

WOMEN AND SUSTAINABLE DEVELOPMENT IN MARGINAL REGIONS : OBSERVATIONS FROM A DISTRICT OF U.P. HIMALAYA, INDIA

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ABSTRACT : The Marginal regions are in a very poor state of ecological health due to deforestation, increasing pressures of human and animal population and their needs and the greed of commercial interests. A deterioration in natural environment has a direct impact on women's lives and their culture. They are engaged in back-breaking labour from dawn to dusk to cultivate fields and obtain daily necessities of life : fuel, fodder and water. Women become the most active agents of ecological maintenance and restoration of culture especially or in the marginal regions as most of the men either go out in search of employment or are directly involved in forest or mineral exploitation. Women of marginal regions of Pauri - Garhwal district of Uttar Pradesh, India, have protested against the commercial exploitation of Himalayan forest, not only jointly with the men of their community, but on occasions even in opposition of the village men, due to different priorities in resource use. They have also been active in agitations against deforestation, large dams and mining activities. The paper presents a closer view of the study region and the role of women in its sustainable eco - development.

INTRODUCTION

The marginal regions are in a very poor state of ecological health due to deforestation, increasing pressures of human and animal population and their needs and the greed of commercial interests. A deterioration in natural environment has a direct impact on women's lives and their culture. They are engaged in back-breaking labour from dawn to dusk to cultivate fields and obtain daily necessities of life. fuel, fodder and water. Women become the most active agents of ecological maintenance and restoration of culture especially in the marginal regions as most of the men either go out in search of employment or are directly involved in forest or mineral exploitation.

Women of marginal regions of Uttarakhand of India have protested against the commercial exploitation of Himalayan forests, not only jointly with men of their community, but on occasion even in opposition of the village men, due to different priorities in resource use. They have also been active in agitations against deforestation, large dams and mining activities. The paper presents a closer view of the study region and the role of women in its sustainable eco-development.

Needless to say that Uttarakhand is a peripheral region not only in the geographical sense but peripheral in the much larger context of political economy as well. It is interesting to note that the region is currently going through a process

of popular mobilization in which development, inadequate and inappropriate to the needs of the regional society and ecosystem, is one of the key issues. In the earlier years (1970s) the region had witnessed the *Chipko* movement spear-headed by the peasant women of the area protesting against commercial exploitation of its forest resources and succeeded in securing a ten year ban on green-felling in the hills. The movement has appreciably contributed to the formation of the environmental consciousness, nationally and internationally. These are essentially movements against imposition of grossly inappropriate model of development and vertical cultural structures on the regional society. Thus, the Women of Uttarakhand, through a series of environmental actions have made a notable contribution to the ongoing debate on women and environment and the emerging perspective of eco-feminism.

THE CONCEPT

The concept of sustainable development was introduced to the policy circles in the conference on World Conservation Strategy. But it gained wider currency with the publication, of the World Commission on Environment and development (The Brundtland Commission Report under the title *Our Common Future*, WCED, 1987). Ever since it has become fashionable to qualify development with sustainable as if development alone has become a dirty word. But the phrase is used in a variety of ways and there is no common agreement about how sustainable development could be achieved, though every one seems to be advocating it.

The idea that economic growth and environmental conservation should be made compatible with each other is fairly old. It started gaining recognition from the 1960s, particularly with the publication of *Limits to Growth*. The Brundtland Commission attempted

to give a new definition to the relationship between the two. It defined sustainable development as development that meets the needs of the present without compromising the ability of the future generations to meet their own needs. In other words, it means that we can attend to the needs of the world's population now and in future as well as to the quality of environment.

Starting from this, there is an array of definitions. All these definitions could be put in two sets : firstly, the sectoral definitions applicable to a specific sector or subsector such as sustainable forestry / fishery development and like. These definitions are concerned with maintenance of the resource base as end in itself and not as a means to the ultimate goal of improving on a sustainable basis the living standards of the people. The comprehensive definitions of sustainable development do not demand the preservation of the current stocks of natural resources or any particular mix of human, physical and natural assets. As development proceeds the composition of the underlying asset base changes. For example, utilization of a given forest ecosystem implies some change in its structure and composition and thus sustainability cannot mean the identical reproduction of the ecosystem in its original state year after year. It is more a 'banking' concept. The real problem is that any static definition of sustainable development centring on the conservation of a given resource base, however equitably it is controlled, can hardly work.

