Constraints Analysis of Joint Forest Management Programme in Jammu Division of Jammu and Kashmir

Tariq Iqbal[1]*, P.S. Slathia[2], Rajinder Peshin[3], Sandeep Sehgal[4], Manish Kumar Sharma[5], Kiran Kour[6] and Rakesh Kumar[7]

[1,2,3,7]Division of Agricultural Extension Education, FoA, Sher-e-Kashmir University of Agricultural Sciences & Technology, Jammu, J&K
[4]Division of Agroforestry, FoA, Sher-e-Kashmir University of Agricultural Sciences & Technology, Jammu, J&K
[5]Division of Statistics and Computer Applications, F.BSc, Sher-e-Kashmir University of Agricultural Sciences & Technology, Jammu, J&K
[6]Division of Fruit Science, FoA, Sher-e-Kashmir University of Agricultural Sciences & Technology, Jammu, J&K
*Corresponding author email id: tariqiqbal1991@gmail.com

ARTICLE INFO

ABSTRACT

The study was conducted in purposively selected "East Forest Circle" of Jammu division of J&K. Multistage sampling was followed for the selection of respondents from six forest ranges from East circle, having maximum number of Joint Forest Management Committees (JFMCs) purposively. Twenty four committees, four from each selected ranges of and eight members from each selected JFMC were selected through random sampling technique making the sample size of 192 respondents. Total 192 JFMC members were interviewed to find out the constraints faced in Joint Forest Management Programme. Henry Garrett's ranking technique was used to analyse the constraints. The result showed that respondents ranked Lack of funds, Delay in planting time, lack of training programme as major constraints in respective order.

INTRODUCTION

Forests in India form the second largest land use after agriculture (Afreen et al., 2011). Forest is one of the most important natural and renewable resources for the very survival of human beings, especially those who are living in and around the forest. (Bhat, 2018). According to the report (MoEF, 2010), the total forest cover of the country is 69.09 Mha. Out of the total forest area, 8.34 Mha is very dense while almost half of it (31.9 Mha) is moderately dense and the rest being open forests and mangroves. There are close to 200,000 villages that live inside or on the fringes of forest significantly depend on forests for their livelihood (World Bank, 2006). People living in these forest fringe villages depend upon forest for a variety of goods and services. These includes collection of edible fruits, flowers, tubers, roots and leaves for medicines; firewood for cooking; materials for agricultural implements, house construction and fencing; fodder for livestock and grazing of livestock in forest. Moreover, a significant percentage

of the country's underprivileged population happened to be living in its forested regions (Saha and Guru, 2003). 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 (Murali, 2002). JFM making it one of the largest communities based natural resource management programme in the world (Kumar, 2002). The National Joint Forest Management Policy came out after the successful experience of Arbari hills in Midnapore district of West Bengal during the early 1970s where local communities formed forest protection committees to conserve their forest resources at a very early stage. JFM activities broadly include development of protection and management strategy for JFM areas, field operation, participatory

process, and decision making and sharing of usufructs (Nataraju et al., 2013). 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 (Ballabh et al., 2002). Forests of Jammu and Kashmir exhibit remarkable diversity ranging from sub-tropical to temperate to alpine because of the distinctive geo-climatic conditions prevalent in the State. Total recorded forest area of Jammu and Kashmir state is 20, 23,000 ha. Out of which 38,736 ha is under JFM (MERCC, 2014-15). JFM involves sharing of responsibilities and rights of local communities and forest department (FD) as primary stakeholders in forest management system. (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 constraints faced by the Joint Forest Management Committee members in Joint Forest Management Programme.

METHODOLOGY

The research pursuit was conducted purposively in "East Forest Circle" of Jammu division which 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. 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 thereby making the sample size of 192 respondents.

To find out the major constraints faced by the respondents in Joint Forest Management Programme, Henry Garrett's (1969) ranking technique was used. As per this method, respondents were asked to assign the rank to all the constraints and that ranking was converted into score value with the help of the following formula:

$$\text{Percent position} = \frac{100 (R_{ij} - 0.5)}{N_j}$$

Where, R_{ij} = Rank given for the ith variable by j^{th} respondents, N_j = Number of variable ranked by j^{th} respondents

With the help of Garrett's table, the present position estimated was converted into score. Then for each constraint, the score of each individual were added and then total value of scores and mean value was calculated. The constraints having highest mean value was considered to be the major constraint. For the purpose of prioritizing the constraint, Garrett ranking method was used. After calculating the percent position of ranks of the already constraints transmutation of order of merit was done following Garret (1981) method. The final ranking of the constraint in order to fix their relative priority was done on the basis of their mean score.

