VIABILITY OF JOINT FOREST MANAGEMENT PROJECTS

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Introduction

The Ministry of Environment & Forests issued the following guide lines on 1st June 1990 regarding Joint Forest Management projects :

Developing Partnerships : Between communities and Forest Departments, facilitated by NGOs;

Access and Benefits : Only to organized communities undertaking regeneration, with equal opportunity based on willing participation;

Rights to Usufruct : All non-wood forest products and percentage share of final tree harvest to communities, subject to successful protection and conditions approved by the State;

10-years working scheme : Micro-plans detailing forest management institutional and technical operations to be developed by community management organizations with local foresters and NGOs;

Funding : From Forest Department programmes with encouragement to communities to seek funds from other agencies;

Following Rules : Strict adherence to no grazing, unauthorized cutting of trees before maturity, except as outlined in the working scheme.

Objectives of Peoples Participation

The primary objective of involvement of people in the protection, management and sharing of benefits is to check the speed of deforestation and to rehabilitate the degraded forest for multiple benefits to the society and the local communities. The purpose can not be achieved without critical analysis of the reasons that have led to this situation. According to Forest Resources Assessment 1990 carried out by FAO of the United Nations, the annual rate of deforestation in India between 1981 and 1990 was 0.6 million ha (Anon., 1995). This is twice the rate which was recorded between 1971 and 1980.

Reasons for loss of forest cover

The main reasons for this loss of forest cover are livestock grazing, lopping tree leaves for fodder and firewood extraction for local use as well as for sale in neighbouring townships.

Excessive grazing : The livestock population of India is presently about 500 million heads and this is growing annually at about 1.24%. Goats, which some environmentalists call 'locusts on hoof' are increasing at the annual rate of 3.2%. According to Forest Survey of

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India (Anon., 1996) the demand of fodder in the year 2000 is projected as 1136 million tonnes (MT) of green and 949 MT of dry fodder; the production is estimated to be 250 MT of green and 441 MT of dry fodder. Considering that 30% of the fodder comes out from the forests, this works out to about 178 MT of green and 145 MT of dry fodder. The sustained production of fodder from forests is only about 45 MT. This is sufficient for proper feeding of only about 22 million heads of livestock. As against this carrying capacity the number of animals, actually grazing is about 160 million heads. This number is about eight times more than what is sustainable. The forest areas are therefore over-grazed and the productivity keeps on declining. The sustainable grazing pressure is considered to be one cow unit per hectare while the actual pressure may be upto twenty in accessible places. While moving in forest areas these hoofed animals work as carriers of several diseases particularly, heart rot, caused by *Ganoderma lucidum*. The mortality of Sissoo plantations along the Gang canal near Sriganganagar in Rajasthan is primarily due to excessive grazing pressure of cows and buffaloes. Majority of the trees were found to be suffering from heart rot caused due to above named fungus. The recent reports of large scale mortality in Sissoo plantation reported in the plains of North India may be due to this reason.

Lopping : Lopping of leaves from standing trees for feeding of livestock is a common practice in hills of Northern and Central India. Oaks, Terminalias, Anogeisus and several other species of fodder value are on the brink of extinction. The disappearance of Banj (Oak) forests in Uttar Pradesh hills have dried up large number of water springs. Several villages suffer severe water crisis during dry months. In a study of environmental impact of grazing and lopping it was found that the water supply of Almora town in U.P. got totally broken down after the water supply catchment area was opened up for this purpose (Chaturvedi, 1993). Increasing number of species which were considered of little fodder value about two decades ago are now lopped for fodder. This includes valuable timber species like Sal, Shisham, Khair etc. The crown of green leaves is Nature's machine that produces wood through photosynthesis. *Carpinus viminia* (Hornbeam), the most valuable wood in the temperate forests of India has been lopped to extinction. Two sample plots of Banj Oak near Nainital recorded zero growth during a period of 12 years. The leaves after falling on the floor, are the major constituent of humus, which is the agency that recycles nutrients, besides protecting the vegetation from damage caused by nematodes. Recently the practice of sweeping forest floors, and transporting this biomass outside forest areas for use as energy or as fertilizer in agriculture lands has increased many fold and is drastically reducing forest growth. In a study of Social Forestry plantations in Orissa, it was found that several plantations had put on zero growth in the 4th and 5th year. The floor was swept repeatedly in all such plantations. The trees also showed top drying. The large scale mortality in Casuarina plantations in the coastal belt in Orissa is also due to sweeping of forest floors, a practice that exposes the nodules of Frankia to sunlight and thus drying them up.

