

Role of Joint Forest Management in the Socio-Economic Enhancement of Tribal's in Madhya Pradesh

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ABSTRACT

Madhya Pradesh has the largest forest area in India. The area of Madhya Pradesh is 30.28 million ha, as the state of Madhya Pradesh is second largest in terms of area in the country. It consists 9.38 % of the geographical area of the country. In Madhya Pradesh more than 20000 villages are in and around forests, they account 42% of the total villages of the state. Madhya Pradesh is receiving worldwide popularity in terms of conservation and protection of natural resources mainly through Joint Forest Management which has a well renowned record over the past three decades. The study was carried out in the Mandla district of the Madhya Pradesh targeting on the tribal areas which are proximate to forests, with an aim to find out the impact of Joint Forest Management in the economic enhancement of the tribal population, to find out the level of participation in Joint Forest Management activities. The participatory rural assessment approaches were used to collect the data from respondents of the study area involved in the forestry sector. Data was collected by using household interview, semi-structured questionnaires, and data were inserted and analyzed in MS Excel and in SPSS (Statistical package for social sciences). Chi square test at 5% level of significant is applied. It is found that the Non-timber forest products in the study area contribute 25% in the total income of the forest users. It is also found that the Joint Forest Management has brought great changes in the area either ecologically and economically.

Keywords: Joint Forest Management, Income, Socio-Economic Enhancement.

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INTRODUCTION

Forest is the important treasure blessed by God to people. Forests not only provide ecological benefits but also provide economic benefits as well. Forest plays the dynamic role not only in maintaining the ecological balance but also providing the livelihood opportunities to people depending on forests. The state of Madhya Pradesh has an area of 30.82 million ha, as it is the second largest state in the country in terms of area. The area of Madhya Pradesh accounts 9.38% of the geographical area of the country. The recorded forest area of Madhya Pradesh is 94.689.38 sq km which accounts 30.72 % of the geographical area of the state. Madhya Pradesh has the largest forest area in the country. Forestry and agriculture are the integral part of the farming systems in Madhya Pradesh. Forests also provide many services to people including food, shelter, clothes, drugs, species, rubber, paper, oils, timber and many other sources which can hardly be described in detail. The state of Madhya Pradesh has been successful in making the forestry sector as people oriented by setting up with 15228 Joint Forest Management Committees (JFMCs) involved in protection and management of about 70% of the forest area. People living in and around the forest areas are the real protectors of the forests. As through Joint Forest Management people are becoming the protectors rather than users. Forest based industries make an important contribution to the economy of the state. Knowing the economic benefits of forestry sector efforts are being made by policy makers for the expansion of trade of forest produce in the state. Nationalized forest products like Tendu Leaf, Sal Seed and Kullu Gum have already been taken in care. In addition, a number of forests produce like Aonla, Harra, Lac, Achar, Mahua etc. are also being collected & traded through a network of Cooperative Societies. Aonla, Gum, Tendu Leaf, Sal seed, Harra and various medicinal plants of Tendu leaf collection activities alone account for an income of about Rs. 145 crore every year to the forest dwellers. Teak and Sal forests are the pride of the state. The national forest policy 1952 valued the enormous benefits of forestry sector on the state economy and the policy of 1988 emphasized to guarantee environmental steadiness to maintain ecological balance. The policy further stated forestry with people oriented will bring a noticeable remark on the management, protection and conservation of forests. Madhya Pradesh is the first state to implement people-oriented forestry approach by formulation of village level Joint Forest Management committees in 1991.

The new state forest policy 2005 lays emphasis on controlling forest crimes and forest degradation.

REVIEW OF LITERATURE

Deep Pandey (2007) The author in his article Joint Forest Management in Rajasthan- Case Studies of Two Villages in Udaipur District expresses that development of rural communities through participatory forestry is a dynamic move towards the economic, social, environmental growth, and enhancing the forecast of basic needs and services in rural areas. However, Forestry sector has the ability to achieve the rural development through the integrated management of natural resources. The author suggests that the for achieving the aims of rural development to a great extent it largely depends upon the efficient utilization of natural resources including land, forests, soils, water and trees etc. The author concludes that it is important to realize the importance of forestry and integrated rural development planning to improve the availability of goods and services to the rural people.

Naseer et al. (2014) The author states that Joint Forest Management program in India is one of the important co-management efforts for the conservation and protection of the natural resource. The author states that natural resources are the important treasures blessed by God. Forests provide subsistence needs of housing materials, food, medicine, fuel-wood, small timber and non-timber forest products. The author also argued that the rural population in forest fringe areas is reliant on forest resources for their livelihoods as well as a way of life both socially and culturally. In every case, joint forests management offer vast potential for poverty alleviation among the forest- dependent poor. The evolving concept of community forest management has naturally brought to the fore various interrelated issues concerning forest management.

