

5. Development Interventions

Irrespective of whether the poverty of mountain people has increased or has acquired greater visibility, poverty issues have become part of the conscious concern of the State in recent decades. Consequently, although to a lesser extent than in the plains, the extent of development interventions in mountain areas has increased significantly in recent decades in the HKH Region (Banskota and Jodha 1992a). As a background to "the State owning the poverty" (Sharma and Partap 1993), and acting against it, the following issues should be considered.

The Perceptions underlying Interventions

If one looks through planning and development documents, including those relating to individual projects (funded internally or externally), the State's sense of poverty and of other problems in mountain areas are reflected through the following perceptions (Jodha et al. 1992, Banskota and Jodha 1992a, and Jodha 1991).

In the comparative context of the mainstream situation (i.e., the plains), economic conditions in the mountains are considered to be poor; productivity levels and production/consumption options are judged to be low and inferior respectively; mountain people are seen to be isolated and to have limited access to State-sponsored welfare and income/employment opportunities; and the mountain areas are seen to have rich potentials that are not being harnessed. However, the State (i.e., its policy-makers) does not seem to recognise and use an important invisible 'niche' of mountain habitats, i.e., the rationale behind the traditional resource management systems, which is a product of people's accumulated experiences through generations of trial and error.

Guided by the concern for poverty and for the backwardness of mountain people; the need to extend the State's welfare net to mountain people; the integration of mountain areas and people into the mainstream economy; and the need to harness the unique potential of mountain areas (hydropower, timber, etc) for national development, the States in the HKH Region (on their own or through external aid) have introduced several development interventions in recent decades. The latter could directly or indirectly relax the poverty-promoting constraints generated by mountain specificities which traditional communities find difficult to manage. The State is better equipped to do so as it has access to better technologies, skilled manpower, financial resources, macro-level perspectives, and the legal powers to accomplish the aforesaid tasks. However, one crucial thing that the State does not seem to have is the clear understanding of mountain specificities, or rather their imperatives. Nor is it concerned about acquiring it by understanding the traditional systems. This lack of understanding and 'feel' for mountain realities can be perceived as a product of the inaccessibility, marginality, diversity, etc characterising mountain areas; as they greatly contributed to information and knowledge gaps about mountains which blinded the perspectives of the mainstream decision-makers vis a vis mountain areas. Consequently, development interventions usually focussed on symptoms (e.g., low productivity, or underutilised 'niche') but could not understand the underlying driving forces or processes, e.g., interlinkages between 'niche' and fragility or between fragility and diversity, that needed more careful and integrated approaches to, say, productivity

promotion through outright increase in the use intensity of fragile land, or replacement of nature's regenerative processes by high, energy-intensive external inputs. Similarly, due to interlinkages between fragility and inaccessibility and accessibility and resource extraction rates, the increased accessibility in mountain areas is not only a matter of creating a network of roads but also of managing its side effects on fragile slopes and easily over-exploitable 'niche'.

Key Features of Development Interventions

The above factors influenced the approach, design, and consequences of public interventions in mountain areas (Jodha 1992). They are reflected through certain key features. These are given below.