Firewood demand : According to Forest Survey of India (FSI) report, the total requirement of firewood in the country is around 201 MT. Out of this roughly 103 MT comes from the forest areas (including plantations) which constitutes nearly 51%

of the total requirement, while the balance 98 MT comes from farm forestry sector including common lands (Anon., 1996). The FSI has estimated that the incremental growth of India's forests in terms of fuelwood is around 26.3 million m^3 (21 MT) per year. Of this around 17 MT is available on sustained basis. In this way, nearly 86 MT of fuelwood is being removed from the forests and plantations of India every year in excess of what they are capable of producing on sustained basis. The study has also stated that the share of wood fuel in total energy consumption increased from 54.57% to 61.10% between 1978-79 to 1992-93. The total current requirement of timber is 64 million m^3. The entire increment of timber is about 42 million m^3. The increment from natural forests will be about 29.4 million m^3, the remaining 12.6 million m^3 will come from plantations. It will thus be seen that the requirement of firewood is more than three times that of timber while sustained production is about 1/3rd. There is an excess removal of about 11.8 million m^3 of timber from the forest areas. With the ban on green felling by the Government the unauthorized removal of wood has further increased.

The Role of NGOs

The role of non-Government organizations is emphasized in community participatory projects as facilitators between the Forest Departments and the local inhabitants. The NGOs are usually headed by retired bureaucrats or politicians or other persons, who can influence Government decisions. The services of NGOs are not free. A large percentage of the funds allocated to forest re-habilitation projects goes to these organizations. Some of these NGOs are located in the type of buildings which will bring a commercial establishment to shame. Their salary structure and the facilities are at par with any Government department. The business of forming NGOs has become so attractive that several senior officers in the Government join them either after retirement or while serving. Their association facilitates the flow of funds from Government and foreign funding agencies. Several Government institutions and Universities eye these funds and have registered NGOs, within their over all set up. Most of these organizations are based either in Delhi or in State capitals and have no knowledge of any aspect of forestry or rural environment. It is questionable how these organizations are considered to be better qualified to interact with villagers than the local foresters. They have no stake whether the forestry project succeeds or fails. Their association is on contract for a short period, during which they produce some attractive booklets, that may contain nothing of real value. None of these publications contain any quantitative data that will withstand scrutiny from a competent professional. Several of such organizations are now facing meaningless investigations after the damage has been done. The malady has become so widespread that some officers controlling JFM funds themselves open NGOs in the name of their near relations, to get lion's share of these funds.

Mechanics of participation

A whole community can not be involved in decision making. Actual participants will have to be selected or elected. Tragically the decline in the standard of our public life has spread so fast and so wide that to expect the village representatives to manage the natural resources for the overall benefit of the community will be expecting

too much. People will lose interest in protection as soon as the inflow of funds stops (Mukherjee, 1997). If by God's grace a forest gets rehabilitated in course of time, some powerful persons will reap all the benefits. The poor persons involved will be silent spectators and may not even have the courage to report matters to the authorities. In any case the restoration of any forest through natural process will not take less than 50 years before they can reach viable productivity levels. We should learn from the experience of forest panchayats of Kumaun and Garhwal in U.P. hills. The institution of forest panchayats is about 80 years old and the panchayats have the powers of forest officers. After the opening up of new roads facilitating transport of timber to markets in the plains regions, many panchayat forests have been sold off. Only such forests, where the forest officers were vigilant, and the Deputy Commissioners were cooperative, could the forests be saved. Several of these panchayats were suspended in the interest of these forests. Fortunately while framing these rules a provision was incorporated that these could be superseded, if they worked against the interests of the welfare of the forest and other members of the society.

Status of Forests in Ancient India

Many persons argue that the forests have always been under the control of the local communities, before these were declared Reserved Forests by the British Government. This is not true. The Kautilya *Arthasastra* clearly mentions about Government control over all forests. "Land which cannot be used for agriculture because it is unsuited for it is called 'Bhumicchidra' a weakness in the land, i.e. inferior type of land." It is to be used either for pastures or forests. Two kinds of forests are distinguished, the 'dravyavana' for various kinds of forest produce and the 'hastivana' as a sanctuary for elephants. The latter has little economic value, the elephants being mainly intended for purposes of war. The principal produce of the 'dravyavana' would appear to be timber and wood of all kinds as well as base metals like iron, copper, lead etc. There can be no doubt that both kinds of forests belong to the State. It is laid down that a separate forest should be planted for each different type of produce. In fact it is mentioned that entirely new forests are to be planted when a new State is carved out of unoccupied territory. As to pastures, it seems that all grasslands belong to the State. The 'Vivitadhyaksa' - the superintendent of pastures - is responsible for laying out grasslands, providing wells, tanks etc. for the purpose, also for planting fruit-orchards and flower gardens in the area. The safety of cattle grazing in the pastures and the protection of caravans passing through the area under his control are also to be ensured by this officer. It seems that pasturelands are intended to be leased out to herdsmen, who may also make a living by cutting and selling the grass. It is these persons who are allowed to charge for damage caused by unauthorized cattle straying on their pasture lands (Kangle, 1965). It was only after the fall of a strong central Government that the control of forests passed on to local persons. Certain States continued to properly manage their forests, but by and large much attention was not paid for the proper upkeep of these forests as the political conditions remained fluid.

