

The Economic Contribution of Forest Resources to the Tribal Communities in Odisha: A Study of Two Villages in Rayagada District

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Abstract-The basic problem of rural area is problem of underemployment rather than unemployment and it is high incidence of unemployment and underemployment among the economically weaker tribal sections of the society in the country. The tribal people living in forest area depend on forests resources for various products such as fuel wood, construction materials, medicine, food etc. There are three ways in which forest provides livelihoods for the tribal communities living in the forest fringe villages. They are direct employment, self-employment and secondary employment. The state of Odisha has a rich and abundance source of forest produce that has contributed and shaped the lives of the poor tribal people across the state. Both men and women from different tribes in rural Odisha are mostly engaged for collection and marketing of forest products that provides a great source of income to them. The broad objectives of the paper is study (i) the important role played by the forest produce in providing better economic status to the tribal people in Odisha (ii) to look into the economic and employment aspect of the forest produce particularly in the two villages of Rayagada District (iii) some strategy and policies to overcome the issues and challenges of overexploitation of forest produce for the better livelihood impact on the tribal people in the two villages of the district. The present study documents economic contributions of forest resources to the tribal communities of Kashipur block in Rayagada district of Odisha state. The study is based on personal interviews, interview schedule, and personal observations in the two sample villages using multi-stage random sampling technique.

Key Words: Tribal people, Dangaria Kandha, major and minor forest produce, livelihood, forest resources, employment, income, two villages, Kashipur Block, Rayagada District, and Odisha

I. INTRODUCTION

The forest resources are important in the livelihoods of local people in most developing countries in the world. In the third world countries one of the

important sources of livelihood is forest resources. India is also not the exception from that. In our country a huge population living close to the forest depends on the forest resources for their livelihoods. There are around 1.73 lakh villages, located in and around forests (MoEF, 2006). Though there are no official census figures for the forest dependent population in the country, different estimates put the figures from 275 million (World Bank, 2006) to 350-400 million (MoEF, 2009). Forest goods and services provide a major source of subsistence for the People living in the forest fringe villages. These includes collection of edible fruits, flowers, tubers, roots and leaves for food and medicines; firewood for cooking (some also sale in the market); materials for agricultural implements, house construction and fencing; fodder (grass and leave) for livestock and grazing of livestock in forest; and collection of a range of marketable non-timber forest products. The forest fringe communities not only just collect these forest products for their own consumption but also for commercial sale, which fetch them some income. The income from sale of the forest products for households living in and around forest constitutes 40 to 60 per cent of their total income (Bharath Kumar *et al*, 2010; Sadashivappa *et al*, 2006; Mahapatra and Kant, 2005; Sills *et al*, 2003; Bahuguna, 2000). Moreover, forest resource is the second largest land use in India after agriculture covering 21.05% of the total geographical area of the country (Anonymous, 2011). The livelihood associated with the forest tribal communities are in the form of direct employment, self-employment and secondary employment. The application of local skills and village-level technology in wood-based and small-scale forest-based enterprises provide secondary employment and livelihood opportunities for tribal people, main amongst are saw milling, rayon, pulp and paper, ply

wood and panel products, wood seasoning and preservation, tanning, sports goods, match splints, veneers, wooden boxes, bamboo and cane products, agricultural implements, furniture, structural wooden items, musical instruments, *bidi* making, educational goods, wood carving, wooden utensils *etc.* (Pant, 1984; Gera, 2002).

The present paper examined the importance and role of forest resources in local livelihoods and tries to determine the forest dependence of the tribal communities of the Kashipur Block, located in the Rayagada district of KBK Region. The study area, such as the Bhitrapadamajhi village and Tikarpadar village (Southern part of Odisha state) is one of the tribal rich area comprises with 100 percent tribal population in the Rayagada district. This paper is engaged to discern the interactions of tribal, specifically Santal with sub-humid deciduous forest region of Kashipur area of KBK Region. The important tribal communities in the Kashipur block are Dangiria Kandha, Ganda, Bonda, Bhumia, Binjhal, Gadaba, Katiya, Koya, *Munda*, etc. However, the most important thing is that, they are economically, politically, educationally and socially backward with accompanying impediments of health issues, high illiteracy, severe poverty, rampant malnutrition, superstitions, addictions, ignorance and exploitation by the other sections of the society. Lack of development, Unemployment and under-employment features are inherent in the Kashipur block causing very low income and miserable life of the households in the two sample villages. In other words, the forest resources are the most important contributor to the total livelihoods among the tribal communities in the two villages. In the present paper, the study has tried to examine the contribution of forest resources to the forest tribal communities in the two villages of Kashipur block of KBK Region in Odisha. The followings are the broad objectives of the Paper such as,

- ❖ To find out the livelihood of the poor tribal people living in the two villages.
- ❖ To examine the contribution of forest resources to the tribal communities in the study area.
- ❖ Some strategy and policies to overcome the issues and challenges of overexploitation of forest produce in the two villages of the district.