- i) Extension of Generalised Approaches. As a product of decision-makers' perceptions, training, background, and biases, most of the development interventions or anti-poverty measures in mountain areas are largely unmodified extensions of programmes evolved for non-mountain areas. Whether one looks at the 'food first' focus and discouragement of 'sideline activities' (e.g., diversification) in the pre-1978 policies of China or the land reforms programme from the 1950s and integrated rural development programmes from the 1980s onwards in India or HYV-based agricultural production programmes in any of the HKH countries, a common feature is the imposition of externally evolved approaches on mountain areas. Their inappropriateness and ineffectiveness partly explain the persistence of poverty in mountain areas (Banskota and Jodha 1992a and Sanwal 1989).
- ii) Missing Mountain Perspective. Relative to the above, another feature of development interventions is their disregard of the imperatives of mountain specificities in their design and implementation which are usually based on experiences in non-mountain areas. This applies to practically all activities ranging from the choice of norms and yardsticks for investment allocation and performance evaluation to the choice of technologies, administrative arrangement, design of support services, etc (Jodha 1990, Banskota and Jodha 1992a and 1992b). A few concrete examples can be given. Whereas the fragility and marginality of mountain resources call for extensive types of land use, production programmes promote intensification even on fragile slopes with the help of subsidies and extension advice. Similarly, although diversity calls for a focus on interlinked land-based activities with multiple goals, the programmes encourage narrow specifications using high energy-intensive external inputs. Sectoral development projects segregate activities (e.g., crop, livestock, horticulture, forestry) which are organically interlinked in the mountains. The same can be said to apply to infrastructural development when it fails to balance the vulnerability of fragile slopes with the design and density of roads. While inaccessibility and diversity call for a decentralised and participatory approach, most of the support services (credit, extension, etc) are centralised and rigidly structured (Jodha 1990 and 1991 and Banskota and Jodha 1992a).
- iii) Implicit Negative Orientation. In keeping with the concerns and approach of the State towards mountain areas (e.g., relating to the backwardness and poverty of mountain areas, their integration with the mainstream systems, harnessing of mountain 'niche', etc), development interventions acquire a specific focus and orientation which have serious negative side effects on the mountain areas and on their people. These attributes could be categorised as inappropriate overemphasis on: (a) intensification, (b) integration, (c) extraction, and (d) substitution or impositions (Jodha 1991).

- (a) **Intensification** of mountain resource use is the hallmark of all programmes directed towards raising productivity, especially the productivity of mountain agriculture. However, their focus is on short-term considerations, guided by pressure to produce more even from marginal and fragile resources. Thus, the intensification approach becomes indiscriminate. This disregards the value of diversification and the complementarity of intensive and extensive types of land use; productivity of the total system (covering biomass as well); and the importance of resource regenerative processes. The final consequence of indiscriminate intensification means resource degradation, giving rise to a vicious circle of degradation - poverty (Jodha 1991 and 1992).
- (b) **Integration** of mountain areas with mainstream plains or urban economies through physical infrastructure, market links, and legal and administrative processes is a useful approach to the reduction of inaccessibility and of its consequences. But the uncontrolled side effects of integration have several negative implications which add to the pressure of external demands on mountain resources and lead to their overextraction. As a result of the marginality characteristics of mountain areas and the marginalisation of mountain people, the situation becomes dominated by mainstream concerns. The age-old resource management systems, regenerative folk agronomy, recycling and sharing systems, and community control and regulation of resource use are marginalised and disappear in due course (Jodha 1991). The poverty implications of such changes hardly need elaboration. The creation of a dual sector economy, represented by commercialised, accessible areas and subsistence-oriented distant areas, is another side effect of unbalanced integration.
- (c) **Extraction**, although a phenomenon related to the intensification and integration processes, is separately listed because our focus here is on over-exploitation of mountain 'niche'. The products and activities with a high comparative advantage for mountain areas, such as irrigation, hydropower, timber, tourism, and minerals, are obvious examples; where guided by the needs of mainstream economies (and mountains), governed by market signals, and the State's revenue requirements, the resources and surpluses of mountain areas are syphoned out at unequal terms of exchange and compensation for local communities. Owing to the specific nature of technological, administrative, and fiscal measures involved, there are few local multiplier effects from such projects. Hence, the trickle-down benefits in terms of increased income/employment options for local people are quite limited. The environmental and resource-degrading implications of the large-scale extraction of mountain 'niche', finally influencing the people's livelihood systems, is another poverty-related consequence of over-extraction. Another related issue is that the bulk of public investment, whether for infrastructure or for other activities, is concentrated in the areas with high potential for extraction in order to help mainstream, urban economies (Banskota and Jodha 1992b).
- (d) **Substitution** (or impositions) implies the discarding of the traditional measures, both technological and institutional, which were evolved by mountain communities for their sustainable survival. Besides the several examples already mentioned in different contexts, we may further add that development interventions have tried to substitute people's systems with government measures; the natural processes of resource regeneration with bio-chemical subsidies; diversification by narrow specialisation; folk agronomic knowledge with externally evolved R & D based technologies; and self-help and collective sharing with external relief (Jodha 1991).

