

Perception Towards Joint Forest Management Programme in Conservation of Forest Resources in Jammu Division

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ABSTRACT

The present study was conducted in purposively selected “East Forest Circle” of Jammu division of J&K. Multistage sampling plan was followed for the selection of respondents. Six forest ranges from East circle having maximum number of JFMCs were selected purposively. Twenty four committees, four from each selected ranges of East circle and eight members from each selected JFMC were selected through random sampling technique making the sample size to 192 respondents. The perception measurement consisted of 26 items. Results of quasi- experimental research design showed that majority of JFMC’s members were agreed with all the perception statements except that JFM activities helps in increasing the agriculture yield/land productivity, promotes forest tourism and helpful in improving communication skills of participants.

Keywords: Joint forest management, Perception, Productivity, Ranges, Statements

INTRODUCTION

India is the seventh largest country in the world though it owns 1.8 per cent of the global forest on the 2.5 per cent of the global land area. In India, 706,820 sq km (23.80%) of the area is under forests (World Bank Indicator, 2015). It is estimated that about 200 million people live in and around forests, and fully dependent for their livelihood on forest resources. Several approaches initiated to conserve forests without involving the local communities have not met with reasonable success. Thus, it is increasingly recognized that involvement of people in forest management, apart from contributing to regeneration of degraded forest, and helping in cost-effective conservation, also meets community’s subsistence needs. To push such efforts,

a decentralized and participatory forest management programme called joint forest management (JFM) is being promoted in India since 1990. The JFM provisions, under the JFM guidelines of 1990, expected to promote peoples’ involvement, collective decision-making, and social fencing, empowerment of the village community and sharing of authority, focus on sustained harvest of usufructs. According to Murali (2002) India’s national forest policy of 1988 was a landmark policy for local people’s rights over forest resources. This reform in forest policy has begun to transform how forests are protected and used in India. Communities that were historically perceived to be encroachers and illegal users of forests by the state were invited to partner with the state in protecting forests. Following national implementation guidelines 1990, various state

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governments began implementing their own Joint Forest Management strategies. West Bengal became the first state to adopt the JFM in 1990. Since 1990 JFM guidelines from the Centre, all the states have resolved to implement JFM making it one of the largest communities based natural resource management programme in the world (Kumar, 2002). The idea was to bring 33 per cent of the forest cover in India within this joint forest programme by the year 2020. By the end of 2006, close to 100,000 communities were practicing/adopting one or the other form of JFM covering an area of about 22 million hectares in 28 states, (Saxena, 2000). Evidence on the success of JFM based on the yields of timber and its benefit sharing has shown mixed results (Khare *et al.*, 2000). The impact of JFM has been argued to differ due to the degree of specific rights and benefits that forest department has allowed to the local communities. As per the Champion & Seth Classification of Forest Types (1968), the forest in UT of Jammu & Kashmir and UT of Ladakh belong to eight Type Groups which are further divided into 42 Forest Types, the highest in the country. The Jammu & Kashmir Forest Act, 1987 is the only state-specific Forest/Wildlife act or rule that exists in the UTs. The two UTs have a Forest Protection Force to assist the Department in enforcing the forest laws on the ground and protection of forests and wildlife. The Forest Department of the two UTs have implemented various schemes focusing on rehabilitation of degraded forests, consolidation and demarcation, Eco Task Force, urban forestry, pasture and fodder development, stabilization of strip area on National Highways, development of Conifer Forests, CM's Participatory Afforestation Scheme, Integrated Forest Protection, participatory grazing land development programme etc. (India State of Forest Report 2019). Recorded Forest Area (RFA) in the two UTs is 20,230 sq km of which 17,643 sq km is Reserved Forests, 2,551 sq km is Protected Forest, and 36 sq km is Unclassed Forests. In the UT of Jammu & Kashmir and UT of Ladakh, during the period of 1st January 2015 to 5th February 2019, no forest land was diverted for non-forestry purposes under the Forest Conservation Act, 1980 (MoEF&CC, 2019). Total number of JFMCs in Jammu and Kashmir was 4,173. (MERCC, 2014-15). JFM involves sharing of responsibilities and rights of local

communities and forest department (FD) as primary stakeholders in forest management system. It is also supposed to invoke active participation of local people and application of their traditional wisdom and knowledge in countering ecological and economic vulnerabilities in the form of soil erosion, drought condition, loss of soil productivity and scarcity of timber, fuel wood, fodder, plant leaves etc. (Mir *et al.*, 2014). Therefore keeping in view the importance of Joint Forest Management Programme in conservation of forest resources the present study was conducted to find out the perception of Joint Forest Management committee members towards Joint Forest Management Programme.