II. DATA SOURCES AND METHODOLOGY OF THE STUDY

The paper is based on both primary and secondary sources based on the above mentioned objectives. The paper used both simple and purposive sampling method to study the households in the two villages of the district. The interview schedule methods have been used to for collecting the primary data from the households in the sample villages. For the sake of the present study we have purposively selected Kashipur block of KBK Region in Rayagada district of Odisha as it is a part of forested Part of South-Western part of the state. For additionally, for the purpose of the study we have studied 150 poor tribal households whose livelihood mostly depends on the forest resources and related activities. And it is a complete study method, where each and every head of the households are asked for the required information. Data was collected using two sets of questionnaires which were administered to 150 respondents each and also the management staff of the forest in that selected block. The questions were on the role and importance of forest products in sustaining rural livelihood, impact of community sources of livelihood and most important economic activities of the people around the reserve in the two villages. Furthermore, a very simple mathematical tool has been used for the presentation of the data. All the computations are being made on the basis of the receipt of returns from the respondents in the 150 respondents.

III. STUDY AREA

Kashipur is situated about 75 km from the district headquarters. Kashipur is situated at 19°22'N 83°08'E. It is 75 km towards west of the district headquarters and 452 km from the state capital Bhubaneswar. The locality is surrounded by dense forest, and numerous cliffs throughout the block making the Block full in natural resources and also increasing the scenic view of the block. The Kashipur block is one of the largest blocks in terms of population and area in the Rayagada district of Odisha. It is one of the most backward and under developed block based on the various socio-economic indicators not only in the Rayagada district but also in the whole state. it is a totally a tribal dominated block, where more than 80 percent (DSHB, 2011) tribal people live followed by other social groups like SCs, OBC, general categories. It is a hilly

and forest area. Due to this, there is lack of road and communication facilities in the block, people suffer a lot. This block is far from the district head quarter, it is about 80 km from the district. Predominantly

inhabited by Kandha, bonda, bhumia, gadaba, katiya and Damba tribal, Kashipur is one of the poorest blocks in the State.

Table.1.1: Socio-religious Status of the Tribal Households in the Sample Villages

Type of Family	Rayagada District		
	Bhitarapadamajhi	Tikarpadar	Total
Nuclear	72 (90)	66 (94.28)	138 (92)
Joint	8 (10)	4 (5.72)	12 (8)
Total	80 (100)	70 (100)	150 (100)
The Religion of the Households			
Hindu	60 (75)	65 (92.85)	125 (83.34)
Christian	20 (25)	5 (7.15)	25 (16.66)
Total	80 (100)	70 (100)	150 (100)
Caste of the Households			
ST	78 (97.5)	16 (22.85)	94 (62.66)
SC	2 (2.5)	54 (77.15)	56 (37.34)
OBC	-	-	-
General	-	-	-
Total	80 (100)	70 (100)	150 (100)
Population Compositions			
Populations	Rayagada District		
	Bhitarapadamajhi	Tikarpadar	Total
Male	70 (20.58)	48 (18.6)	118 (19.74)
Female	75 (22.06)	56 (21.7)	131 (21.9)
Boys	90 (26.48)	76 (29.46)	166 (27.76)
Girls	105 (30.88)	78 (30.24)	183 (30.6)
Total	340 (100)	258 (100)	598 (100)