In the face of the reality of the problem the challenge of poverty and the challenge of environment are still prevailing even in the developed countries. Therefore, we have to search for development paths and models that are socially just, culturally acceptable and

environmentally sustainable. The Environment, Energy and Economy: the three E's interlinked with each other, are the pivot of human well being. Energy and technology are interdependent and so are the economy and space. Man develops technology and makes use of environmental resources to improve upon his well-being and in this process he transforms economy as well as space. The environment (physical and cultural), the energy (conventional or non-conventional) and the economy consisting of people and their activities in the context of spatial organisation of settlement system, provide a viable model for development. The essential elements of the model of sustainable development are expressed as: SE-TT-LE-ME-NT-S (settlements, Fig.1) where SE-sustain environment by reorienting life styles and slowing population growth; TT-transform technology to suit socio-cultural milieu, spatio-economic system and physico-biotic resource base of the local habitat; LE-lower energy consumption received from conventional commercial sources. ME-maximise employment opportunities to accommodate structural shift in occupational structure; NT-neutralise traps of deprivation to facilitate meaningful participation by disadvantaged groups and self-reliance;and S-strengthening processes for socio-spatial equity. All these interrelated elements mutually reinforce the sustainable process of eco-development (Singh,1995).

Thus the management and conservation of the natural resource base and the orientation of technical and institutional change could lead to the attainment and continued satisfaction of human needs for present and future generations (FAO,1992). Satisfaction of the basic needs of the natural resource dependent people is of critical importance in any programme and strategy of sustainable development. It cannot be achieved through increasing deprivation of

the resource dependent people and by hitting on their survival needs. This is precisely the kind of 'conflict' that has come to be generated in the Uttarakhand region and the local women are its worst victims as they are more directly and more intensively dependent on environmental resources. There have been a few changes in the policy orientation specially with regard to the management of the forest resources, but the object of 'gender equity' continues to elude us as ever before.

THE STUDY AREA

Pauri Garhwal is one of the constituent districts of Uttarakhand, which is recognised as a distinct socio-economic region of Uttar Pradesh for the purpose of development planning and administration. Except for a narrow strip of foothill plain called Bhabar, the entire area of the district is set in the Himalayan ranges (Fig.2), The district is spread out between 29° 45' N to 30° 15' N latitude and 74° 24' to 79° 23' E longitude. The mean elevation varies between 600 and 2800m. The north eastern part of the district has the highest elevation and it tapers off roughly in the south-west, Dudhatoli being the highest point (3116 m) and Chilla near Rishikesh being the lowest (295 m). The district forms part of the basin of river Alaknanda (called after Devprayag) which is the master stream and demarcates Pauri Garhwal from Tehri-Garhwal. Nayar is the major river of Pauri District. Both the branches of the Nayar river originate from the two faces of Dudhatoli range and flow in the southern direction and meet river Ganga at Vyasghat, below Devprayag. The cross profiles of the fluvial valleys show convex forms with steep valley sides, interlocking spurs descending towards the main channels with hanging valleys, water falls and terraced agricultural fields on the gentle slopes on the valley sides.