G. C. Dhruva Bijaya et. al (2016) The author demonstrates how community forestry has played an important role in providing the livelihood opportunities to the people living in and around the forest's areas of Nepal. The author lays emphasis on, that the policy-makers, experts and the local communities should be involved to the great extent for the benefits obtained from community forestry for the benefits of local people. The author highlighted that the challenges which forest sector is facing. The author states that the local forest users, government officials and other

stakeholders should join hand for the thoughtful impact of community forestry management, utilization and conservation on a sustainable basis.

RESEARCH METHODOLOGY

To understand the methodology in brief, purposive sampling was conducted focusing on the poor users of the community forest. Out of 180 household only 50 households were interviewed. Through questionnaires quantitative data was collected. The researcher personally distributed the questionnaires to the respondents of the study. The participation of respondents was completely voluntary in this survey, as it was clearly stated in the questionnaire. The collected data were categorized and coded in computer. The data collected from the respondents was processed and analyzed by using Excel and SPSS Software. Through questionnaire quantitative data was collected and was analyzed by using statistical tools like percentage, mean, where the qualitative data was analyzed in descriptive way and findings of the study are in shown through medium of tables, charts, and figures with interpretation. The Likert scale is also used. The Pearson Chi-Square test was applied to test the effect of joint forest Management in improving the condition of the forest.

$$\chi^2 = \sum_{i=1}^n \frac{(O_i - E_i)^2}{E_i}$$

Where χ^2 Chi-Square

O_i is the observed frequency

E_i is the expected frequency

OBJECTIVES OF THE STUDY

- To find out the impact of Joint Forest Management on the socio-economic enhancement of tribal's in Madhya Pradesh.
- To find out the contribution of Joint Forest Management to off farm income of tribal's.

HYPOTHESES

- Joint Forest management has positive impact on the socio-economic enhancement of tribal's in Madhya Pradesh
- Joint Forest Management has neutral impact on the off-farm income of tribal's.

LIMITATIONS OF THE STUDY

The limitations of this study were that it was only conducted among tribals in Barangda village of Mandla District in Madhya Pradesh. Therefore, generalization of this study regarding socio economic enhancement of Madhya Pradesh may not be applicable to the other districts of the Madhya Pradesh. Besides these limitations, this research has been carried out in limited time bond and also with limited available resources. Therefore, the results might not be fully appropriate for all other related conditions.

DISCUSSION AND RESULTS

1. Age Group of Respondents

Table 1 Shows Age group of the respondents: -

Age group	Frequency	Percentage
<20	9	18
20-40	28	56
40-60	13	26
Total	50	100

Figure 1 Age Group of the respondents

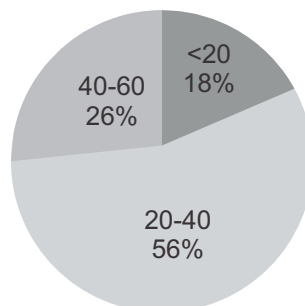


Table 1 & figure 1 shows that the greater part of the respondents was between the age group of 20-40, which accounts 56%, followed by 26% between the age group of 40-60 and 18 % were less than 21 years age respectively. The young generation less than 20 years was less in percentage compared to other age groups. This may be because young people in these age groups are still studying and are involved in other domestic works.

2. Sex of the Respondents

Table 2

Sex	Frequency	Percentage
Male	41	82
Female	9	18
Total	50	100

Figure 2 Sex of the respondents

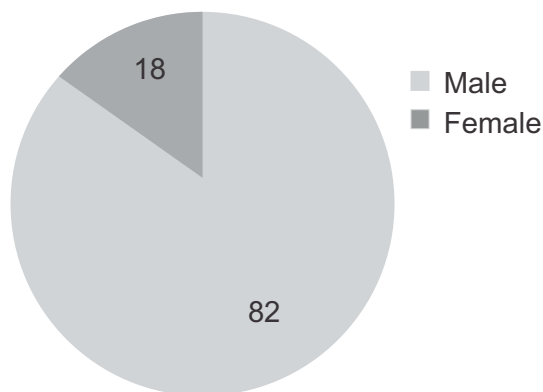


Table 2 & figure 2 shows that the majority of the respondents were males comprising 82%, followed by 8% of females. This shows that women are not fully involved in Joint Forest Management activities.