RESULTS AND DISCUSSION

The Table 1 shows the Preference and Ranking of constraints in JFM programme Accessed by the JFMC members. Among the

Table 1. Preference and ranking of constraints in JFM programme accessed by the JFMC members

Rank	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	13th	Mean Score	Garret rank
Scale (x) factor	84	74	67	62	58	54	50	47	43	38	33	26	16		
A* (f)	80	25	15	13	12	10	9	8	6	5	4	3	2		
f(x)	6720	1850	1005	806	696	540	540	376	258	190	132	78	32	68.401	I
B (f)	67	21	19	16	14	11	10	9	7	6	5	4	3		
f(x)	5628	1554	1273	992	812	594	500	423	301	228	165	104	48	65.739	II
C (f)	62	20	18	17	16	14	13	9	7	6	5	3	2		
f(x)	5208	1480	1206	1054	928	756	650	423	301	228	165	78	32	65.151	IV
D (f)	53	19	17	16	14	13	12	11	10	9	7	6	5		
f(x)	4452	1406	1139	992	812	702	600	517	430	342	231	156	80	61.765	IX
E (f)	50	30	25	20	17	14	9	7	6	5	4	3	2		
f(x)	4200	2220	1675	1240	986	756	450	329	258	190	132	78	32	65.343	III
F (f)	48	20	18	17	15	13	12	11	10	9	8	7	4		
f(x)	4032	1480	1206	1054	870	702	600	517	430	342	264	182	64	61.161	XII
G (f)	44	28	23	19	16	14	11	10	8	7	6	4	2		
f(x)	3696	2072	1541	1178	928	756	550	470	344	266	198	104	32	63.203	V
H (f)	42	27	21	19	17	13	12	11	9	7	6	5	3		
f(x)	3528	1998	1407	1178	986	702	600	517	387	266	198	130	48	62.213	VIII
I (f)	41	29	24	18	15	14	12	10	8	7	6	5	3		
f(x)	3444	2146	1608	1116	870	756	600	470	344	266	198	130	48	62.479	VI
J (f)	38	31	22	20	15	14	12	11	10	7	5	4	3		
f(x)	3192	2294	1474	1240	870	756	600	517	430	266	165	104	48	62.270	VII
K (f)	37	25	21	19	18	16	14	12	11	9	5	3	2		
f(x)	3108	1850	1407	1178	1044	864	700	564	473	342	165	78	32	61.484	XI
L (f)	35	30	23	19	17	15	13	11	9	8	5	4	3		
f(x)	2940	2220	1541	1178	986	810	650	517	387	304	165	104	48	61.718	X
M* (f)	33	30	22	20	16	13	12	11	9	8	7	6	5		
f(x)	2772	2220	1474	1240	928	702	600	517	387	304	231	156	80	60.473	XIII

A to M are the codes used for different constraints

Table 2. Garret technique based constraints analysis of joint forest management programme

Constraints	Mean score	Garret rank
Lack of funds	68.401	I
Delay in planting time	65.739	II
Delay in payments of work	65.151	IV
Lack of awareness	61.765	IX
Lack of Training Programme	65.343	III
Lack of knowledge of new plant species	61.161	XII
Illegal cutting of Trees	63.203	V
Low Survival rate of plants	62.213	VIII
Non cooperation of locals with JFMC members	62.479	VI
Shortage of labour at planting time	62.270	VII
Poor management by forest department	61.484	XI
Fire's problems in forest	61.718	X
More distance from forest area	60.473	XIII

192 respondents, lack of fund ranked as first by 80 respondents. Similarly, delay in planting time ranked as first by 67 respondent.

The major constraints faced by the JFMC members in Joint Forest Management Programme in Jammu division have been presented in Table 2. The results revealed that respondents ranked 1st to Lack of funds. The reduction in fund allocation of JFMCs is a threat to the conservation efforts of the government and local people who are losing employment opportunities, financial resources and better management of resources are very much important factors for successfully implementation of a programme, Ranked 2nd to Delay in planting time probably due to the importance of planting time for survival rate of plants. Lack of Training Programme was ranked 3rd. Training and awareness programme is also very much needed for a community where a developmental programme is going to implement, which will enhanced the knowledge of the beneficiaries, ranked 4th to delay in payments of work, ranked 5th to Illegal cutting of Trees, ranked 6th to Non cooperation of locals with JFMC members, Ranked 7th to Shortage of labour at planting time, ranked 8th to Low Survival rate of plants, ranked 9th to lack of awareness, ranked 10th to Fire's problems in forest ranked 11th to Poor management by forest department, ranked 12th to Lack of knowledge of new plant species and ranked 13th to More distance from forest areas. Forest fires degrade the soil, inducing floods and landslides. The risk of forest fires from local people was high and destroyed JFM plantations. Forest fire line should be constructed to control fire's problems in forest. The findings of the present study were in accordance with the studies of Himberg et al., (2009); Choudhary et al., (2017); Ashwar et al., (2017); Singh and Tyagi (2017) and Thigale et al., (2018).

CONCLUSION

It is concluded on the basis of findings that major constraints faced by the Joint Forest Management Committee members in Joint Forest Management Programme were lack of funds followed by delay in planting time, lack of training programmes, delay in payments of works, Illegal cutting of trees, Non-cooperation of locals with JFMC members, Shortage of labour at planting time, low survival rate of plants, lack of awareness, Fire's problems in forest, Poor management by forest department and Lack of

knowledge of new plant species, To overcome from these constraints it is suggested that, more time should be given to JFM programme, more new species of plants should be introduced in the area, more funds should be given to JFM programme, training programme should be organised for proper JFM management, more work need to be done to conserve forest. Forest fire line should be constructed to control fire's problems in forest, awareness programme should be conducted and strict action should be taken against illegal cutting of trees. The concerned agencies should take appropriate step to minimize these constraints in order to fully exploit the potential of JFM programme as there is large scope of employment generation opportunities and asset creation in rural areas living in close proximity of forest.

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