

The Workshop

The purpose of the Workshop was to identify known and unknown factors concerning rural mountain economies outside areas of cultivation as the basis for defining a research agenda for the next three years. The concern was not, however, with the academic study of the mountain economy for its own sake but rather as the means to (i) facilitate the evaluation of public policy and projects in mountain areas ; and (ii) assist in making public intervention more accurately targeted and economically efficient.

More specifically, the objectives of the Workshop were :

- To review on a comparative basis the off - farm employment experiences and problems in the Hindu - Kush Himalaya
- To identify a set of research priorities and issues in the field of off-farm employment generation

Within the objectives, the Workshop was organised around four themes :

- Major Off - Farm Activities in the Hills
- Inter - Sectoral and Spatial Linkages
- Human Resource Development
- Policies and Programmes

Specific topics were introduced by the speakers, highlighting project and programme experience. The presentations were followed by brief comments by a panel of discussants, and finally, floor discussion.

Major Off - Farm Activities in the Hills

Off - farm activities in the hills have been largely unrecorded and therefore underestimated. Censuses continue to categorise the majority of rural hill households as agricultural, although it is becoming increasingly evident that off - farm employment and income support are as important as

on - farm work. Studies of rural hill areas in Nepal have indicated that agriculture contributes only 23 per cent of the total income of farm households, while off - farm activities provide as much as 57 per cent of the total income.^[1] Similar findings have been reported for rural areas in other countries.^[2] Based upon limited insights about off - farm activities, it is possible to group them into two broad categories : the **formal** and the **informal**. The formal off - farm sector is small and includes non - agricultural activities (mainly manufacturing and processing) that are fairly well integrated with the organised sector. The informal sector is much larger and covers practically all the off - land activities in rural hill areas. These are largely unregistered, and usually family operated on a seasonal or part - time basis.

Discussions of the **informal** sector concentrated on two major areas : trade and marketing, and women's activities. Regarding trade and marketing, it was mentioned that there are large trading networks supplying basic goods across this entire mountain chain. Underlying these trading networks are handicraft activities, manufacturing, trail maintenance, portage, trade linkages with towns and market centres, and even concentrations of capital. Trading networks in the hills have therefore been large - scale employers. Trade has created networks of spatial exchange, facilitated the penetration of monetisation of isolated mountain valleys, and provided a basis for credit. Trade obviously has important linkages with the development of agriculture, manufacturing, and tourism, for without active trading support these sectors stagnate easily ; trade is the stimulus for their growth and diversification. The composition of trade also indicates changes in the living conditions of the people and is therefore an important, though relatively simple, indicator to monitor. Despite their encompassing role, the significance of trade networks has not yet caught the attention of either policy makers or professionals. Knowledge about many aspects of this dynamic informal sector is limited, and the important question is how trade can become a basis for integrated policy designed not simply to expand trade, but to stimulate manufacturing and support the development of other sectors such as agriculture, forestry and infrastructure.

With reference to trading in the hills, it was noted that until recently this was an important form of employment for the people of the northern Hindu Kush - Himalaya in Pakistan, India, Nepal, Tibet, and Bhutan. Underlying the trading relations was a complex web of social, economic, and financial interactions. Improved accessibility and changing sources of traded goods have changed both the composition of trade and the people in trading activities. There has been a shift in the whole pattern of trade which has adversely affected northern peoples, who now have to seek other forms of employment. With respect to apple production in Himachal Pradesh, India, it is evident

1. Agricultural Project Services Centre (APROSC), *Rapti Household Baseline Survey*, Kathmandu, 1981, p. 105.
2. R. Islam, Non - Farm Employment in Rural Asia : Issues and Evidence, *The Asian Employment Programme* (ILO - ARTEP)

that marketing and its related issues such as who controls the trade, transport arrangements, packaging, collection, credit, extension, and processing have proved to be more critical in determining income and employment generation than the production itself.

Regarding the role of women's activities in the informal sector, it was emphasised that women form the major labour force of the unorganised sector in the hills. Women have a very high participation rate in large parts of the hills, compared with many plains areas. The contribution and role of women's income and employment generating activities have not been adequately understood. Development activities suitable for women require a better understanding of their present role in the hill economies.

Points raised with respect to the informal sector included the fact that it is not realistic to concentrate only on trade without also focusing on production and productivity. In the hills, the constraints appear far more critical for production and productivity, and if these could be removed, trade development should follow.

Other issues discussed were related to the question of accessibility. It was mentioned that improvement in accessibility has been the major stimulus for expansion and development of trade and markets.

Regarding small - scale industrial activities in the hills, Nepal's recent experience with the Cottage and Small Industries Project in a number of hill areas was highlighted. After five years of experience, the project has succeeded in enhancing incomes and employment, with one of the highest repayment rates in the country for bank loans. The critical innovation of this project has been to remove the need for collateral security for bank loans. The assets created by the project developed under the loans are used as collateral. Banks have been motivated to support the development of cottage and small - scale industries in the hills through guarantee of 75 per cent of the credit provided. The project also emphasises the role of the marketing agent who is responsible for not only providing the raw materials but also purchasing the product. The types of activities supported are woollen goods, cotton textiles, metal works, and agro - based and forest industries. Key problems have been the relatively slow delivery of inputs and lack of markets for outputs. There are also problems relating to the choice of technology and the location of small manufacturing units.

