

Socio-Economic Impact of Common Property Resources on Rural Poors: An Evaluative Study

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Abstract- *Common Property Resources (CPRs) is very important to the poor villagers by which they fulfill their day to day needs for survival. The quantification in monetary terms of CPRs collection from various sources is a very crucial task. This paper tried to examine the nature and existence of CPRs and its contribution towards the employment and income generation for the inhabitants of rural West Bengal. Their quantification and actually how far the inhabitants are benefited from collected commons or more benefited from the opportunity man-days with local wage rate in their locality compare to cost incurred for collection of CPRs are analyzed in this paper. The ratio of benefit in cost is the highest in case of peoples belongs to the SC category and the lowest in case of general category of people. Total cost measured in terms of money is the highest in case of minorities where as the benefits is highest in case of SC. But in case of general category of people, the money value of benefit is the lowest, as compared with the cost associated with it. Poor as well as a section of middle class depends largely on this commons.*

Keywords- benefit, cost, common property, employment, income.

I. INTRODUCTION

Common Property Resources (CPRs) is very important to the poor villagers by which they fulfill their day to day needs for survival. Lack of natural resources available to the poor of any country is the main cause of poverty of the world. That is, most poor people are poor because they do not possess any income-generating Private Property Resources (PPRs) and do not have access to Common Property Resources (CPRs) or CPRs are not locally available at all in their area. Even today, most of the rural poor of the earth depend, to a great extent, for their livelihood on CPRs.

Though many of these poor people, whether they belong to general caste or schedule caste or tribes, have been allotted vested land and ownership rights (called Patta) particularly in West Bengal, the land amount is so small and the quality of the land is so poor and that they can hardly manage their families with the income from the property.

Seasonal character of agriculture and lack of attention gainful employment opportunities forces these poor families to look for some other sources of income and CPRs become an important source for them. But while we recognize the importance of CPRs in the life of these poor rural people, it is also painfully observed that the areas under CPRs are gradually declining. Another important observation is that there is lack of quality management and overall planning of these resources, which has not been given adequate attention earlier.

The CPRs help the people of any locality by generating income and employment by way of collection of commons apart from another source of income and employment.

The importance of CPRs described by Singh (1996) as “in the past the peasants who had small piece of land, who couldn’t eke out enough from it for their survival, who used to eat fruits from their nearby forests and used to collect leaves, flowers and dried branches, and by selling these to others supplemented their income from other sources. They also used to maintain a couple of cows, goats and were living happily in their villages depending on their village common grazing land.”

The poor people collect, free of charge, firewood, crop wastes, cow dung, weeds, fodder, organic manure [dry leaves’ forest litter), building materials [polls, thatch and silt), fruits and vegetables, herbs, fiber etc. from CPRs. Water which is essential for survival is also collected from community ponds, lakes, rivers, canals etc. Besides, CPRs also provide raw materials for traditional occupations including art and craft, and thus indirectly support employment in these occupations.

Collection of food, fuel as well as fodder like spinach, vegetables, mushrooms, small fish, grass, green leaves, dry leaves and dry branches of trees, small timber, building and constructional materials directly from common places as well as private places helps the dwellers by strengthening their daily livelihood sustenance and generate

income from sales of these excess items after fulfilling their daily needs.

These Common Property Resources (CPRs) like playground, various types of roads, bathing (in the ponds, river, canals etc.), defecation, Sansan (places of burning dead bodies), Bhagard (a wasteland for depositing dead bodies of animals), Hariparia (depositing place of unshaped & unused clay pot and other unused materials), market / haat, school / college, grazing places etc. help the mass directly in different way.

In urban areas, people also depend on the CPRs like playground, parks, roads, lakes, footpath, dustbin and vats, hawker's corners, parking places, canals, river and drainages etc. They have some direct contribution as well as indirect. They not only contribute amenities to the city dwellers but also help the poor to earn their livelihood utilizing those places and corners.

II. REVIEW OF LITERATURE

Beck and Ghosh (2000) observed that, CPRs made about 12% of poor household's income. Fuel and fodder were the most important CPRs accessed by the poor and women and girls are mainly responsible for collection of CPRs. Although it is crucial for the poor people livelihood, but there is no proper management for these resources and the dictum is very fruitful here that 'every body's property is nobody's property'. So the village people over graze or overuse the resources and conflict arises in time of collection, which is particularly mentioned in the Beck's (1994) study in three villages of west Bengal. He pointed out that, despite in West Bengal there is a lack of local common's land (found in other states of India) it is very important for subsistence of poorest households and particularly for woman and children and or poor people, and it add between 19 and 29 percent to household income of very poor villagers. Although the rich people enjoy a significant amount of these resources in different ways, they are not dependent on these resources like poor for their livelihood sustenance.

