. It was also observed that the sources of

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income and income from agriculture differ substantially in the villages which result in differential income for the sampled farmers.

Key Words: India, Odisha, Agriculture, Crop, farm, non farm income,

Introduction

Odisha has been one of the poorest states in India. Orissa is a hot spot of migratory labour during nineties and early 2001-2005. The state is endowed with plentiful of natural resources which could be ploughed back for higher agro economic growth. The direct and indirect work forces constituting around 64 % of total state workforce are engaged in agriculture in Orissa. The differential resource endowment and their utilization for agricultural development in the state are reflected in differential development level in the districts. There is differential trend in the productivity and production of food and non-food grains in coastal and non-coastal districts of the state. The infrastructural developments for agriculture as well as resource endowments also differ considerably among the coastal and inland districts. The differential resources utilization pattern and economic development level could be traced to differential resource endowments in coastal and inland districts. The coastline, which stretches over 408 km, has also enough potential for marine fisheries development. The contribution of coastal districts to total food grain availability is more than 45% as against the total population of around 31% with total geographical area of 21% of the state. The irrigation availability in coastal districts is more than 50% of the net sown area. Accordingly, cropping intensity and cropping pattern also differ in coast and non-coastal area. However, the income of the state from different resources does not commensurate with the resource potentials available in the state. The data analysis on income parameters under the village

dynamics studies project reflect different scenarios in the study districts which are endowed differently with respect to the resources as well as agro ecological scenario.

Results of Income Analysis

The results of Income analysis in the state show differential patterns of income level in comparison to national average (Table 1). The per capita income level in the TE 93-94 was INR. 12178 which grew to INR 24431 during the triennium 2009-10 which is about 100% growth in the 17 years of development effort. The comparison of annual compound growth rate of Odisha vis- a- vis India, it is inferred that Odisha income grew at a rate of 2.3 % during the 1993-94 to 2004-05 period against a growth rate of 3.92% for India which was higher than Odisha growth rate. But a remarkable change has been observed for Odisha after 2004-05 when Odisha shifted to a higher growth trajectory of about 7% as against 6.71 for the Country as a whole which is observed from the Table 1. However, the average long term growth rate is observed to be almost equal during the period 1993-94 to 2009-10 for the country and the state. The higher income growth rate during the period 2005-06 to 2009-10 for Odisha is commensurate with higher national growth rate during the same period which grew at a rate of more than 7%. The long term average growth rate of Income for Odisha and India was observed to be about 4.5 % and 4.8 % respectively indicating the growth rate of income for Odisha was lagging marginally against the Country income growth rate.

Income analysis for the study villages

The analysis of income for all category of farmers in the study villages (Table 2 and 3) reflect that the relatively interior villages in Bolangir districts experience higher percapita income in the year 2010-11 against the relatively less interior villages in Dhenkanal district. When the per capita income of the study villages are compared, it was observed that Bilaikani village under Bolangir district recorded highest per capita income of more than INR. 12000 followed by Sogar village under Dhenkanal district recorded per capita income of INR 11800 during the year 2010-11 as against INR 10316 for Chandrasekharapur and the lowest income of INR 6884 in Ainlatunga in Balangir district which still suffers from poverty inspite of watershed development in the village. The variation in the percapita income level is observed due to the diversification in the agriculture in the Bilaikani Village which has vegetable production during Rabi as watershed development has ensured water availability for a second crop. The vegetables like ridge gourd, bitter gourd fetch good income for the farmers in Bilaikani. Ainlatung village is typically tribal dominated village and is yet to capitalize on fruits of watershed development inspite of availability of water resources and a beginning has been made in crop diversification for vegetable crops in the area. The income differential between two villages in Bolangir district is more than 100%. The income differential between two villages of less interior district of Dhenkanal is about 10% which reflects that the two villages are comparably in equal footing with respect to utilization of income potentials. The two villages in Bolangir district are tribal dominated. However, the sources of income and income from agriculture differ substantially in the villages which result in differential income for the sampled farmers.