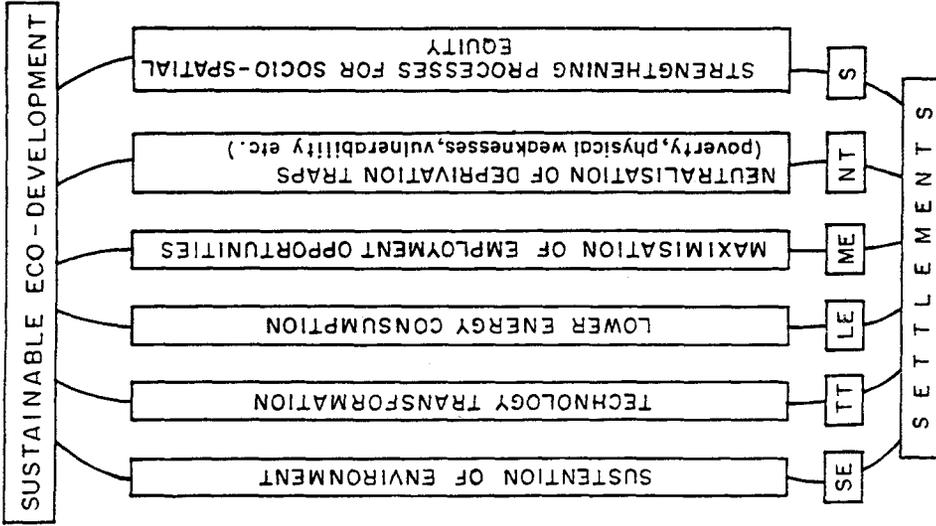


Fig.1. Integrated Strategy of Sustainable Eco-Development

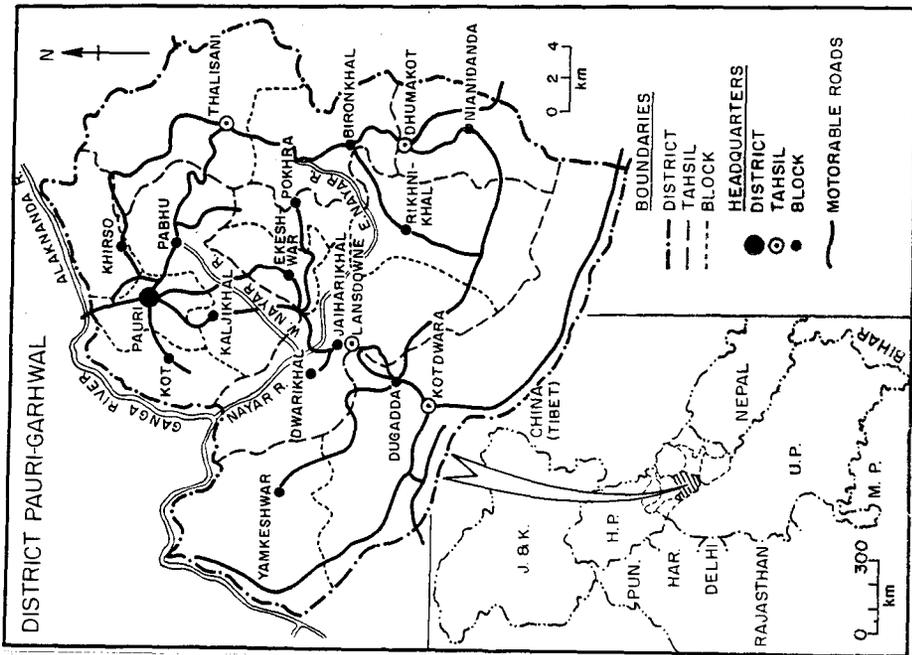


Fig. 2 : District Pauri-Garhwal

The district has widely varying climatic conditions from tropical / sub tropical to temperate and Alpine, but, for the most inhabited part, it may be termed as temperate. The Garhwal Himalayas naturally possess a vast array of bio-geographical resources varying according to the latitude, topography, climate conditions, soils, extent and direction of sunshine, which in their turn influence the land use, human settlement, and cultural patterns.

The soils vary in their texture, morphology, moisture content, chemical composition from slope to slope and valley. However, in general the soils are shallow and thin, frequently mixed with pebbles and gravel and poor in fertility, excepting in the lower valley villages and the sub-mountain plain. Thus the soils need heavy manuring in order to continue a precarious cycle of subsistence farming.

The forests dominate the bio-geographic resources and they are a valuable material wealth and ecological resource for the whole country. Recognising its ecological importance, the National Forest Policy, 1952 had recommended at least 60 per cent forest cover in the hills, but according to the latest available data it has actually shrunk to 37.49 percent. Deforestation has set off a series of natural disasters and severely undermined the peasant economy of the region.

Forests are nature's most bountiful and versatile renewable resource providing simultaneously a wide range of economic, environmental, social and aesthetic goods and services. But the forests came to be seen only as a source of revenue from the time the colonial government acquired monopoly control over them and unmitigated commercial exploitation and gross mismanagement of the Uttarakhand forests has brought us to a point of ecological disaster and when the people's movement made the

government to see the reality and realise the need for better conservation of the forest resources, it in effect reacted by blaming the local communities and curtailing their access to the non-timber forest produce (NTFP), so vital for satisfaction of their subsistence needs. Since women are more directly dependent on such forest produce due to their multiple responsibilities for gathering fuel, fodder, fibres and fertiliser (leaf - manure) and not the least water, the negative effects of deforestation are disproportionately borne by the women, and the girl children.

