

Background to the Workshop

The significance of off - farm employment can be understood in the context of the increasing population and labour force and the growing difficulties of conventional land - based activities to generate adequate levels of gainful employment. A major thrust of integrated mountain development should be toward activities that reduce direct dependency on land, are increasingly market oriented, and are economically and environmentally desirable.

Population Growth in the Hills

After centuries of relatively marginal changes in the size of population, hill areas within the last few decades have experienced dramatic increases in population. Nepal has nearly doubled its population during the past thirty years and is likely to continue to add more than a million people in the hills every decade. The evidence from Indian hill areas also strongly suggests phenomenal growth rates of the hill population in recent decades. In China also people in the hills continue to increase in large numbers.

Significant population increase in the Hindu Kush - Himalaya and the Hengduan Mountains has been possible primarily on account of success in reducing mortality rates. While rates of increase are not uniform, population growth is increasingly identified as a significant variable in the overall socioeconomic and environmental changes occurring in the hills. In the absence of concomitant socioeconomic changes, the implications of rapid population growth are not difficult to imagine. Increasing demands for various necessities exacerbate pressures on limited resources, leading to environmental deterioration. Employment generation becomes increasingly difficult with limited technological and productivity changes. The combined manifestations of rapid population growth clearly indicate worsening economic and environmental conditions.

The most significant aspect of this demographic change is reflected in the increase of labour force. Those who will enter the labour force during the next decade have already been born, and unless efforts are made to provide gainful employment to them, pressures on the environment are likely to increase. With half a million new entrants into the labour force by 1990 in the Nepalese hills alone, rapid expansion of employment opportunities is the only answer to the growing poverty. To the extent that poverty and environmental degradation are interrelated, it is also an important solution to environmental problems.

Pressures on Land - based Resources :

Breakdown in Agriculture - Livestock - Forest Systems

Conventional employment options in hill agricultural systems are unable to cope with the problems. Further large - scale expansion of cultivated lands in the hills is no longer economically or environmentally desirable given the already serious degradation of marginal lands brought under the plough. With decreasing size of holdings and declining productivity of hill agriculture, the capacity of the subsistence agricultural economy to provide food, fuel, fodder, and employment to the growing hill population is increasingly difficult. Any extrapolation regarding food, fuel, fodder supply, and employment generation, provides a disconcerting picture of the future for many hill areas.

The increasing pressures on land - based resources, particularly arable land, forests, and pastures, is a common feature in the otherwise heterogeneous environment of the Hindu Kush - Himalaya. While the types of pressures, their intensity, and sources vary greatly, the inevitable consequence of growing pressures on land resources has been to disrupt the conventional linkages and balance developed by the hill people between land use, land resources, and land - based activities. Difficulty in traditional transfers of nutrients to agriculture from livestock and forests has adversely influenced growth in productivity of agriculture. Similarly, livestock productivity has been seriously affected due to shortages of fodder as bovine and human populations compete for the same land - based resources. Widespread deforestation has significantly worsened the fuelwood availability in the hills.

Due to these significant changes and the fact that a large number of people in the hills continue to depend upon these land - based resources for survival, the sustainability and productivity of land resources is a fundamental issue in hill development. A substantial reduction in the current pressures on land - based resources through development of alternative avenues of employment is the first major step in this respect. While this does not rule out the potential for developing productivity of hill agriculture and land - based resources, it underscores the need for concomitant developments in off - farm sources of income and employment.

Integrated Mountain Development and Off - Farm Employment Generation

The concept of carrying capacity in the hills refers to the growing asymmetry in the interrelations between population, labour supply, stock of accessible natural resources, and prevailing levels of technological capability. Under existing conditions, relatively simple calculations of demand - supply reveal declining availability of key resources and consequent decreasing standards of living. Any further increase in demand within relatively inelastic supply conditions can only result in progressive impoverishment, of both the human and physical environment. It is therefore argued that reducing demand pressures is almost a precondition for any positive influence of development programmes, as supply constraints change slowly.