Size class-wise income analysis in the study villages

The size class-wise analysis of income (Table 2 and 3) for different sampled villages in the study districts reflects stark differences in the income accruals for different groups. Within the labour classes, Bilaikani records highest percapita income of INR 10955 during the year 2009-10 in comparison to other villages. It is inferred that the higher on farm income for different sampled farmers in the Bilaikani village also ensured higher agricultural labour income. The labour income for other three villages reflect that the two villages in Dhenkanal district have little difference of less than 5% only where as the difference in the labour income for villages in Bolangir district was observed to be more than 124% . for the size class of small farmers category, Sogar village has the highest per capita income of INR 13789 in comparison to other villages. Within the small farmer category, Bilaikani village follows Sogar village interms percapita income. In this category Chandrasekharpur village in Dhenkanal district has the lowest percapita income of INR 7714. Coming to the category of medium farmers, Chandrasekharpur village recorded highest per capita income of INR 12535 in comparison to other villages and the lowest was observed for the village Ainlatunga which was calculated to be INR 5282 which less than 55% of the village recording highest income for the medium category. Within Dhenkanal district, the income differential between Sogar and Chandrasekharpur was observed to be more than 25% in the medium farmer category indicating the diversified income level for the farmers in Chandrasekharpur village. For large farmers category, the per capita income in Bilaikani Village was recorded to be INR 17835 followed by Sogar village was recorded to be INR 15853 followed by Chandrasekharpur which was INR 11681 and Ainlatunga had per capita income of INR 10692 for large farmer category.

Within the large category of farmers the income differential was more than 70% for the highest and lowest per capita income during the year 2010-11 in the sample villages.

Composition of Income in Villages

Coming to the composition of income in the villages (Table 4), it was inferred that the salary income dominated all the sources income in Sogar village and non farm income dominated the sources of income in Ainlatunga village. In Chandrasekharpur village, the crop income and non farm income for the sampled farmers was almost equal, with crop income being 25.54% against the non farm income of 23.44% of total income. The crop income was lowest in Sogar village which was recorded to be about 2.9% as against crop incomes of 25.5% for Chandrasekharpur, 25.28% for Bilaikani and 20.8 for Ainlatunga. For non farm income, Ainlatunga in Bolangir district recorded highest percentage of income of 34.9% followed by Bilaikani 27.7%. Chandrasekharpur, 23.44% and Sogar 20.77%. The salary income was much higher in relatively less interior district of Dhenkanal than the interior district of Bolangir during the year 2010-11. The income from remittances was observed to be almost nil for all the villages except Sogar which was recorded to be 4.29% of total income. Bilaikani village has the highest labour income of 19% of the total income in comparison to other villages. Chandrasekharpur has the lowest farm labour income of 3.89% followed by Ainlatunga. Sogar has highest income of 24% from business in comparison to other villages followed by Ainlatunga and Bilaikani. The lowest business income was observed for Chandrasekharpur with 4.41%. Livestock income was highest in Ainlatunga with 14.29% followed by Chandrasekharpur with 12.22%. A negative income was observed for Sogar village from livestock indicating higher expenses in maintenance of live stock. Within the

category of caste occupation, Chandrasekharpur village reflects highest caste income percentage of 13.31% in comparison to other villages. The pension income contributes least to the total income in all the villages with highest pension income observed for Bilaikani with 2.62% of total income. Remittance income of 4.29% is observed for sogar village only. The income analysis indicates that the sources of income are almost diversified with no specific source contributing more than 50% of the total income in the villages.

Income Diversification

The analysis of income diversification in the study villages (Table 5 and 6) indicate that the extent of diversification is highest in Ainlatunga and Bilaikani with 0.51 each followed by Chandrasekharpur and Sogar with 0.49 and 0.46 for all category of farmers . Within the size class of farmers, it is observed that the medium category has the highest diversification index in most of the villages in which Bilaikani records the highest index of 0.66 followed by sogar with 0.56. The sources of income diversification is observed to be relatively less for labour classes in all the villages and lowest being observed for Soagar with 0.33 followed by Bilaikani with 0.41. Within the large category, Ainlatunga has the highest diversification index followed by Chandrasekharpur, Sogar and Bilaikani in that order. In the small category of farmers, Bilaikani has the highest diversification index with 0.62 followed by Ainlatunga with 0.54, Sogar with 0.49 and the last is Chandrasekharpur with 0.47. It indicates that no particular source is important enough for income in the study villages.

Inequality of Income

The study of income inequality of income (Table 7) in the sampled villages revealed that Chandrasekharpur village has the highest inequality with Ginni ratio of 0.41 followed by Soagar with 0.39, Ainlatunga 0.30 and the least inequality is observed for Bilaikani with 0.26 Ginni ratio for all category of respondents. Within the size classes, maximum inequality is observed for small class farmers for all the villages except Bilaikani. The labour income class reveals the minimum inequality for all the villages. The maximum inequality is observed for Sogar village within the labour class and minimum inequality is observed in Bilaikani with Ginni ratio of 0.15 followed by Aiunlatung with 0.18. For medium class of farmers highest inequality is observed for Chandrasekharpur village followed by Ainlatunga. The difference in inequality is less in case of large sampled farmers for all the villages with highest inequality being observed for Chandrasekharpur.