B Agarwal (1989) studies on various field works throughout India pointed out that 30 millions people or more depend wholly or substantially on non-timber forest products, which are of particular importance in the lean season. Woman and children play a central role in accessing CPRs, and have a more detailed knowledge of non-cultivated and wild crops than men in some cases. Access to CPRs has declined across India over the last 30 years. He describes the CPR in India as – 'a wide variety of essential items are gathered by rural households from the village commons and forests, for personal

use and sale: food, fuel, fodder, fiber, small timber, manure, bamboo, medicinal herbs, oils, materials for house buildings and handicrafts, resin, gum, honey, spices and so on.

N.S. Jodha in the mid 1986's and 1990's on the CPRs has shown that CPRs contribute to employment generation, income generation and asset accumulation for rural poor. A study of 550 households in 60 villages of the state of Madhya Pradesh conducted by Urvashi Narain^[5] (spring-2006), pointed out that: Dependence on common natural resources does not decrease as income of the families rises. The rich depend heavily on fodder collection and on constructional wood because they have larger animal's holdings and therefore a greater demand. Rich households are just as dependent on natural resources as the poor, though the rich and the poor depend on different resources. Among the households that collected natural resources, the poorest derive about 12% of their total income from resources. And the wealthier households depend on the commons as much as the poorest ones.

In a study of three villages in Karnataka, Pasha (1992) observed the CPRs contributed 10 percent of gross income of poor households. The CPRs are very important for poor village people for their income and employment generation, although it is declining at very alarming rate.

III. OBJECTIVES OF THE STUDY

This present paper has been carried out to achieve the specific objectives mentioned below.

- i) To examine the nature and existence of CPRs in rural areas of West Bengal.
- ii) To investigate the contribution of CPRs towards the employment and income generation for the inhabitants.

IV. METHODOLOGY

Multistage stratified random Sampling technique has been used here for collection of data. At the first stage Paschim Medinipur district of West Bengal has been purposely chosen for this study. In the second stage 04 Blocks (Midnapore, Sabang, Kharagpur and Jhargram) were selected randomly out of 29 blocks in total of Paschim Medinipur district. In the third stage 03 mouzas (villages) were selected from each of the Sample blocks. And in the last stage 25 households are select randomly from each sample village. Thus our sample comprises 4 (four) Blocks, 12 (twelve) villages and 300 households for our in-depth study on CPRs.

Questionnaire and survey methods are used to collect primary data from sample households.

V. ANALYSIS AND FINDINGS OF THE STUDY

Here an attempt has been made for quantify the collected items from village premises, forests, water bodies, livestock grazing and other commons in monetary terms and also to assess the number of man days created from the information on the time spent by the members of any households for collection of different items from CPRs and to analyse the cost required for the collection of commons.

The grazing income from commons and other collected materials for the cattle were deliberately considered as common income of the households.

Then we have collected data in relation to Commons' Income and Employment. We have segregated the common income into following five categories. This are-

- i) Collection of various types materials from Village as commons in a particular year,
- ii) Collection of various types materials from Forests as commons in a specific year,
- iii) Collection of various types materials from Water Bodies as commons during the year,
- iv) Income generated through Grazing of the Household animals for this year,
- v) Collection of various types of materials from other sources, apart from the above four sources as commons for the same year.

The Total Common Income of any family was computed with the sum total of the above five sources of Common.

Average collection of benefits per day per member multiplied by approximate market value and multiplied by number of approximate days in a year (say 300 days). As they earn from the occupation reflect the total income similarly the employment generation from the collection of commons also reflect their total income.

The Per Capita Total Income and Per Capita Common Income was calculated in the following way-

Per Capita Total Income = Total Income of a family / Total number of family members.

Per Capita Common Income = Total Commons Income of a family / Total number of family members.

The annual average amount of instrument expenses was calculated on the approximate rate of various instruments like ropes, chopper, net, mallet, boat, etc. used by the dwellers for collection of commons. The approximate use rate of the instruments were calculated by dividing its value by its life expectancy (in years approximately). This is per year cost. Then maintenance cost, if any, that is included with the per year costs.

Annual average time spent for collection of commons (in hours) was calculated on the basis of the information available from the sample households.

Then the total required hours for collected commons transform into working man days. The total working man-days requirements are calculated by the following formula:

Total hours requirement / 8 hours for one working man days.

The opportunity cost or wages cost has been calculated on the basis of average daily wage rate prevailing in that sample area.

Total cost means amount of expenses plus the total opportunity cost or wages cost at specific areas wages rate. All of these are depicted in **Table 1**. From this table it is observe that the overall maydays (item no. 4) spent for commons collection is 185 days. But it is the highest in Jhargram i.e. 213 days, which is on the above of overall standard. Sabang is the below in rank (165 man days) of the overall position. So it can be said that the Jhargram Block generate maximum man-days and Sabang generate minimum man-days for collection of CPRs. From the point of collection expenses, Sabang is very high by their instrument as well as time cost. But the time cost is very low in Jhargram Block. From the point of net benefit it is examined that Sabang block get the highest benefits, followed by Jhargram, Kharagpur and Midnapore block. It is also observed that CPRs generate a good number of employments in way of man-days and it creates positive net earnings over expenditure that increases the total income of the sample household.