3. Educational status of respondents

Table 3

Level of Education	Frequency	Percentage
No Formal Education	10	20
Primary	35	70
Secondary	05	10
Total	50	100

Figure 3 Educational status of respondents

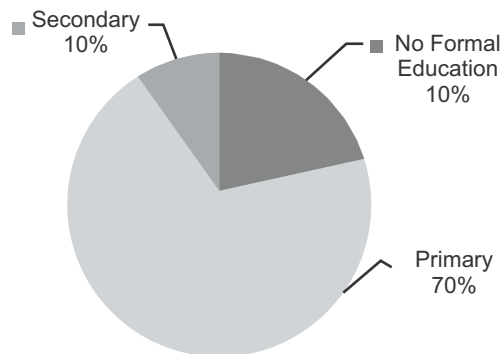
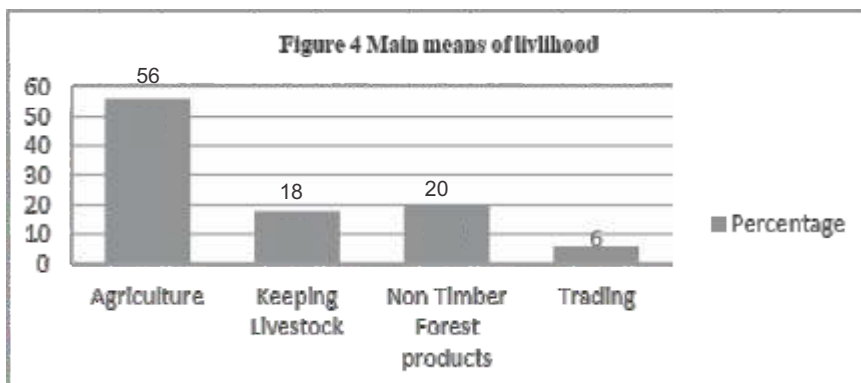


Table 3 & Figure 3 shows that most of the respondents (70%) are primary standard, followed by 20% who have no formal education. A small number of respondents comprising 10% had managed to get secondary certificates. Perhaps this highlights the need for education in the study area.

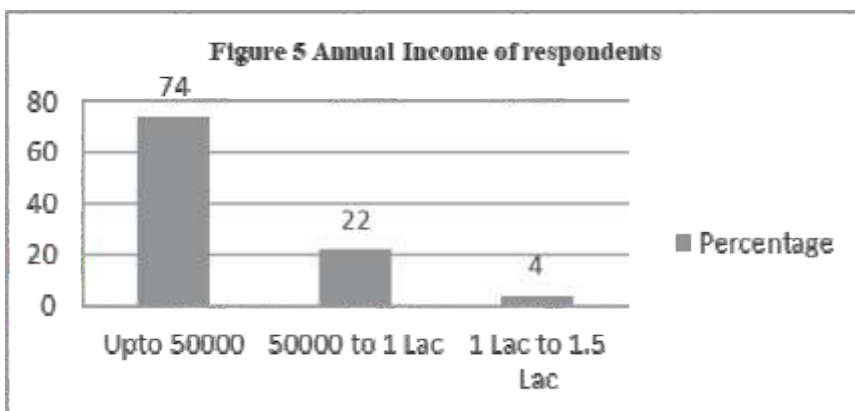
4. Main Means of Livelihood

It was found that agriculture farming was the main source of income. *Figure 4* shows that majority of the respondents are involved in agriculture, comprising 56 %, and 18 % depending upon livestock as 20 % earn their livelihood form forest products, and 6% are earning their income from Trading.



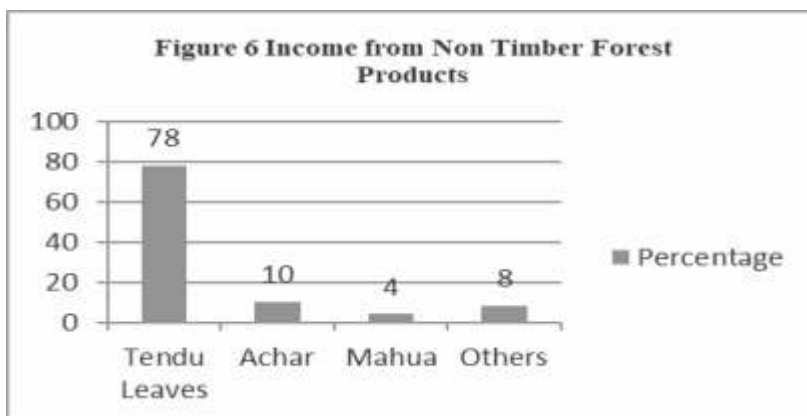
5. Annual Income of the Respondents

Figure 5 shows the annual income of the respondents as 74% respondents have their annual income up to 50000. While 22 % of the respondents have annual income from 50000 to 1 Lac and 4% have annual income from 1 Lac to 1.5 Lac.