Source: Author’s calculation from Field Survey, January-February 2017

Note: The figures in the brackets indicate the per cent of the Total Households

IV. GENERATION OF EMPLOYMENT FROM FOREST BASED ACTIVITIES

Non-Timber Forest Products (NTFPs) have an important and significant role in the household economy of the tribal people living in the dry-deciduous forests of Bhitarapadamajhi and Tikarpadar village of Kashipur block of Rayagada district in Odisha. However, due to the lack of agricultural land, allied activities and also industrial activities, forest fringe people collect forest products in regular basis for their livelihoods and sustenance. And they are living in the foothills of the mountain and forest. They also make some value-added products to have some extra money for day to day life. But it is very difficult for them to provide three square meals a day to their

family members. It is comparatively easier to calculate the monetary value of NTFPs, which are marketed at the local market or by intermediaries. However, the products which are normally collected for domestic uses carry enough monetary value too, but it never calculated in a proper way. It is very difficult to get a proper information from people in the forest area, that which product and how much each household collect annually as the production of NTFPs vary from one year to another. A relative value can be calculated based on the importance, availability and quantity of these products. We have already mentioned in the previous paragraphs that the livelihood associated with the forest tribal communities are in the form of direct employment, self-employment and secondary employment. But there is no secondary employment in

the sample villages of Kashipur block of Rayagada district.

V. LIVELIHOOD GENERATION FROM DIRECT EMPLOYMENT

In the study area, direct employment is accelerated frequently by the Forest Department under the regular jurisdiction of forestry activities in the form of casual labour. The main forest based activities begetting

employment and income for the people are land preparation, nursery operations and plantation works, development of soil and water conservation measures, *tendu* leaf collection and bamboo works (Islam, Quli, Rai & Sofi, 2013). These works are mainly contractual with daily-paid wage basis and the people related to these forest based activities are quite accustomed to it as employment in these operations is instable due to its seasonal nature in these studied area of the block.

Table.1.2: Livelihood Generation from Forest base Direct Employment

Nature of Employment	Mean employment (Mandays/household/annum)	Wage rate(Rs.) Per mandays (Rs.)	Mean Income)Household per annum
Direct employment	9.45	195	1842.75
Secondary employment	0	----	0

Source: Author’s calculation from field survey, November, 2019

The above table explains about the livelihood generation from forest based employment in the sample villages of the block. The details of the Forest based direct and secondary employment in the study area have been given in Table-1.2. It is easily discernible that the average size of forest-based direct paid employment among the surveyed population is 9.45 mandays/ household/ annum and the mean income earned from these activities is ` 1842.75/ household/ annum in the study area. The overall picture of the table explains that, there is very low level of both employments leading to low level of income among the tribal households in the two villages.

VI. LIVELIHOOD GENERATION FROM FOREST BASED EMPLOYMENT

The forest resources provides a great sources of income both directly and indirectly to the tribal people in Kashipur block of Rayagada district where more than 85 percent people live in the villages. We have found that, 100 percent households are engaged in the forest based activities such as collecting forest produce, making different forest products and selling them either in the local market (it is called haat in odia) or through intermediaries. But there is a lot of problems faced by the tribal people for selling those products. We have stated earlier in the previous paragraphs that people living in and around the forest area get direct employment as casual labour by the forest department.

Table.1.3: Livelihood Generation from Forest based Employment

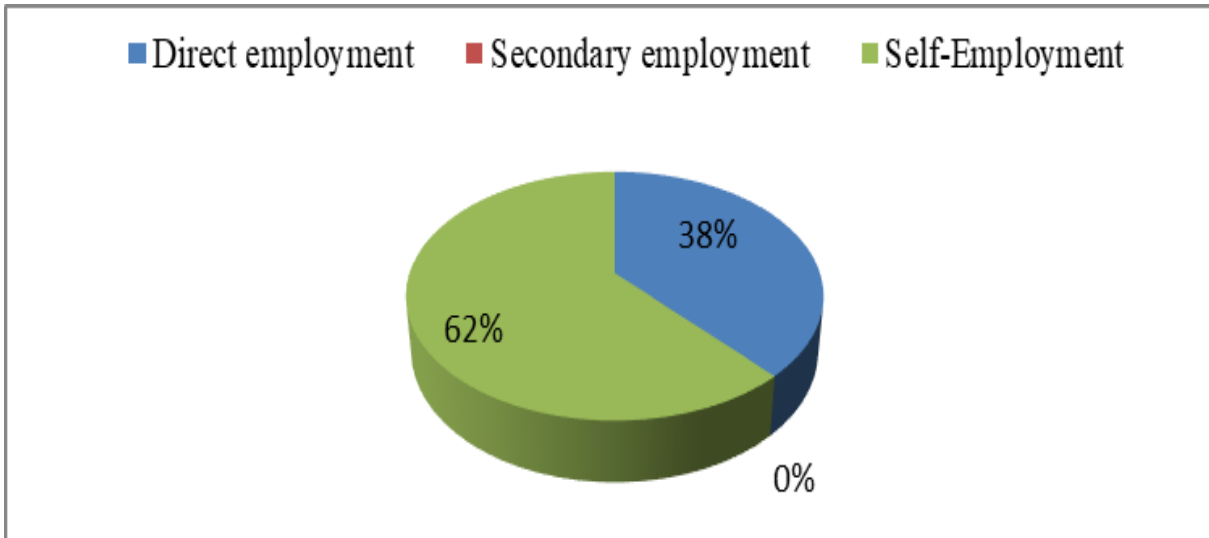
Nature of Employment	Mean employment (Mandays/households/annum)	Mean Income (household/annum) in rupees	Percentage to total
Direct Employment	9.45	1842.75	38.27
Secondary Employment	0	0	0
Self-employment	72.4	3645.25	61.73