Arguments for integrated mountain development, on the other hand, are based on questions regarding the static nature of the carrying capacity concept ; it is only one of the possible scenarios. The experience of many areas, including some mountain regions, strongly indicates that with appropriate policies, carrying capacity can be increased, resulting in higher standards of living. The fact that such possibilities have not been realised in large parts of the Hindu Kush - Himalaya is not so much a matter of the intrinsic nature of mountain areas, but has more to do with policy and programme options and their implementation. Integrated mountain development strategies underscore the substantial scope for productivity enhancement. These changes would be brought about by a new series of economic and environmental interrelations for sustained improvements in the hill economy. The basic question then is how incomes can be improved. In this context, issues such as rural - urban linkages, the role of small towns, development of alternative energy sources, and human and natural resource development, acquire growing significance.

Integrated mountain development approaches should not be merely multisectoral programmes. These programmes must be specifically designed to promote spatial, ecological, and economic integration. Spatial integration promotes the development of specialisation and growth in trade and exchange between rural and urban areas and also between highlands and lowlands. Ecological and economic integration encourages the growth of those activities that are not only economically advantageous but also ecologically sound. Development of off - farm activities has an important contribution to make in all of these integration processes, as this can promote specialisation, diversification, and exchange interrelations between households, and between regions. It is through such developments that sustained improvements in productivity can be achieved in the hills, contributing more effectively to high rates of structural transformation of the labour force than has been historically possible.

Review of Off - Farm Employment

In recognition of these important and complex issues regarding off - farm employment generation in the mountains, ICIMOD has organised state - of - the - art reviews in five countries of the Region. Neither the recognition of these problems nor measures to promote off - farm activities are new in this area ; all the governments of the Region have organised many programmes and activities to generate non - agricultural jobs in the hills and reduce pressures on the land. It was expected that a review of these efforts would serve as a starting point for ICIMOD's work in off - farm employment generation. These reviews cover a wide range of issues and areas, clearly indicating that planned and unplanned changes in the development of off - farm activities are already in process ^[1].

1. Further details of the reviews are presented in Annex 1.

Reviews of off - farm employment in Bhutan have shown that the organised non - agricultural sector is very small at present. However, its future growth and development could be affected by growth rates in the skilled labour force of the hill population (Bhadra and Alirol).

The experiences in Ningxia Autonomous Region of China illustrate that planned resettlement helped to improve the living conditions of the hill people (Li Wenpu). Reviews regarding the mountain people of Sichuan Province in China suggest that while both unemployment and illiteracy levels are high, the implementation of the responsibility and contract system after 1978 affecting ownership of produce and retention of profits has rapidly led to a transformation of the labour force from agricultural to non - agricultural activities. (He Naiwei and Zhang Yuhuan). Similarly, a study for Wenchuan County in China has highlighted the critical role played by town - run enterprises for rapid shifts of the labour force to non - agricultural activities. (Lin Qinfa) Studies on the shift of agricultural labour force in the Autonomous Region of Tibet have maintained that despite Tibet's wealth of natural resources (minerals, geothermal energy, etc.) for generating off - farm work, efforts have been severely constrained by lack of suitable technology, limited capital, and shortages of a skilled labour force (Lan Jin and Deng Yiming). The mountain areas of Yunnan Province revealed shifts from cereal crops to cash crops, forestry, animal husbandry, and tertiary sector activities in response to recent changes in policies relating to ownership of produce and marketing (Zhang Xiaoshan and Deng Yiming).

A number of reviews on the experiences of Himachal Pradesh, Uttar Pradesh, and Darjeeling in India have highlighted the recent efforts made to enhance the productivity of land - based activities by switching from cereal grains to the higher income - generating activities of sericulture, dairying, and horticulture (T. N. Dhar; Arun Sud; Bhaskar Ghose). It was further noted that the main constraints facing the diversification of employment opportunities are related to inadequate levels of infrastructure and skills.

The exercises on Nepal dealing with various dimensions of off - farm employment indicate a number of interesting issues. While infrastructure development is a significant employment generator, full potential is not being experienced on account of the choices of technology and outflow of resources from project areas (Pradhan). Migration from the hills is playing an increasingly important role in supplementing agricultural incomes in the hills, but many of the traditional outlets for migrants are no longer available (Sharma). In some cases, it was found that the share of off - farm incomes has increased with decreasing land holdings, returns from off - farm work are relatively lower than farm work, and women play a major role in off - farm work in the hills (Bhattarai). An examination of the pattern of spatial linkages in Nuwakot District of Nepal suggests a strong lowland or valley bias in the development of off - farm activities (Banskota). Another interesting phenomenon in Nepal has been the increasing significance of agricultural activities in many small hill towns which were initially established to provide off - farm services (Manandhar).