Migration Income

The average migration income (Table 8) is more than 51% for all category of farmers in Sogar village followed by Ainlatunga with 22%, Bilaikani has 13% of total income from migration, followed by Chandrasekharpur with 7.9 which is the least amongst the villages. The migration income of Sogar is mostly from salary and business where as the migration income for Ainlatunga is due to labour income which is due stresses of agro economic conditions. The migratory income for Sogar is Pull type i.e due to pull of higher opportunity, whereas, the migration income in Ainlatunga is push type i.e pushed by stressed agro economic conditions in the village. Within the villages, the large farmers in Sogar have highest migratory income in comparison to other large farmers in other study villages. Average migration income is highest for the Sogar villages and

lowest migration income is observed for Ainlatunga indicating the push factor dominance for the cause of migration. Within the labour category, Ainlatunga records highest migratory labour income with 49% in comparison to other villages within labour class and size class within Ainlatunga.

Conclusion

The analysis of income for Odisha and study villages in Odisha reflects the volatility of the rate and sources of income that supports the livelihoods of the population. Odisha has been experiencing a higher growth rate after 2005-06 in comparison to its earlier slow growth during eighties and nineties. The study of income dynamics in the sampled villages in the districts of Dhenkanal and Bolangir in Odisha reveals differential pattern of income accruals from different sources. The large diversification in sources of income reveals that no single source is important enough to sustain livelihoods in the villages. Migration still contributes a substantial chunk of income in some of the villages which is not necessarily due to pull factors.

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Table1. trends in per Capita Income of Odisha and India

YEAR	ODISHA	INDIA
TE 1993-94	12173	15653
TE 2004-05	15976	23235
TE 2009-10	23117	32247
COMPOUND ANNUAL GROWTH RATE (% PER ANNUM)		
1993-94 TO 2004-05	2.8	3.9
2004-05 TO 2009-10	7.0	6.7
1993-94 TO 2009-10	4.5	4.8

Table 2. AVERAGE PER CAPITA INCOME IN (INR/PERSON/ANNUM)

Village/Size class	Labour	Small	Medium	Large	All
SOGAR	9393	13788	8263	15853	11800
CHADRASEKHARPUR	9130	7714	12536	11681	10316
AINLATUNGA	4875	7512	5828	10692	6884
BILAIKANI	10956	8828	10599	17835	12214

TABLE 3: AVERAGE PER CAPITA INCOME (INR/PERSON/MONTH)

Village/Size class	Labour	Small	Medium	Large	All
SOGAR	772	1133	679	1303	970
CHADRASEKHARPUR	750	634	1030	960	848
AINLATUNGA	401	617	479	879	566
BILAIKANI	900	726	871	1466	1004

Table 4: COMPOSITION OF INCOME

Village/source	Crop	LS	FL	NF	Sal	Caste	Busi	Rem	Pen
SOGAR	2.89	-4.92	10.10	20.77	40.38	1.49	24.09	4.29	0.91
CHADRASEKHARPUR	25.54	12.22	3.89	23.44	16.45	13.31	4.41	0.00	0.74
AINLATUNGA	20.80	14.29	8.66	34.89	7.65	0.93	11.33	0.00	1.44
BILAIKANI	25.28	8.07	18.82	27.37	10.11	0.00	7.73	0.00	2.62

TABLE 5: DIVERSITY IN INCOME (NO. OF SOURCE/HOUSEHOLD)

Village/Size class	Labour	Small	Medium	Large	All
SOGAR	0.33	0.49	0.56	0.45	0.46
CHADRASEKHARPUR	0.53	0.47	0.48	0.48	0.49
AINLATUNGA	0.45	0.54	0.55	0.52	0.51
BILAIKANI	0.41	0.62	0.66	0.35	0.51

TABLE 6 : DIVERSIFICATION INDICES OF INCOME SOURCE

SOGAR	0.33	0.49	0.56	0.45	0.46
CHADRASEKHARPUR	0.53	0.47	0.48	0.48	0.49
AINLATUNGA	0.45	0.54	0.55	0.52	0.51
BILAIKANI	0.41	0.62	0.66	0.35	0.51

TABLE 7: INCOME INEQUALITY (GINNI RATIO) IN SELECTED VILLAGE

Village/Sizeclass	Labour	Small	Medium	Large	All
SOGAR	0.35	0.41	0.31	0.32	0.39
CHADRASEKHARPUR	0.31	0.41	0.46	0.36	0.41
AINLATUNGA	0.18	0.24	0.32	0.23	0.30
BILAIKANI	0.15	0.18	0.14	0.29	0.26

TABLE 8: PERCENT IN COME FROM MIGRATION (%)

Village/Sizeclass	Labour	Small	Medium	Large	All
SOGAR	38.9	56.5	42.2	57.8	51.1
CHADRASEKHARPUR	7.3	16.9	9.3	1.6	7.9
AINLATUNGA	49.1	15.9	12.7	18.9	22.0
BILAIKANI	14.0	14.9	8.7	14.1	13.0