

a framework for poverty alleviation in mountain areas

Combination of Approaches

The above description of the limitations of various mainstream approaches, strategies, and interventions for development and poverty alleviation is not meant to pronounce their futility; but what it seeks to emphasise is the very partial character of each of them, which might still work in better endowed areas with only one or two missing links in the development chain. Mountain areas, as earlier emphasised, have several links missing due to their specific physical and concomitant socioeconomic characteristics. Therefore, the strategy of development and poverty alleviation for these areas needs to integrate elements of all these approaches, with suitably varying weights depending on the specificities of different areas. Some other basic elements of a strategy for development and poverty alleviation in mountain areas, emerging from the foregoing description of the nature and sources of their underdevelopment and poverty, are outlined below (Various elements of the strategy, along with the characteristics and sources of poverty in mountain areas, are also schematically presented in Annex 3.)

Recognition of Mountain Specificities

Mountain specificities consist of a set of conditions of which one sub-set (inaccessibility, fragility and marginality) represents constraints and another subset (diversity, niche and adaptation mechanisms) opportunities for development and poverty alleviation. Opportunities offered by the latter are not realised because of the constraints imposed by the former. The crucial issue is that of finding appropriate ways of mitigating and reducing the constraining influence of the former in order to ensure sustainable use of the latter. In other words, the approach to development and poverty alleviation in mountain areas has to be two-pronged: reducing inaccessibility, minimising the impact of fragility, and mainstreaming mountain economies and societies to reduce their marginality, on the one hand; and identification, development and, use of the diverse natural endowment, comparative advantage, and human adaptation skills, on the other. The two processes have to be integrated and to go on simultaneously.

Improving Access: Physical and Social Infrastructure and Energy

It is recognised, without doubt, that improvement in access of the mountain people to markets, technologies, and information as well to social services like education and health is vital for their development and for sustaining their livelihoods. It is also, at the same time, pointed out that improving access through building of physical infrastructure, such as road networks, dam-

ages the environment and is also very expensive, particularly in relation to the prospective returns on investment. The strength of economic argument against roads in the mountains depends on the time span for assessment of returns. Rates of return would also be considerably higher than otherwise estimated if planning of roads were to be integrated with identifying and using economic potential of road catchment areas. So far as the environmental argument is concerned, it seems to have been used too often without fully examining its force. Efforts, nevertheless, need to be made to explore and use technologies and methods of constructing infrastructure that minimise environmental damage and hazards. There have been experiments to deal with the problems of costs, environment, and economic benefits of roads in mountain areas (Banskota 1997), which need to be carefully assessed from the point of view of their wider application. At the same time, it has to be recognised that it may not be possible, within the foreseeable future, to provide road access to all mountain settlements; and, therefore, alternative ways of providing physical access, such as ropeways, power driven or gravity-based, and bridges have to be seriously considered as suitable options for very remote and inaccessible areas.

Building infrastructure for the provision of access to education and health services and information, including information on technologies and markets, should generally have no adverse environmental impact. It is, however, expensive because, given low population density and the small size and thin spread of settlements, it is necessary to have more schools and health posts, say per thousand of population, than in the plains to ensure universal access. Given, however, that the mountain people have as much right to these basic services as any other groups of population, society will have to bear the cost. New frontiers opened by satellite communication, information technology, and electronic media offer opportunities for distance education, as well as for accessing information on technologies and markets in a more economical than and equally effective manner as normal channels. Use of these opportunities on a wide scale needs to be seriously explored for the benefit of mountain communities.