There is a user vs consumer conflict involved not only with the forest department, but even within the community, with the menfolk due to differing priorities in resource use. For example, if men value the forest as a source of timber, women value it more as a source of cooking fuel. The peasant women of Uttarakhand have demonstrated that women are natural 'ecology people'. The well known *chipko* movement was essentially a movement against commercial exploitation of the forest not only at the cost of the ecology, but of the subsistence needs of the local communities. By hugging the trees and transposing their bodies between the trees and the axes, they symbolically expressed their deeper affinity with nature.

According to land use out of the total area of 757986 ha a mere 12.02 percent (91142 ha) is classified as the net sown area. In the net sown area 51.10 per cent is reported as sown more than once. A mere 8.87 per cent of the net sown area is irrigated, mostly by small gravitational channels (locally called *gool*). Besides, 4.48 per cent of the area is classified as cultivable and another 5.80 per cent as barren and a hefty 59.31 per cent is shown to be under forest. But numerous studies some based on Satellite imageries, have brought out that the actual forest area is much smaller. None- the- less

forests, dominate the environment, and the agricultural resource base of the district is rather restricted.

It is generally accepted now that agriculture may not serve as the core sector for rural development planning in the hill region as it can not sustain the pressure of increasing population either through extensive or intensive cultivation. On the other hand, the mountain ecosystem is more suited to forestry and horticulture both of which are equally important for ecological stability of the hills as well as the plains below but forestry and horticulture should primarily strengthen the food security system rather than bring cash income through export of timber and fruit crops (Rupali Juyal, 1993).

WOMEN AND DEVELOPMENT

The district with an area of 5379 Km² supports a population of 682,535. The relative density of population of the district is 126Km² (as against 99 persons/Km² for the whole Garhwal division. It is important to note that the population of the district grew by 6.90 per cent only during the decades 1981-91 as compared to 15.31 per cent during 1971-81 and as against the State average of 25.48 per cent during 1981-91. The growth rate is the lowest in the State. The only other district that returned less than 10 per cent population growth is the other hill district Almora. The low growth may be explained in good part by massive outmigration due to the dwindling resource base of the district.

The other notable demographic feature of the district, which is also related to the migration phenomenon is the seemingly high or progressive sex-ratio of 1068/1000. In the total population of 682,535 the females accounted for 51.45 per cent. The district thus has the highest sex-ratio, only after the other hill district of Almora. The third ranking district, i.e. Tehri

also belongs to the hill region. But the effect of male migration in this respect becomes all the more evident from the age-group related sex-ratio in the population. The females exceeded the males only in the age-group 15-59 years (54.99%), whereas the males outnumbered the females in the 0-5 years and 60 & above age-groups. This corroborated the common observation that in many villages only the children and the aged among the men are to be seen, leaving it on the women to fend for the family.

The hill districts of Uttar Pradesh manifest a much higher female work participation rate. On the basis of the 1991 census the male and female work participation rates for Pauri-Garhwal district were returned as 40.67 and 23.66 per cent respectively, as compared to 49.68 per cent and 12.32 per cent respectively for the whole State of Uttar Pradesh. In fact the seeming difference between the male/female work participation rate is due to the fact that a much larger proportion of female workers were classified as marginal workers. It was reported that 37.01 per cent women were in the work force, 23.66 main workers and the rest marginal workers. The proportion of marginal workers was comparatively much higher for women but this should be more due to the technical import of definition, otherwise visibly there are seen many more women working than men at any hour of an average day.

It is true that with 49.44 per cent female literacy rate, the third highest in the State, the women seem to be favourably positioned on this indicator, but still the difference between male and female literacy at 33.02 per cent points (as compared to 82.46 for men) is rather marked. Girls schooling has certainly picked up in the last two decades or so, but the prevalence of illiteracy is high among women of elder generations. It is important to note that

a relatively high literacy profile by no way means any middle class status for the women.

Furthermore, most of the women workers are engaged in primary sector activities; 94.0 per cent are classified as cultivators and 1.3 per cent as agricultural labour. Excepting in other services, the participation of women in other activities including the manufacturing sector is negligible. In fact, the census data seems to miss the observed fact that dairying and animal husbandry engages a significantly large number of female workers, including the girls, which is somehow not reflected in the census data. Thus most of the female workers in the district are typically peasant women. This also points to their crucial role in the maintenance and sustainable development of the natural resource base of the communities.