METHODOLOGY

Quasi-experimental research design was employed for the study. The study was conducted purposively in "East Forest Circle" of Jammu division. Jammu division is classified into three forest circles namely East circle, West circle and Chenab valley circle. East circle comprises of maximum number of districts namely Jammu, Samba, Kathua and Udhampur. So the present study was purposively conducted in East circle because of having maximum number of districts. Multistage sampling plan was followed for the selection of ultimate respondents. Six forest ranges from East circle having maximum number of JFMCs were selected purposively. Twenty four committees comprising of four from each selected range of East circle were selected through random sampling technique. Eight members from each selected JFMC were selected randomly for the study thus making the sample size to 192 respondents.

RESULT AND DISCUSSION

As far as socio-economic status of the respondents was concerned the average age of the respondents was 60.79 years. Overall average number of formal schooling years completed by respondents was 6.52 (± 3.14) years, may be attributed to non existence of government school, high fee of private school, non interest of parents as well as children for attending school. 52 per cent of the respondents had telephone connections. The average family size of the respondents was 6.07 (± 1.43) members (higher than the state average of 5.7 according

to Census of India, 2011). 60 per cent of the respondents had the Joint family, average operational land holding of the respondents was 1.17 (± 0.17) hectares with 0.05 (± 0.13) ha average irrigated area, average number of fragments was 2.24 (± 0.80), average area for grazing purpose was 0.34 (± 0.17) ha and average area under tree purpose was 0.15 (± 0.08) ha. 42 per cent respondents were solely dependent upon agriculture as only source of income, 11 per cent dependent on Agriculture + Govt. job, 3 per cent dependent on agriculture + Pvt. job, and 22 per cent dependent on Agriculture + Labour and Agriculture + Business respectively.

With regard to background information about JFM, the result presented in Table 1 reveals that the average area under JFM programme was 52.77 (± 28.47) hectares, the average numbers of members in a JFM committee were 12.67 (± 3.14), average number of villages in a JFMC programme were 3.29 (± 3.14) villages and average experience in JFM as a member was 11.29 (± 2.23) years.

With regard to division wise background information about Joint Forest Management the result showed that average number of member in JFMC in Billawar

division was 11.750 (± 1.75255) members with 62.312 (± 42.8860) ha average area under JFMC and the average villages covered under JFM were 3.1250 (± 1.12599). The experience as a member in JFMC in Billawar forest division was 12.00 (± 2.07020) years. In Jammu forest division average number of member in JFMC was 11.7500 (± 0.95743) members with 60.00 (± 16.32993) ha average area under JFMC in 2.7500 (± 0.95743) average villages and the average experience as a member in JFMC was 11.250 (± 1.500) years. In Kathua forest division average number of member in JFMC was 17.2500 (± 5.90903) members with 42.00 (± 16.30951) ha average area under JFMC in 3.5000 (± 1.73205) average villages covered under JFM and experience as a member in JFMC was 10.5000 (± 1.91485) years. In Ramban forest division average number of member in JFMC was 12.00 (± 0.81650) members, average area under JFMC was 50.00 (± 21.60247) ha, average village covered under JFM was 3.2500 (± 0.500) and experience as a member in JFMC was 10.00 (± 1.63299) years. And in Udhampur forest division average number of member in JFMC was 11.5000 (± 1.00) members, average area under JFMC was 40.00 (± 21.60247) ha, average village covered under JFM was 4.00 (± 0.81650) and experience as a member in JFMC was 12.6667 (± 4.61880) years (Table 2).

Data depicted in Table 3 reveals the mean difference in the number of members, area, villages and experience as a member in Joint Forest Management Committee. From the analysis of data it was found that except between Kathua and Udhampur there was significant differences in number of members, area, villages and experience as a member in Joint Forest Management Committee between all the other sampled forest divisions (Table 4).