Access to modern forms of energy is extremely important for improvement in the quality of life and productivity of economic activities. Mountain areas suffer from a paradox in this respect: they are endowed with large amounts of energy resources, especially water, but also biomass, wind, and solar radiation; but most mountain settlements and households have no access to electricity. For example, in Nepal only about five per cent of rural households have electricity connections, figures for rural Balochistan and North East India are 23 and 25 per cent respectively (Rijal 1999). Use of water resources is often bogged down in controversies about environmental impacts of large projects amidst which the needs of mountain people get completely sidelined. Environmental problems apart, large dams, in any case, provide little benefit to upstream mountain communities. It must be ensured that dams do not pose any threat to the lives and livelihoods of mountain people and mechanisms should also be developed to see that part of the revenue earned by these projects is invested in improving the lives of mountain people. Solution to the problems of mountain areas and households, especially of those not likely to be connected to the national grid system in the near future would, however, primarily lie in the development of small-scale, decentralised systems based on local energy resources (Rijal 1998).

Resource Base: Identification, Assessment and Access

It must be clearly recognised that the development of mountain areas, particularly of the kind that is likely to lead to poverty alleviation should be based on local resources. Therefore, it is necessary to identify such resources on an area to area basis. Uniqueness and diversity are

strengths of the mountain resource base that need to be focussed upon, as these areas cannot compete with products and services produced by non-mountain areas. Also, diverse resources require different approaches to identify, develop, conserve, and use them. The unique mountain environment in terms of natural beauty, scenic grandeur, biodiversity and ruggedness of topography as well as cultural heritage constitutes a kind of resource that needs to be conserved and promoted for tourism of various types. Limited arable land, the primary resource for the livelihoods of mountain people, needs to be put to uses and technological treatments that improve its productivity; and non-cultivated, non-forested land could be used in productive ways such as for growing horticultural crops and for commercial plantation in order to combine the economic and environmental benefits. Forests could similarly be developed, conserved, and used with suitable mechanisms to meet the twin objectives of environment and economy. In the case of water resources, many mountain areas face a paradox of plenty with scarcity: huge quantities of water flow down from the rivers, often with deep gorges, but villages above them face acute scarcity of drinking and irrigation water; and, there is heavy rainfall during a few months, while for the rest of the year there is drought. Access to water for drinking and irrigation from the rivers and harvesting rainwater through the use of appropriate technologies are of crucial importance for sustaining livelihoods. On the other hand, use of water resources for power generation, especially on a small scale, decentralised basis would lead to improved well-being and productive capacities of mountain communities.

It must be noted that productive resources available in mountain areas are, more often than not, thinly spread over space, each location offering a small quantity thus limiting the scale economies of production and marketing, and are also often liable to be rapidly exhausted if used indiscriminately without attempt at conservation and regeneration. This is particularly the case of non-timber forest products such as medicinal, herbal, and aromatic plant resources. A systematic assessment of the locations and quantities of such resources is, therefore, necessary from both the economic and conservation angles. Introduction of area wise, large-scale production and regeneration of resources can be useful and effective in this respect and needs to be systematically explored.

It is obvious that the mountain people should have access to local natural resources in order to use them for productive purposes. It is seen that access is denied to them, ostensibly for conservation. Thus, they cannot use or have only restricted access to plant resources from state controlled forests or protected areas and sanctuaries, to barren non-agricultural, non-forest lands and to river waters. Many communities have lost their traditional rights to these resources, as a result of new laws relating to forests and natural resources and with the conversion of large areas into sanctuaries and reserves. Regulating use of environmentally sensitive resources is quite understandable, although it is a debatable issue whether environmental degradation is caused mainly by the actions of local communities or results from policies and actions of the state or from those of large business enterprises outside mountain areas. But it should be possible to find ways to conserve the environment without jeopardising the livelihoods of the people. It must be noted that conservation efforts may have better chances of success if the local people are associated with them and also benefit from them. Mechanisms to entrust the task of managing, conserving, and using natural resources to local communities have been successful in some cases and could be emulated on a wider scale. Use of incentives and disincentives within suitable legal and institutional frameworks should be preferred over instrumentalities such as total bans and denial of access.