There are several instances, where forests have been protected by local persons. In such cases invariably the efforts of some person devoted to the cause of environment,

with some moral authority is involved. People like Anna Hazare, Baba Amte, Saklani etc. are rare. The successful stories of forest rehabilitation are very small in number and the area covered by these efforts is insignificant in the national context. The stories are blown out of proportion. While talking to the author in 1994 Shri Saklani of Pujargaon was so worried that all his effort may go waste after his death and his worst fear was from the persons surrounding him. The Mayavati Ashram in Pithoragarh District was started by Swami Vivekanand and has a large temperate forest of broadleaved species attached to it to safeguard its water supply. The local villagers mercilessly hack the trees for fodder and fuel. All pleading of the inhabitants of the Ashram fall on deaf ears.

Conclusions

Ground realities : The community participatory projects cannot succeed by ignoring ground realities. Stopping grazing temporarily in any area will only transfer the livestock pressure in neighbouring areas, where the rate of degradation will become faster. An impression is given, that closure of about 5 to 10 years will restore fertility and grazing can be safely resumed after this period. This is not true. The areas will require to be closed to grazing for all time if complete restoration of the site is desired. When people's cooperation is sought many inducements are given and attractive promises are made. This is done to achieve certain fixed targets of forming certain number of village protection committees. In a certain village land in Ajmer District of Rajasthan, under National Tree Growers Cooperative Project an area of about 5 hectares was closed by digging a trench and employing watchers. People were promised that the area will meet their fodder demand after 5 years. The project was funded by SIDA. Inquiry revealed that the village had a population of about 100 camels and 500 goats. It was obvious that the restored are cannot provide feed for that number even for a day.

The Joint Forest Management can succeed only if :

- Livestock population is reduced to about 10% of what is today;
- Animal husbandry is treated as a business and not permitted on forest lands;
- Litter removal from forest floors is completely banned and firewood collection from forest areas is stopped except for bona-fide family use of rural people;
- The lopping of tree leaves for fodder or any other use is totally stopped;
- After any forest area is partially recouped; management objectives should be decided in consultation with people.

The forest is a complex biological entity. It's management needs high degree of professional expertise and experience. Joint Forest Management, as is being practiced to-day is in the long run, going to benefit neither the forests, nor the local communities, nor the Nation. Some NGOs may be the only beneficiaries of such projects. In India we are over using our natural resources including water, mineral resources, clean air, fertile soil and forests. Joint Forest Management is a populist slogan to fool some people for some time. A dispassionate and unbiased analysis of facts

clearly brings out that Joint Forest Management projects are not sustainable in the long run. Such projects have greatly reduced the emphasis on scientific management of forests, impacting adversely on the technical competence of foresters.

SUMMARY

This paper contends that Joint Forest Management projects have been initiated by government and are not a spontaneous response of people to safeguard forests. The NGOs involvement is only to serve their own vested interests. Pressure of livestock grazing is at least eight times more than what the forest areas can support. Lopping of tree leaves for fodder and sweeping of forest floors has drastically reduced the growth of forests. Kautilya's *Arthasastra* clearly mentions that in times of the Maurya kings the forests and pasture lands belonged to the State. Dispassionate and unbiased analysis of present day facts show that Joint Forest Management projects are not sustainable in the long run.

संयुक्त वन प्रबन्ध परियोजनाओं की जीविष्णुता

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सारांश

संयुक्त वन प्रबन्ध परियोजनाएँ सरकार की आरम्भ कराई हुई हैं तथा वे वनों की सुरक्षा करने के लिए जनता का स्वत: स्फूर्त प्रतिचार नहीं है । इनमें गैरसरकारी संगठनों का सम्मिलित होना उनके निहित स्वार्थो को सिद्ध करने के लिए ही है । पशुओं को चराने का दबाव ही जितना वनों की उसे करा पाने की क्षमता है उसकी अपेक्षा कम से कम आठ गुना है । चारा-पत्तियों के लिए वृक्षों का झंगान किया जाने और वन तल की झाड़ू लगाने जैसी सफाई करने ने वनों की बढ़वार को बहुत ज्यादा घटा दिया है । कौटिल्य के अर्थशास्त्र में कहा गया है कि मौर्य सम्राटों के समय वन और गोचर भूमियां राजा की होती थी । आज के तथ्यों का पक्षपात रहित हो बिना पूर्वाग्रहों से विश्लेषण करने पर स्पष्ट दिख जाता है कि संयुक्त वन प्रबन्ध परियोजनाएँ लम्बे समय तक चलती नहीं रह पाएंगी ।

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