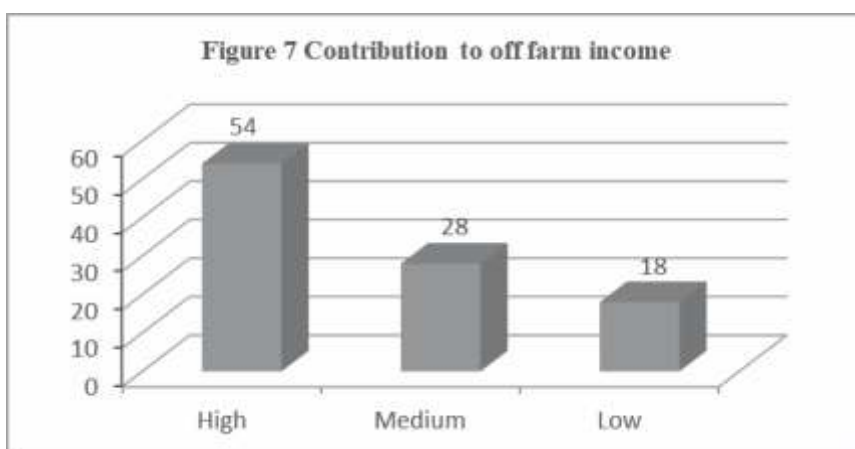
6. Income from Non-Timber Forest Products

Figure 6 show that Non-Timber Forest Products contribute a good portion to the household income of the respondents of the study area. It was found that 78% of the respondents earn their income from the collection of Tendu Leaves, 10% of respondents earn income from Achar, 4% from Mahua, and 8% of the respondents earn their income from other non-timber forest Products.



7. Contribution of Forests to Off Farm Income

As shown in *Figure 7*. It was found that agriculture is the main income generating activity in the study area besides that forest products contribute to the off-farm income of the respondents. The forest contributed exclusively to 25% of the household income. The 54%, 28% and 18% respondents stated that the contribution of forestry sector to their off-farm income was high, medium, and low respectively which are shown in the below in the bar graph in figure7. The calculated chi square is 7.814 where the tabulated chi square is 5.99 at 2 degree of freedom (df) and at 5% level of significant. The chi square test shows that there is a significant difference between the responses of the respondents. It shows that contribution to the off-farm income is increasing.



Impact of Joint Forest Management on the Socio-Economic Enhancement

8. Benefits from Joint Forest Management

Figure 8 show that Joint forest Management is benefiting the respondents of the study. 56% of the respondents responded that through Joint Forest Management the provision of resource base for income generation has benefited. While 14% of the respondents said that Joint Forest management has benefited them the increased availability of forest products and 30% of the respondents said the Joint Forest Management has provided them the employment opportunities.

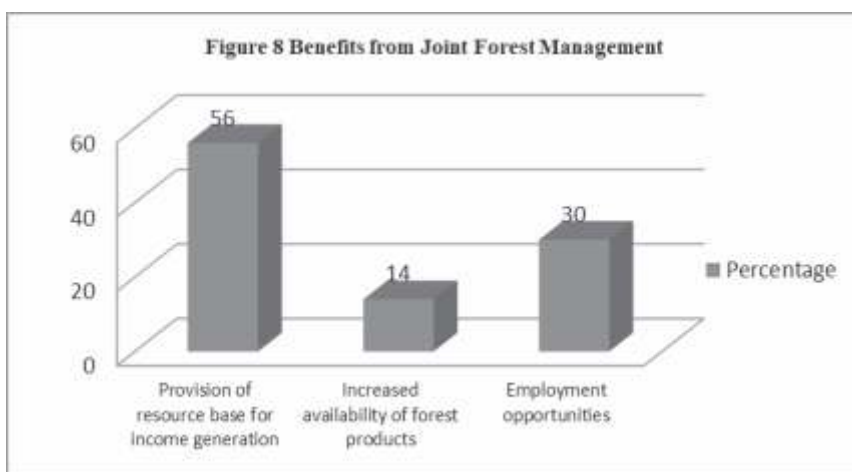
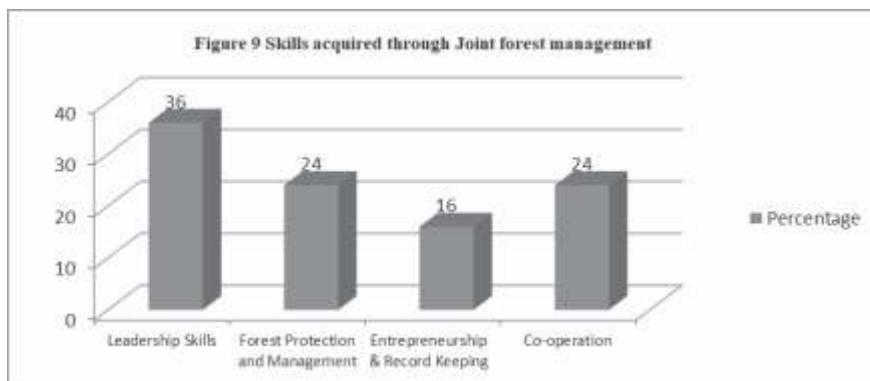