Collective Institutions

It is often forgotten that most productive resources are collectively, rather than privately owned in mountain areas. Leaving aside a small fraction of the land area under cultivation and a small proportion of land under non-agricultural uses owned by individual households, mostly in urban areas, all land, forests, pastures, and water resources are under state or community ownership. Therefore, livelihoods are, to a great extent, dependent on state policies and actions and the capability of communities to manage and use these resources and share the benefits among their members. Also, private actions of households in the use of resources under their control have significant externalities, both positive and negative, on the well-being of the communities. The role of communities and community-based organisations, therefore, is extremely important, not only for managing common resources, resolving conflicts, and determining access to and benefits from these resources, but also as channels for voicing the interests, concerns, and claims of mountain communities. In the specific sphere of productive activities, the small scale of production of individual households and units warrants that producers organise themselves to gain access to technology and inputs and marketing products in order to reduce transaction costs per unit of production and improve bargaining power to realise lower procurement costs and better product prices.

Area-based Approach

Diversity in ecological conditions and resource endowment and lack of connectivity with other areas within mountain regions warrants an area-wise focus in development. This is also likely to be more effective than the household-based targetting approach in view of the area, rather than household characteristics constituting the main sources of poverty, as argued earlier. Delineation of an area for strategic and programme interventions could best be done in mountain areas on the basis of a watershed approach, but it is necessary to combine socioeconomic features with physical characteristics to define and make a watershed the basis for planning of development and interventions to alleviate poverty (Papola 1996). At the same time, it must be recognised that a watershed, small or large, is a part of a wider economic space with linkages and inter-dependence with other spatial units. In this context, it is important to explore and develop rural-urban linkages and the role of small towns as market and service centres. These towns have a vital role as links between villages and cities located far away from most mountain areas. From the economic perspective, it would be useful to graduate from a watershed to a market-shed approach for development planning with a town in the centre providing market linkages to villages in the hinterland.

Use of Spatial Methodologies

Unlike in the plains, space is characterised by discontinuities and extreme and frequent variations in mountain areas. Therefore, any approach with a linear treatment of space will not be suitable here. Methodologies for resource assessment and development planning have, therefore, to be highly sensitive to spatial variations. Mapping techniques using tools like Geographical Information Systems (GIS), therefore, are of particular significance for mountain areas. Maximum use should be made of such methodologies in portraying living conditions and poverty, geographical distribution of the resource base, and infrastructure and market linkages for planning and implementing development and poverty alleviation programmes in mountain areas.

Role of the State

In the current context of emphasis on greater reliance on markets for development and poverty alleviation and only a minimalist role for the state as facilitator, mountain areas are in danger

of further marginalisation insofar as market failures afflict these areas more than other naturally and infrastructurally better endowed areas. The state, therefore, needs to continue not only investing in infrastructure and services, but also to evolve policies in favour of these areas to ensure that markets function better and that the risks and effects of market failures are minimised. Ensuring food security will be essential for facilitating diversification of mountain economies into market-oriented development of products with comparative advantage, and the state will need to play a role in this respect in the initial period until markets become profitable enough for private trade to take over. Pro-mountain policies can be well justified not merely on the grounds of equity, but much more on the plea that mountain people need to be compensated for the deprivation and cost involved in conserving an environment that is necessary for sustaining development and livelihoods not only in mountain areas, but also of the people and economies in downstream areas. In other words, investments made by governments and society as a whole, including the private sector, in the development of mountain areas and for the welfare of mountain people need to be seen as the price of environmental services rendered by them rather than as dole outs and subsidies in the conventional sense.

Analysis and Advocacy

Such an approach towards development of mountain areas and poverty alleviation among mountain people can emerge only if the government, civil society, private sector and international organisations are convinced that the fates of wider national and global economies and societies are linked to a great extent with those of mountain areas and people. It is, therefore, important that the issues of the valuation of mountain resources and costs and benefits of the mountain environment to local communities and for wider national and global development and sustenance, as well as highland-lowland linkages, are intensively and extensively investigated; their results widely shared with governments, private sector, and the international community; and appropriate mechanisms evolved for rational and equitable sharing of costs and benefits.