Table 1: Background information about Joint Forest Management (n=192)

Parameters	JFM members
Average area under JFM (ha)	52.77 $\pm$ 28.47
Average number of members in a JFM committee	12.67 $\pm$ 3.14
Average number of villages in a JFM	3.29 $\pm$ 3.14
Experience in JFM as a member (years)	11.29 $\pm$ 2.23

Table 2: Division wise Background information about Joint Forest Management

Name of forest Division	Number of Selected JFMC	Average number of members in a JFMCs	Average area under JFMC (ha)	Average number of villages in a JFMC	Experience as a member in JFM (years)
Billawar	8	11.7500 (± 1.75255)	62.3125 (± 42.8860)	3.1250 (± 1.12599)	12.00 (± 2.07020)
Jammu	4	11.7500 (± 0.95743)	60.00 (± 16.32993)	2.7500 (± 0.95743)	11.2500 (± 1.5000)
Kathua	4	17.2500 (± 5.90903)	42.00 (± 16.30951)	3.5000 (± 1.73205)	10.5000 (± 1.91485)
Ramnagar	4	12.00 (± 0.81650)	50.00 (± 21.60247)	3.2500 (± 0.500)	10.000 (± 1.63299)
Udhampur	4	11.5000 (± 1.000)	40.00 (± 21.60247)	4.00 (± 0.81650)	12.6667 (± 4.61880)

Table 3: ANOVA of differences

Parameter		Sum of square	df.	Mean square	F	Sig.
Number of member in a JFMC	Between Group	101.333	4	25.333	3.592	0.024
	Within Group	134.000	19	7.053		
	Total	235.333	23			
Area under JFM	Between Group	2084.521	4	521.130	0.573	0.685
	Within Group	17272.469	19	909.077		
	Total	19356.990	23			
Number of village in a JFMC	Between Group	3.583	4	0.896	0.728	0.584
	Within Group	23.375	19	1.230		
	Total	26.958	23			
Experience as a member in JFMC	Between Group	15.208	4	3.802	0.696	0.604
	Within Group	103.750	19	5.461		
	Total	118.958	23			

Table 4: Comparison of Forest divisions

Group name		No. of member in a JFMC		Area under JFM		No. of village in a JFMC		Experience as a member in JFMC	
		MD	S.E	MD	S.E	MD	S.E	MD	S.E
Billawar	Jammu	0.000*	1.62	2.312	18.46	0.375*	0.67	0.750*	1.43
	Kathua	5.500	1.62	20.312*	18.46	0.750*	0.67	1.500	1.43
	Ramnagar	0.250*	1.62	12.312*	18.46	0.500*	0.67	2.000	1.43
	Udhampur	0.250*	1.62	22.312*	18.46	1.250	0.67	0.000*	1.43
Jammu	Kathua	5.500	1.87	18.000*	21.31	0.750*	0.78	0.750	1.65
	Ramnagar	0.250*	1.87	10.000*	21.31	0.500*	0.78	1.250	1.65
	Udhampur	0.250*	1.87	20.000*	21.31	1.250	0.78	0.750	1.65
Kathua	Ramnagar	5.250	1.87	8.000*	21.31	0.250*	0.78	0.500*	1.65
	Udhampur	5.750	1.87	2.000	21.31	0.500*	0.78	1.500	1.65
Ramnagar	Udhampur	0.500*	1.87	10.000*	21.31	0.750*	0.78	2.000	1.65

With regard to perception of JFMCs members towards JFM programme, the result in Table 5 shows that on the basis of weighted mean score of perception statements i.e. JFM programme helps in increasing income and the forest cover of particular village ranked at 1st position. JFM helps in employment generation in area of its operation was ranked at 2nd position. Similar results were also found by (Parul, 2003). JFM promotes sustainable resource conservation and JFM activities encourage empowerment of local communities was ranked at 3rd position. JFM programme restricts the

migration of animals to forest areas was ranked on fourth position on the basis of weighted mean score. Similarly on the basis of weighted mean score perception statements such as “Water harvesting structures constructed under JFM programme helps in reducing water scarcity”, JFM enhance livestock population and yield, rules and regulations regarding JFM is easy to understand, regeneration of degraded land is possible due to JFM activities, equal benefits for rich and poor families is possible under JFM, JFMC members and forest officials make people aware of activities, process