Even though individual holdings are small, agriculture is a back-breaking exercise. Farming is carried out on small terraces whose soil is so poor that it need to be heavily manured before and during each crop. Dry farming condition being the general norm, even otherwise no chemical fertilizers could be used and the local farmers have to depend on cow-dung and leaf-manure for soil nutrients. This requires each household to rear cattle. The quantity of biomass material that has to be carried to the field is astounding and this task almost exclusively falls in the share of women in the traditional division of labour between men and women. In the earlier years in many parts of the district there was a practice (called 'goth') of keeping the cattle out on the distant fields during the whole summer and monsoon seasons right upto the onset of the winter season, to fertilise the fields with cow-dung and urine. This also obviated the need to carry head-loads of manure by the women to the distant fields up or down the slope. But this ecologically useful practice has almost stopped

with the massive migration of the male, as it needed cooperation among four to five families so that there were enough persons to stay in the camps to protect the cattle specially from the beasts of prey.

Thus, almost everything in the precarious mountain agriculture is left to women excepting ploughing the fields. In addition to working hours in the homes, they have also to cut and carry huge loads of grass/fodder and fuel, care for the cattle, fetch potable water for drinking as well as other domestic uses. Indeed in these, traditional peasant communities 'ghass-lakadi ka sukh' i.e. biomass reward was considered as a favourable factor in the choice of village for a daughter's marriage and by the same reasoning in the present day situation service-holding status of the would be bridegroom would be so considered, because to an appreciable extent it would mean some escape from this sort of back-breaking daily grind.

Given the heavy work burden on women, much of the domestic work is passed on to the children, specially girls, not only domestic work but even gathering fuel and fodder and fetching water. This is one of the reasons that even with the acceptance of the need for girls education fewer girls go beyond the primary school stage, as compared to boys in the community. Sheer drudgery and hardship of daily life is of the women reflected in their poor health status.

There have been no technical innovations or institutional changes that could reduce the drudgery and stress suffered by women in their work-a-day life. On the contrary, as described above, massive male migration as a coping up strategy to make survival possible in the face of the dwindling resource base, has enormously increased the women's work burden (Table - 1). At the same time, it is evident that there is hardly any manpower left behind to engage in

the task to regeneration of the ecological life support system.

Table-1

working Hours per day for Women of a Village (Syuta in Chamoli, Agrawal, 1992)

Months	No. of Working Hours
January	9.82
February	12.92
March	12.22
April	14.33
May	12.33
June	13.03
July	12.54
August	9.27
September	14.23
October	10.80
November	12.10
December	10.48

The critical place of the women both as the beneficiaries and the main agency of sustainable development in the hill region specifically can hardly be over emphasized. There are numerous grass-root examples from within the region such as the commendable work of the Dasauli Gramswarajya Sangh affiliated organisations for regeneration of the forest ecology. In fact, in numerous villages the Mahila Mandals (women's groups) have shown a great deal of initiative and organisational skills for the regeneration and management of the community

forests. There is thus a demonstrated potential for meaningful involvement of the local women in the programme and strategy of sustainable development.

CONCLUSION

Decentralised participatory management of forests has been considered since long as the only long-term solution to the problems of deforestation and environmental degradation. Subsequent to the revised Forest Policy (1988) some State governments have introduced schemes of joint forest management (JFM) in selected areas with the participation of local forest dependent people particularly tribals and women. Unfortunately, the Uttar Pradesh government is not one of them though it also has very recently announced introduction of JFM in selected districts (not yet identified) with the World Bank's financial and technical support. How it would work out is yet to be seen. Earlier also in a very few projects, local community participation was sought, as for example in the Integrated Watershed Management Project for the Doon Valley. But there is not much change noticed in the overall policy orientation and management practices. Even in those States where the JFM system has been tried women have been sidelined. Thus the most crucial dimension of sustainability of the forest resources has been missed. Neither the official framework nor the traditional community decision-making provide any institutional mechanism for addressing to the women's forest-related needs and priorities. Unless this happens sustainable development is going to remain a mere slogan especially in marginal hill regions.

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