Table 1 Costs of and benefits from the collections from Common Property Resources (CPRs) in the Sample Families in the Sample Blocks

Items / Sample Blocks	Midnapore	Sabang	Kharagpur	Jhargra	Over All
Number of Families	75	75	75	75	300
1. Average amount of expenses (Rupees)	284	358	259	275	294
2. Average value of Benefits (Rupees)	17887.79	21605.5	17873.91	19035.3	19100.64
3. Average time spent for collection of commons (hours)	1542.24	1681.06	1413.68	1856.17	1623.28
i) Village Commons	291.22	333.51	279.69	224.5	282.23
ii) Forests Commons	407.67	67.07	472.14	876.67	455.89
iii) Water bodies Commons	122.67	681.42	174.31	45	255.85
iv) Grazing Commons	478.44	95.85	380.23	516.24	367.69
v) Other Commons	164.19	144.21	107.31	42	114.43
4. Time spent (in Days): Row 3 / 8	183.02	165.26	176.71	213.05	184.51
5. Opportunity cost at <i>mouza</i> average wage rate: (Rs)	70	75	70	60	68.75
6. Total opportunity cost (Rupees.) (Row4 * Row5)	12811.66	12394.3	12369.7	12783.0	12685.10
7. Total costs (1+6) (Rs)	13095.66	12752.3	12628.7	13058.0	12979.10
8. Net Benefits (2-7) (Rs)	4792.128	8853.25	5245.21	5977.22	6121.534
9. Benefit- Cost Ratio (8/7)	0.37	0.69	0.42	0.46	0.47

Source: Field Survey

Blocks of Midnapore, Sabang, Kharagpur, Jhargram and over all sample families of all sample blocks are shown in X-axis and in Y-axis benefits and costs are measured in monetary terms. The monetary cost-benefit analysis from collection of commons is shown in the **Figure 1**. The costs (opportunity cost of labour hours spent plus equipment cost in the form of depreciation and maintenance) are well below the total benefits, generating surplus from collections. The cost-benefit ratio is very high in case of Sabang and is very low in case of Midnapore. This may be due to high amount of expenses on one hand and high opportunity cost (average wage available from next alternative).

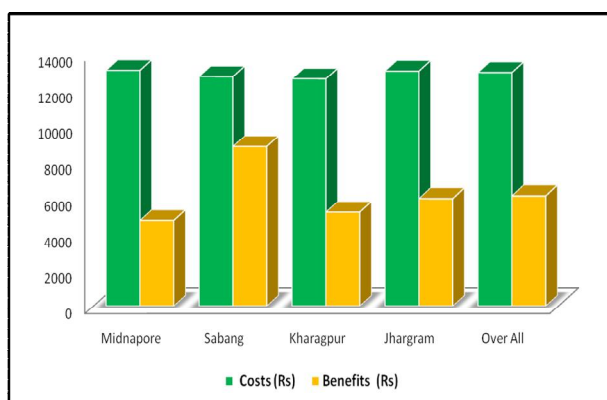


Figure 1 Total Costs and Benefits from the Collection of Commons in different Blocks of sample Households: Costs and Benefits from the Collection of Commons in the sample Blocks

Various castes in our sample families has been shown in X-axis whereas benefits and costs are shown in Y-axis in

monetary terms. The caste-wise cost-benefit analysis shows the varied performance by different social groups. The ratio of benefit in cost is the highest in case of SC and lowest in case of General category groups. Both total cost and total measured in terms of money are the highest in case of SC. But in case of General groups, the money value of benefit is the lowest, as compared to the cost associated with it (Figure 2).

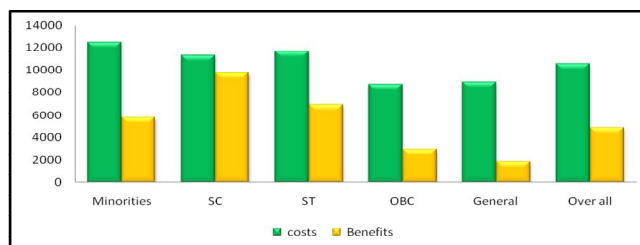


Figure 2 Total Costs and Benefits from the Collection of Commons in different Category of sample Households:

VI. CONCLUSION

It may be concluding that the benefits of Common Property Resources (CPRs) are always high in compared with the cost required for collection of commons. And it is always benefited to collection of commons when the dwellers of the villages get opportunity to work in their locality on the rate. The ratio of benefit in cost is the highest in case of SC and lowest in case of General category groups. Both total cost and total measured in terms of money are the highest in case of SC. But in case of General groups, the money value of benefit is the lowest, as compared to the cost associated with it. So, the CPRs make a substantial contribution to the total annual income of the family not only to the rural poor but also on rural rich and generate substantial employment in particular for the rural poor.

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