Table 5: Perception of JFMCs member's towards Joint Forest Management Programme

S. No.	Perception Statements	JFM Member Number (%)					
		Agree (3)	Don't know (2)	Disagree (1)	Total Score	Weighted Mean Score	Rank
1	JFM programme helps in increasing income	192 (100.0)	0 (0)	0 (0)	576	3.00	1
2	JFM promotes sustainable resource conservation	190 (99.0)	2 (1)	0 (0)	574	2.98	3
3	JFM helps in employment generation in area of its operation	191 (99.5)	1 (0.5)	0 (0)	575	2.99	2
4	JFM helps in increasing the forest cover of particular village	192 (100.0)	0 (0)	0 (0)	576	3.00	1
5	Regeneration of degraded land is possible due to JFM activities	185 (96.4)	6 (3.1)	1 (0.5)	568	2.95	7
6	It enhances livelihood and living standard	78 (40.6)	93 (48.4)	21 (10.9)	441	2.29	18
7	JFM activities encourage empowerment of local communities	191 (99.5)	0 (0)	1 (0.5)	574	2.98	3
8	Sharing benefits from JFM with govt. is satisfactory	150 (78.1)	21 (10.9)	21 (10.9)	513	2.67	16
9	JFM promotes forest tourism	46 (24.0)	64 (33.3)	82 (42.7)	348	1.81	20
10	Helpful in building good relationship with forest department employees	177 (92.2)	13 (6.8)	2 (1.0)	559	2.91	11
11	JFM programme restricts the migration of animals to forest areas	189 (98.4)	3 (1.6)	0 (0)	573	2.98	4
12	JFM activities release the pressure from agriculture land	172 (89.6)	14 (7.3)	6 (3.1)	550	2.86	13
13	JFM increases the participatory nature of people towards other govt schemes	189 (98.4)	3 (1.6)	0 (0)	573	2.98	4
14	Participation in JFM enhance economic and social security	137 (71.4)	52 (27.1)	3 (1.6)	518	2.69	15
15	JFM is a good source of women empowerment	130 (67.7)	53 (27.6)	9 (4.7)	505	2.63	17
16	Helpful in increasing the productivity of degraded land	174 (90.6)	14 (7.3)	4 (2.1)	554	2.88	12
17	JFM promotes representation of all sections of the society	154 (80.2)	37 (19.3)	1 (0.5)	537	2.79	14
18	JFMC members and forest officials make people aware of activities, process and benefits of JFM to facilitate their participation to a great strength	180 (93.8)	9 (4.7)	3 (1.6)	561	2.92	9
19	JFM activities protect forest area from flood and drought	177 (92.2)	14 (7.3)	1 (0.5)	560	2.91	10
20	Helpful in improving communications skills of participants	61 (31.8)	98 (51.0)	33 (17.2)	412	2.14	19
21	JFM activities help in increasing the agriculture yield/land productivity	11 (5.7)	87 (45.3)	94 (49)	301	1.56	21
22	JFM enhance Livestock population and yield	188 (97.9)	4 (2.1)	0 (0)	572	2.97	5
23	Equal benefit for rich and poor families is possible under JFM	184 (95.8)	7 (3.6)	1 (0.5)	567	2.95	8
24	Introduction of JFM has improved the quality of forest in the area	191 (99.5)	1 (0.5)	0 (0)	575	2.99	2
25	Rules and regulations regarding JFM is easy to understand	187 (97.4)	5 (2.6)	0 (0)	571	2.97	6
26	Water harvesting structures constructed under JFM programme help in reducing water scarcity	189 (98.4)	3 (1.6)	0 (0)	573	2.98	4

and benefits of JFM to facilitate their participation to great strength, JFM activities protect forest area from flood and drought, helpful in building good relationship with forest department employees, helpful in increasing the productivity of degraded land, JFM activities releases the pressure from agriculture land, JFM promotes representation of all sections of the society, participation in JFM enhance economic and social security, sharing benefits from JFM with govt. are satisfactory, JFM is a good source of women empowerment, it enhances livelihood and living standard, helpful in improving communications skills of participants, JFM promotes forest tourism and JFM activities help in increasing the agriculture yield/land productivity was ranked from 5th position to 21st position on the basis of their relative importance respectively.

The concept of benefit sharing was devised to motivate the people to participate in the programme right from planning till harvesting and in the follow-up processed. Above results clearly indicate that over all local people have the positive perception towards JFM programme. Similar results were also found by Pratima and Jattan, (1999).

CONCLUSION

It is concluded on the basis of major findings that overall respondents had favourable perception towards Joint Forest Management Programme. JFM helps in improving the condition of forest and contribute towards assets development in villages situated close to forest proximity and improving socio-economic condition of villagers. Forest officers and JFMCs members were very active and had very good relations with the local people. JFM programme help in proper utilization of degraded land. It is also concluded that JFM is promoting participation of local people in implementation of different government schemes for the conservation of different forest resources. More efforts need to be

done to exploit JFM platform to increase forest tourism in rural areas for enhancing the employment opportunities and income of the communities residing in close proximity of forests.

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