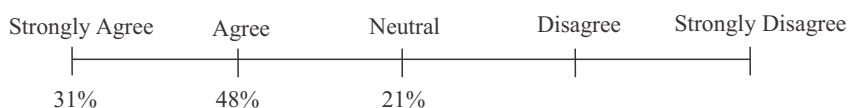
Figure 9 show the various skill acquired by the respondents of the study. It was found that 36% of the respondents said that they have acquired leadership skill from Joint Forest Management, 24% of the respondents said that Joint forest Management has provide them skills related to the forest protection and management. While 16% of the respondents said the through Joint forest management, they have learnt the skill of entrepreneurship and Record keeping and 24% of the respondents said that they have learnt the skills of co-operation through Joint Forest Management.



• Impact on Standard of Living

Contribution of Joint Forest Management towards the standard of living was calculated according to the insight of Likert Scale. It was found that 31% respondents strongly agree while 48% of the respondents agree that Joint Forest Management has improved their standard of living and 21% of the responded neutral changes respectively towards infrastructure enhancement from forest, but among the respondents no one responded disagree and nobody responded strongly disagree which can be seen below in *figure 10*. It shows that people-oriented forestry is strong treasure for the local users in improving their standard of living.

Fig.10 Impact of Joint Forest Management on standard of Living

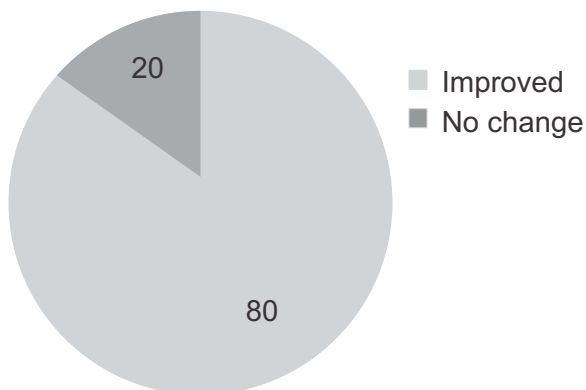


Impact of Joint Forest Management on the Condition of Forests

It is found that before the introduction of Joint Forest Management the condition of the forests in the study area was degraded. The responses of the respondents were collected about the improvement in conservation and protection of forests through people-oriented forestry. It is found that 80% of the respondents chose their answer that the condition of the forests has improved as compared to before the introduction of Joint Forest management, whereas 20% of the respondents responded that it is neutral.

The tabulated chi square is 3.84 with degree of freedom (df) 1 and at 5% level of significant. Whereas our calculated chi square is 20.9. This means that the population living in and around the local forests have protected and conserved it efficiently and shows that the condition has improved. The below pie chart depicts the percentage of respondents regarding the condition of forest in the study area. As shown in the Fig 11.

Figure 11 Condition of Forests



CONCLUSION

Forests are the important treasure blessed by God to people. Forests are not only essential in maintaining ecological balance but also provide economic benefits as well. Despite these vital services forests also acts as sinks of carbon dioxide. Forests also provide many services to people including food, shelter, clothes, drugs, species, rubber, paper, oils, timber and many other sources which can hardly be described in detail. The Joint Forest Management program is one of the best efforts for changing people from forest users to forest conservators. It is found that forestry sector contributes 25% to the forest dependent communities. The Chi square test shows that the Joint Forest Management is an important source of income and employment for the people living in and around the forests. The study shows that condition of forests in the studied area has increased, protection of forests has increased, infrastructure and standard of living has improved after the introduction of Joint Forest Management.

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