Productivity and poverty removal require that traditional knowledge be complemented by modern knowledge. This aspect is not a strong point in development interventions.

- iv) **Emerging Paradoxes.** As a consequence of the abovementioned features, most development interventions generate quite paradoxical situations. The biggest of the visible paradoxes is that the measures directed to relax poverty-generating circumstances (e.g., land use intensification and high input use for higher agricultural productivity, large-scale harnessing of mountain 'niche', and physical and market integration for generating more income options) also contribute to the processes that tend to accentuate poverty in mountain areas. Table 3 summarises such situations with reference to the interventions focussed on managing poverty-generating constraints.

Table 3 lists the measures or development interventions directed towards raising productivity, harnessing mountain 'niche', and bringing about appropriate gains through trade and exchange. Without belittling their success in a number of areas, it should be added that, owing to their short-term focus and their emphasis on symptoms rather than on basic processes (associated with mountain specificities and their interlinkages), these interventions in many mountain areas are inducing the process of change; which is leading to the emergence of unsustainability and prospects of increased poverty. This is because although the interventions fully match the requirements in terms of responses to poverty-generating constraints (e.g., increased resource-use intensity to raise productivity or harness mountain 'niche' for high income and investable surplus), they fail, at the same time, to respond to the imperatives of resource characteristics (i.e., mountain specificities and their interlinkages). Thus, once again, it is a case of the missing mountain perspective which in turn results in the paradox of development interventions leading to a situation in which anti-poverty measures accentuate poverty. This explains the emerging dominant scenario in mountain areas where, despite increased development efforts, poverty is increasing, especially in terms of health, the productivity of the resource base, and the per capita availability of products (Jodha 1992). ICIMOD has put together nearly two dozen indicators of such measurable or verifiable negative changes, and these are described as indicators of unsustainability (Jodha 1992 and Shrestha 1992).

The Way Out

This calls for a fresh look at the development strategies for mountain areas. The linchpin of the new strategies has to be mountain development with a mountain perspective (Jodha 1991 and 1992).

A few important considerations for such a development strategy are given here.

- (a) **An Integrated Approach.** A full understanding of mountain specificities and their imperatives is the first important step. Since most of the mountain specificities have common biophysical foundations, the handling of one also affects the other. We have mentioned already the example of roads that reduce inaccessibility, but which concomitantly adversely affect the fragile slopes, pace and pattern of extraction, and finally the depletion of mountain 'niche'; as well as the narrow specialisation in agriculture which adversely affects diversity and the sustainability of resource use. In fact the interrelationships of mountain specificities serve as a compelling basis for an integrated approach to mountain development (Jodha 1990 and 1992).

Table 3: The Paradox of Poverty Alleviating Strategies Accentuating Poverty in Mountain Areas

