Income Dynamics in Odisha: Evidence from micro level study

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Introduction

Odisha has been one of the poorest states in India. Odisha is endowed with plentiful of natural resources which can 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 Odisha. 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 districts of 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 potentials available in the state. The data analysis 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. The per capita income level in the TE 93-94 was RS. 12178 which grew to Rs. 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's 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 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 2. However, the average longterm growth rate is observed to be almost equal during the period 1993-94 to 2009-10. The higher growth rate during the period 2005-06 to 2009-10 for Odisha 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 analysis for the study villages

The analysis of income for all category of farmers in the study villages reflect that relatively interior villages in Bolangir districts experience higher per capita 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 is observed that Bilaikani village under Bolangir district recorded highest per capita income of more than Rs. 12000 followed by Sogar village under Dhenkanal district which recorded per capita income of Rs. 11800 during the year 2010-11 as against Rs 10316 for Chandrasekharpur and the lowest income of Rs 6884 in Ainlatunga in Balangir district which still suffers from poverty in spite of watershed development in the village. The variation in the per capita income level is observed due to the diversification in the agriculture in the Bilaikani Village which has large area under 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 in spite 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 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 per capita income of Rs. 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 distrct was observed to be more than 124% . for the size class of small farmers category, Sogar village has the highest per capita income of Rs. 13789 in comparison to other villages. Within the small farmer category, Bilaikani village follows Sogar village in terms per capita income. In this category Chandrasekharpur village in Dhenkanal district has the lowest percapita income of Rs. 7714. Coming to the category of medium farmers, Chandrasekharpur village recorded highest per capita income of Rs. 12535 in comparison to other villages and the lowest was observed for the village Ainlatunga which was calculated to be Rs. 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 Rs. 17835 followed by Sogar village was recorded to be Rs. 15853 followed by Chandrasekharpur which was Rs 11681 and Ainlatunga had per capita income of Rs. 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, 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.

Conclusion:

Micro level evidences suggest that per capita income of interior villages of Balangir is slightly better that Dhenkanal district. The variation in the income observed due to diversification in agriculture lead by vegetable production as second crop. The labour class recorded high per capita income in Bilaikani village. Salaried class income was relatively higher in dhenkanal villages over Balangir. Watershed development and irrigation management during rabi season crop holds the key for income diversification in the study area.

References:

1. Orissa Agricultural Statistics-2008-2009, Directorate of Agriculture and Food Production, Govt of Orissa.
2. Economic Survey, 2008-2009, Directorate of Economics and Statistics, Govt. of Orissa
3. Agricultural Hand Book, 1997, DOA, Govt. of Orissa.
4. Sinha, M K; P Nanda, A Kumar and NR Sahu 2013. Socio-economic and Resource Profile Analysis of Sogar Study village. *Res. Bulletin 61*, Directorate of Water Management, Bhubaneswar, pp.33.
5. Sinha, M. K., Nanda, P. and Kumar, A. 2011. Rural Livelihood Pattern of Agricultural Households: Preliminary Evidence from Orissa. *Agril. Econ. Res. Rev.*, *24* (conf), 547-547.
6. Sinha, M. K., P Nanda, A Kumar, GP Behra 2013. Socio-economic and Resource Profile Analysis of Chandrasekharpur Study village. *Res. Bulletin 62*, DWM, Bhubaneswar, pp.29.
7. Sinha, M. K., P Nanda, A Kumar, J Gaudo 2013. Socio-economic and Resource Profile Analysis of Ainlatunga Study village. *Res. Bulletin 59*, DWM, Bhubaneswar, pp.37.

8. Sinha, M. K., P Nanda, A Kumar, SN Biswal 2013. Socio-economic and Resource Profile Analysis of Bilaikani Study village. *Res. Bulletin 60*, DWM, Bhubaneswar, pp.35

9. MK Sinha, JP Dhaka and B Mondal, 2014. Analysing social attributes of loan default among small Indian dairy farms: A discriminant approach. Scientific Research and Essays 9 (2), 2354-2358.

10. MK Sinha and NN Thombare, 2014. Incidence and impacts of clinical mastitis in dairy cattle farms: Case of Maharastra Farmer, Indian Journal of Dairy Sciences 67 (1), 70-73.

11. MK Sinha and JP Dhaka, 2014. Predicting risk of credit default using discriminant approach: A Study of Tribal Dairy Farmers from Jharkhand .Agricultural Economics Research Review 27 (1), Jan-June Issue 2014.