Source: Author’s calculation from field survey, November, 2019

The above table explains about the livelihood generation from forest based employment in the sample villages. From the above table 1.2, we see that the share of income earned from direct employment out of total forest income is 38.27 percent. There is no

secondary employment as well in the two villages. In other words, there is 61.73 percent people are engaged in the self-employment as they mostly depend upon on the forest resources. it provides greater employment opportunities compared to other activities.

Figure-1.1: Income from Forest Resource based Employment



Source: Author’s calculation from field survey, November, 2019

The above pie charts talks about the income from forest based employment among the tribal households in the two sample villages of the Kashipur block. It is seen from the chart that, the share is very low because direct employment is seasonal in nature in these areas. The rest 62 percent share of forest income comes from NTFPs based self-employment since forest based secondary employment is zero in the study area of the Kashipur block of Rayagada district.

VII. ECONOMIC CONTRIBUTION OF FOREST RESOURCES TO THE LIVELIHOODS OF THE TRIBAL PEOPLE

- ❖ Farmers, those who are farming on own land as well as on land taken by lease.
- ❖ Agricultural labourer
- ❖ Animal husbandry which includes goat rearing, poultry rearing, cow rearing etc.
- ❖ Animal husbandry which includes goat rearing, poultry rearing, cow rearing etc.
- ❖ Village traders, including petty businessmen, processing of *muri* etc.
- ❖ From other sources

VIII. MAJOR FINDINGS OF THE STUDY IN THE SAMPLE VILLAGES

- ❖ 100 percent households are tribal people in the two villages.

- ❖ 100 percent households earns livelihood from the forest resources.
- ❖ The annual income of the households is very low in the two villages.
- ❖ More than 78 percent households are living below the poverty line in the two villages.
- ❖ There is lot of exploitations by the intermediaries in the sample villages.
- ❖ More than 38 percent are directly employed in the two villages.
- ❖ 61.73 percent are self-employed in the two villages.
- ❖ The mean income is 1843 rupees per household per annum in the two villages.

IX. CONCLUSION

The study leads to conclude that the livelihoods of tribal communities in the area have traditionally been dominated by subsistence agriculture. However, the forest resources play a vital role in the livelihoods of tribal people through direct paid employment and NTFPs based self-employment. The NTFPs like *sal* leaf, lac, fuel wood, fodder, tooth brush, *mahua* flower, *chironji*, mango, *mahua* seed, tamarind, *ber*, jamun, bamboo corn, *kachnar* flower, *koinar* tender leaf, *kusum* seed, *chiraita*, *toont*, *tendu* fruit, jackfruit, *phutkal* leaf buds, *bel*, *sal* seed, *karanj* seed, *rugra* and *khukhri*, *jirhul* flower, *harra*, *barhar* and *bahera* are integral part of day-to-day livelihood activities and

traditional life style for tribal people in the studied area. Still agricultural sector appears as major employment giving sector in our sample. However, the forest resources play a vital role in the livelihoods of tribal people through direct paid employment and NTFPs based self-employment. A dilatory and sustainable use of natural resources can help in creating newer employment opportunities and be proved as a mode of self-sustenance. Due to a lack of knowledge regarding improved collection practices and value addition, primary collectors are currently unable to earn much from NTFPs. Therefore, revitalization of the process of forming new collectives/groups or strengthening existing ones can be pursued. In order to maintain equilibrium between the welfare of the tribal people and ecological stability in the study area the visualized interventions needs to be implemented judiciously.

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