Poverty-alleviation Measures	Poverty-accentuating Processes	The Reasons behind the Paradox
<p>A. Productivity Promotion</p> <p>High land use intensity; high energy-intensive external input use; high payoff options; narrow specialisation; subsidised support services</p>	<p>Depletion of land resources; increased bio-chemical, economic subsidisation; reduced diversification, resource regeneration and recycling; increased external dependency; breakdown of the systemic integrity of total production systems; emergence of a dual-sector economy with associated inequities; operation of poverty-induced and profitability-induced resource depletion process</p>	<p>Disregard of mountain specificities, e.g., fragility, diversity, marginality, and their interrelationship; discard of the rationale of indigenous resource management practices, institutional arrangements regulating resource use, community obligations, self-provisioning, sharing, etc</p>
<p>B. Harnessing Mountain 'Niche'</p> <p>Large-scale commercial use of the mountain potential (water, hydropower, timber, tourism, horticulture), infrastructural network; technological, fiscal support systems</p>	<p>Choice of scale, technology, support systems with limited local level multiplier effects; environment-degrading side effects; marginalisation of multiple petty 'niche' and people's livelihood systems; infrastructure, concentrated in high potential areas; resource degradation exceeding resource regeneration; creation of pockets of prosperity only</p>	<p>Segregation of high potential areas/activities from total ecosystems; with little concern for fragility and diversity as well as integrity of ecosystem/resource base; insensitivity to long-term consequences and interrelationships of different mountain specificities</p>
<p>C. Integration/Exchange Links</p> <p>Physical and market integration; product processing and exchange; diversification in income sources, gains of trade, exchange; network of the communication infrastructure</p>	<p>Focus on selective areas and products; increased pressure of unregulated external demand, causing resource extraction, degradation; insensitivity to resource limitation; terms of exchange unfavourable; bulk of the subsistence producers by-passed; marginalisation of petty exchange systems</p>	<p>Disregard of imperatives of marginality, inaccessibility, and diversity characteristics; insensitive to carrying capacity of mountain resources; failure to have integrated approach balancing profitability and protection; little regulation of demand pressures</p>

- (b) The Rationale of Folk Knowledge. Despite better technological and fiscal support and the legal authority of the State, development decision-makers cannot replace the mountain people's understanding of mountain conditions and their imperatives. At the same time, because of low productivity and other changed contexts, traditional production systems are neither an answer to the current problems of poverty nor can they be rehabilitated in their old form. However, their rationale is amply relevant today. Hence, a need for understanding this rationale and integrating it into development interventions to avoid or minimise the "paradoxes" mentioned earlier (Jodha and Partap 1992).
- (c) A Two-pronged Approach. An important aspect of the diversity of mountain areas relates to the degree of accessibility. Depending upon the other conditions, such as fragility, marginality, resource diversity, and 'niche', the accessible and remote or inaccessible areas require a different focus. Building on the already visible process of transformation in accessible areas, agro-business oriented measures may need greater emphasis in accessible areas. ICIMOD studies in some areas of Himachal Pradesh (India), Ningnan County (West Sichuan, China), and Ilam district (Nepal), to cite a few cases, have demonstrated that it is possible to raise income and welfare options for the people through commercialisation and diversification without undue resource degradation. For inaccessible areas, a focus on biomass productivity and stability, with an orientation towards harnessing specific 'niche' for commercial purposes, seems to be the better strategy. However, external, commercial linkages will help mountain people only if they are equitable and unexploitative. The investment, R & D, and support service logistics will have to be designed in keeping with the two-pronged approach.
- (d) De-marginalisation of Mountain People/Areas. One of the primary reasons for the disregard of mountain specificities by mainstream decision-makers is the 'marginal status' of mountain areas, mountain production systems, mountain people, and their knowledge vis a vis their counterparts in the plains'/urban areas. As a result of marginality, not only do mountain people count least in the decision-making processes affecting the mountains, but they are also subject to exploitation by means of unfavourable terms of exchange when mountain areas/people are integrated into the mainstream situation. Lipton (1977) elaborates upon such issues in a wider context. This could be a long process with several political implications, yet the de-marginalisation of mountain people is an essential step in mountain development with a mountain perspective. In concrete terms, it may involve the mountain people's command over mountain resources and consideration of their knowledge and concerns while designing development interventions, ensuring a fair share in gains from harnessing their 'niche' with external assistance. This also implies the empowerment of groups (such as mountain women), which are key managers of the environment and resources at village level.

The ongoing work at ICIMOD is focussed on redesigning the thinking process, project formulation, and field action incorporating the above (a to d) considerations.