

## RESEARCH NOTES

### (I)

#### FLOW OF BENEFITS FROM JOINT FOREST MANAGEMENT (JFM) FOR POVERTY ALLEVIATION

A little more than one third of the population of the country lives below the poverty line. The concentration of poverty is more in villages adjacent to forests. Poverty has led to illiteracy and unemployment. This situation coupled with increasing demand of forest produce, particularly timber and firewood in nearby towns has accelerated the unscientific and illegal removal from forest and its sale in towns as a means of livelihood for the poor people residing near forests. The presence of middlemen/profiteers in nearby towns, which is increasing due to unemployment, further strengthens this linkage of survival of the poor with the destruction of forests. This vicious cycle of forest destruction needs to be broken. The appropriate tool for this purpose is the Joint Forest Management (JFM), which also helps in poverty alleviation.

The basic purpose of JFM is to grow/enrich the resource with people's participation, which enhances the flow of benefits and helps in poverty alleviation. This philosophy of JFM "let the forests grow better and dependent people get more and more in a sustainable way" needs to be strengthened/examined in light of flow of benefits to the community and income enhancement of dependent families for poverty alleviation. Further, supplementaries to JFM need to be discussed for poverty alleviation. There are more than 36,000 JFM Committees

protection and managing about 10 million ha forest area in the country.

#### **The demand and supply situation at forest dwellers level**

The size of a Van Samrakhyan Samiti (VSS) formed for protection and management of forest under JFM in Orissa generally varies from 60 to 200 households. Similarly forest area allotted to a VSS under JFM programme varies from 40 to 200 ha. Taking on average that a VSS of 100 households protects a forest area of 100 ha (i.e. one ha per family) under JFM the demand and supply situation is reflected in Table 1.

Where the forest area allotted to VSS comes to 1 ha per household, the sustainable yield per annum is not even adequate to meet the demand and there exist the gap of small timber, bamboo (if area allotted is non-bamboo area) and fodder. Hence for moving towards a self-reliant sustainable forest production system at the level of forest dwellers, which is absolutely essential for forest conservation, the following supplementary to JFM are essential.

#### **Supplementaries to JFM**

(i) *Improving/enhancing the yield from JFM area* : Enhancing the yield from JFM area is absolutely essential in order to sustain and improve the forest under JFM.

**Table 1***Demand and supply situation of forest produce*

Forest produce	Approx. demand/ family/annum	Yield/ family/annum	Surplus (+)/Gap (-) per annum
Small timber	3m <sup>3</sup>	1.4m <sup>3</sup>	-1.6m <sup>3</sup> per rural family
Firewood	2.5 MT	2.7 MT	+0.2 MT per family
Brushwood	2 MT	1 MT	-1 MT per family
Bamboo	16	-	16 bamboos per family
Fodder	5.5 MT	1.5 MT	3 MT per family

For this purpose, VSS needs to be trained appropriately for undertaking cleaning, pruning, thinning and NTFP collection in silviculturally correct manner. The cleaning and pruning can be taken up every year till canopy closes. After closure of canopy, thinning needs to be taken in a periodic manner as per thinning schedule prescribed in the Working Plan such as 7, 14, 20, 30, 40... years of age. Thus the micro-plan of VSS needs to be in consonance with the Working Plan prescriptions. Harvest of bamboo by VSS in JFM area on annual basis needs to be prescribed in the Working Plan and micro-plan of JFM are NTFP collection without harming the tree and without causing forest fire needs to be stressed and propagated.

(ii) *Steps for undertaking afforestation as per the gap between demand and supply* : The afforestation programme in a village should be designed keeping in view the gap between demand and supply. For example in villages where bamboo occurrence is poor or rare in JFM area allotted, bamboo needs to be propagated in household planting, agro-forestry and wasteland planting. Similarly fodder trees like *Gliricidia*, *Sesbania*, bamboo etc. need

preference in fodder scarce areas. NTFP and medicinal plantations need to be raised both in household and wasteland planting. Commercial plantation of pulp species can be raised under farm and agro-forestry. Thus appropriate household plants, farm- and agro-forestry and wasteland planting only can fulfill the gap between demand and supply. Besides, it will also generate surplus for sale nearby. The sale of surplus by VSS to nearby villagers and Forest Development Corporation (FDC) depot needs to be regulated by necessary changes in JFM Resolution and Timber Transit rules. The rate of sale of the surplus to nearby villages can be at the 50% of rate offered by FDC at their depot.

(iii) *Tacking the Employment need of Forest fringe villages* : Unemployment and destruction of forest are linked in proportion. Tacking employment need of forest fringe villages is essential to strengthen VSS and to alleviate poverty. NTFP based household activities can substantially provide employment to the forest fringe villagers as per their interest.

These activities, if organized under marketing support from district level JFM federation or other NGOs, can provide

substantial employment opportunities for removal of poverty and generation of income. These activities can be linked also with animal husbandry activities where in high yielding cattle varieties can be propagated with stall-feeding of cattle. It has been observed in Nayagarh District of Orissa that JFM practices reduced migration of labourers from villages. Further JFM practices if organized as proposed will remove under-employment and unemployment.

(iv) *Providing Environmental benefits and supporting agriculture* : The environmental benefits derived from JFM are tremendous. These benefits are directly perceptible in the form of increase in forest cover and density, more water availability for irrigation, rise in ground water level, reduction in excess temperature etc. More water availability sustains agriculture. Increased leaf litter provides scope for composting which if introduced benefits agriculture and improves income.

## Conclusion

Joint Forest Management (JFM) being

the Government policy, is being implemented in all the states. JFM Committees (JFMCs) are known by different names in different states. In Orissa, these are known as Van Samarakhyana Samitis (VSSs). Samarkhyana means protection and management. These committees have been vested with the responsibility of "Protection and Management of Forest". In lieu of the entrusted responsibility, JFMCs derive benefits from forest. The flow of benefits from forest in sustainable manner while ensuring better growth/enrichment of forest is the theme of JFM. All of the above mentioned are supplementary to JFM.

Thus JFM implementation with all supplementary activities is the need of hour. Undoubtedly the formation of JFMC in all forest fringe villages should be taken up in a time bound manner but its sustainability shall be ensured by undertaking activities which are supplementary to JFM. The flow of benefits from JFM are substantial for removal of poverty among forest fringe villagers/forest dwellers.

## References

- GoI ( ). Ministry of Environment & Forest (MoEF) website on JFM.
- ORG ( ). Wood balance in Orissa by 2000 A.D. Operations Research Group, Bhubaneswar.
- Singh, R.V. (2001). Contribution of participatory Forest Management in the livelihoods of rural communities in India. *Forest, trees and livelihoods 2001*, 2 : 159-166.
- Singh, R.V. and P. Nilsson (1998). *Silviculture and Management practices for community based forest management initiatives*. Scandia Consult Natura AB/Asia Forest Network BBSR, Orissa.
- Singh, B.P. (1989). Gramodyog development based upon Minor Forest Produce with special reference to State of Orissa. *National Seminar on Minor-Forest Produce and Tribal Development*, Institute of Deciduous Forests, Jabalpur.

B.P. Singh\*

---

\* Conservator of Forests (Policy & Planning), O/O Prl. CCF, Bhubaneswar (Orissa).