

CHALLENGES AND OPPORTUNITIES FOR SUSTAINABLE MOUNTAIN DEVELOPMENT IN SOUTH AND SOUTHEAST ASIA: STRATEGIC PERSPECTIVES

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Introduction

An increasing amount of research pursued ever since the 1970s has revealed gradual deterioration of environmental and socio-economic conditions in the mountains of South and Southeast Asia. Yet not much attention has been paid to addressing these problems (Ives et al., 1997). In the wake of preparations being made to launch a worldwide campaign for conservation and development of mountains, this paper highlights the major challenges that lie ahead. This is followed by an assessment of opportunities conducive to facing challenges.

Major challenges

Though information is still inadequate, much has already been learned about the mountains in South and Southeast Asia. Past research findings indicate the following challenges in the pursuit of sustainable conservation and development of those mountains.

Self-governance

One way or other mountain people in South and Southeast Asian countries have been governed by politicians biased towards the plain regions, and this tendency is reinforced by highly centralized decision-making systems. As a result, mountains are not allocated a fair share of the development budget (Ives et al., 1997). Instead mountain resources, including water, are being utilized for the benefit of mainly lowland settlers without any payment to mountain people.

The existing system cannot be changed as long as mountain people are not delegated full rights of self-governance, which is not merely provision of local government with some administrative and developmental responsibilities. Genuine self-governance should allow mountain people to have full control over resource development and allocation as per their own needs and aspirations.

Resource allocation

As sources of important natural resources like hydropower, mountains deserve a fair share of revenue generated from the use of these resources. Determining a fair share is a very complicated and possibly a sensitive matter, as in many instances, benefits from mountain resources transcend national boundaries. The most contentious issues to be resolved are the benefits and criteria to be taken into account to determine the share, and development of a mechanism facilitating its transfer to mountain communities. In Laos, provision has been made to transfer not less than one percent of the revenue generated from hydroelectricity by the proposed Nam Ngum II hydropower project to the watershed development fund

(CPWAM/ADB, 1999). Arbitrarily fixed, this cannot be considered as a fair share of the benefit to be generated by the project.

Institutional adaptations

With population growth and increasing market integration, changes in traditional social and organizational structures are taking place in South and Southeast Asian mountains. Besides, the gradual growth of an educated population with little interest in farming and more inclination towards service and industrial activities, is going to have profound influence on traditional values and systems that may eventually undermine the existence of traditional institutions. In such a situation, the traditional institutions will find it difficult to continue functioning in the same way that they are functioning nowadays. In some of the mountain villages of Nepal, where people with a high amount of remittances and pensions have migrated to cities, lands are undergoing degradation due to the breakdown of traditional land management practices (Paudel, 2001).

The existing institutions have to adapt themselves to the changing situation to ensure their lasting role in conservation and development. Adaptation would require change in their organizational and functional systems and technical capability. In some instances, new types of institutional arrangements have to be made to cope with the changing situation.

Economic integration

Partly because of lack of transportation facilities, the majority of mountains in South and Southeast Asia remain economically isolated from relatively prosperous lowlands. In some areas, where such facilities are available, the overall terms of trade are not in the mountain people's favor due primarily to very limited production and service activities (Dani, 1991). Therefore, the challenge is how to enable mountain people to offer goods and services in exchange for commodities being imported from lowlands.

While infrastructure development is a prerequisite for economic integration, thousands of settlements scattered all over mountains are a serious constraint. It would require a huge amount of investment to integrate all settlements effectively; this is beyond the affordability of most countries in the region. The question arises as to how to facilitate the agglomeration of settlements for their effective integration with lowland economies.

Population pressure

Despite governments' efforts to control it, population in all mountain regions of South and Southeast Asia is still growing at an annual average rate of more than 2.5 percent. As a result, population pressure on land resources is steadily increasing. With the exception of Bhutan, in all mountain areas of South Asia, per capita landholdings are estimated to be less than 0.2 hectare (Sharma and Pratap, 1994); the situation in Southeast Asia is similar. Landholdings will continue to be miniaturized as there is not much scope for the expansion of agricultural lands. Causes of ineffectiveness of population programs are well known, but serious efforts have not been made to address them.

Population growth control alone cannot help to alleviate pressure on land resources and to improve living conditions. Landholdings on which the overwhelming majority of people depend for sustenance are so small that they will not be able to satisfy even subsistence requirements of the majority of people, even if necessary support services are provided to enhance land productivity (Thapa, 1990). Therefore,

promotion of non-farming activities in suitable locations is indispensable for sustainable mountain development.

Land use system

In most areas, lands are being utilized for arable agriculture, which has been the major cause of land degradation (Thapa, 1990; Paudel, 2001). Sustainable conservation and utilization of agricultural lands requires a gradual shift from arable to non-arable types of agriculture in suitable locations. Facilitating this change is a serious challenge that requires a multi-pronged strategy conducive to developing locational potentials, including livestock raising and non-timber forest products, and promotion of non-farming activities.

The experience gained in some of the Gurung villages in Nepal indicates that when mountain people are provided with better alternative income opportunities, they can easily abandon their traditional agricultural practices (Paudel, 2001). This provides an opportunity to promote land use practices in suitable locations.

Local capacity strengthening

Outsiders can facilitate development, but it is the mountain people themselves who have to play the major role. Mountain people have adapted to changing socio-economic situations using the skills, knowledge and resources that they have got. Yet their quality of life is very poor. In some instances, people lack the knowledge required to produce commodities and offer services as per market demand. In other instances, they may have innovative ideas, but have not been able to pursue what they want due to lack of resources and management capability. This demands the provision of a mechanism which would play a catalyst role in strengthening settlers' technological, managerial and entrepreneurial capacities.

Opportunities

Mountains do not need subsidies for their conservation and development. What they need is a fair share of benefits from their resources being utilized by outsiders and support conducive to tapping locational opportunities. According to their basic nature, these opportunities can be broadly grouped as resources, policies and institutions, and technologies.

Resources

As elsewhere, mountains in South and Southeast Asian countries are a mosaic of very diverse natural and cultural resources. These resources can be broadly categorized as follows:

1. Natural resources, comprising forest, water and land, biodiversity and the scenic beauty created by the mosaic of topography and natural resources.
2. Cultural resources, including diverse ethnic and tribal communities with different languages, customs, traditions and economic activities.
3. Human resources with a long-established tradition of hard work and adaptations to a changing resource base and socio-economic conditions.

Besides environmental conservation, sustainable development and management of these resources can help to generate a substantial amount of employment and income opportunities for mountain people. With regard to natural resources, there is a need to institutionalize a mechanism that would enable mountain communities to get a fair share of benefits from the utilization of these resources.

Policies and institutions

Though not effectively enforced yet, the majority of governments in the region have adopted decentralization policies that authorize local governments to make decision on conservation and development activities. Under the framework of these policies, mountain people – through the support of concerned national and international organizations – can put pressure on governments for their full autonomy in matters of conservation and development.

Likewise, there are many old and new local institutions evolved to implement and regulate social and economic activities. These institutions can assist government line agencies to prepare and execute conservation and development activities effectively, provided they are strengthened through their formal recognition as development partners and provision of necessary institutional capability development programs.

Technology

Having been physically and socio-economically isolated for a long period, mountain people have developed a multitude of locationally suitable technologies for natural resource management and the pursuit of economic activities, including farming. Further improvement and promotion of these technologies through appropriate research and effective extension services would help to cut the cost of basic research substantially. Above all, being locally developed the improved local technologies will be widely adopted by mountain people.

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