Concerning the problems of industrial development in Tibet, it was pointed out that the three major constraints are the strong subsistence orientation of rural economies, the poor infrastructure base, and the lack of improved technology and skilled manpower. The experience of the development of dairy industry in Darjeeling was highlighted as an important example of how to create employment in the hills. This industry has provided direct employment to 15,000 milk producers for most of whom this is a full - time job. The entire programme has been managed through cooperative societies that have succeeded in promoting off - land activities like input

delivery, collection, and marketing. However, rapid expansion of the activity created pressures on forests because of feed supply constraints. Similarly, the tea plantations were also introducing better management and labour relations for increasing productivity. Both of these experiences emphasise the critical role of markets and better organisation of the labour force in making a major transition from subsistence to off - farm production activities. Not enough attention has been given to understanding marketing problems in the hill economy.

Other comments referred to the need for identifying areas and activities where the hills have a comparative advantage. It was argued that while some smaller industries have limited potential in the hills, the advantage is in development of the trading and service sectors.

The point was made that improved access hastens the demise of traditional non - agricultural activities and particularly traditional cottage industries. Many problems exist for the future of cottage industries and the only rational approach would be to regard them as intermediate steps, eventually to be replaced by small - scale enterprises that are competitive, productive, and spatially decentralised, but with strong forward and backward linkages.

The problems of extractive industries in the hills and their environmental impact figured extensively in the discussions. The environmentalist position, that all mining industries in the hills should be stopped, was questioned. The knowledge and technology to deal with environmental pollution are already available and should be more extensively used ; employment in these industries has had favourable effects, and alternative employment opportunities may not be easily developed.

Inter - Sectoral and Spatial Linkages

Inter - sectoral linkages in the context of off - farm employment generation in the hills were examined through discussions of on - farm and off - farm linkages and the interrelations between infrastructure development and growth of production activities. Issues regarding spatial linkages were elaborated through discussions of the role and function of small towns in the hills. In many cases, the expected developmental effects fail to be generated because investment and supporting activities have not adequately promoted the growth of these critical linkages.

Discussion regarding on - farm and off - farm linkages highlighted the problem of structural transformation of the labour force in the hills. The occupational structure and the continuation of rapid growth in labour force clearly indicate that large parts of the mountains in the Region will remain predominantly agricultural and rural, well into the twenty - first century. The process of transforming the economic structure of an agricultural economy is going to be disappointingly slow. The informal sector, which includes the broad category of " rural non - farm activities " must be expanded vigorously

to accommodate many of the new entrants to the rural labour force. Since most of the processing and manufacturing industries in the rural areas are agro - based, increases in agricultural production can greatly support these industries and also support employment promotion through relieving the wage - goods constraints. It is also recognised that a well - designed strategy of development, consistent with agro - ecological systems, can greatly enhance employment in the mountain region. Thus, agricultural growth can support non - farm employment generation through : substantial demand for consumer goods and services ; providing raw material for agro - industries and livestock - based industries ; food - for - work programmes like irrigation canals and rural transportation ; and industrial inputs like fertiliser, pesticides, and implements.

A number of other points referred to the problems associated with changes and intensification of hill farming. Expansion in horticulture and vegetable production has resulted in increased pressure on forestry because of the wood used for packaging and stakes to support plants. Examples of relatively low gains in productivity from further intensification of hill agriculture were highlighted. A good deal remains to be done regarding hill agriculture but the crises in the hills are already provoking important changes. These changes underscore the urgent need for development of off - farm activities, if the hill people currently leaving these mountains are to avoid exchanging one type of misery for another. ARTEP's (Asian Regional Team for Employment Promotion) study of labour absorption in Asian agriculture also indicated limited scope for further labour absorption in grain - based agriculture, and this conclusion may be valid for the hill areas also.

Commenting on the structural transformation of the labour force, it was expressed that factors behind fairly rapid shifts from agricultural to non agricultural activities are not well understood. There are indeed many instances when different factors have brought about rapid shifts. Land reform has played a critical role in some countries. The post - cultural revolution changes and particularly the implementation of the new responsibility system in China has played a central role in the transfer from an agricultural to a non - agricultural labour force. The study of transformation at more disaggregated levels, in order to understand the role of different factors, was noted to be important.

Quite apart from problems of measuring, or even precisely identifying, particular types of linkages, in many instances linkages are determined by the underlying sociopolitical relationships, so that the linkages can only be adequately reviewed in the context of the overall political economy.

The presentation on **infrastructure development** focused on the experience of eight hill districts in Uttar Pradesh, India, with respect to roads and small scale power generation. Both power and transport sectors have continued to receive high priority in the development plans for the hills in Uttar Pradesh. While roads have been seen as lifelines for the hill areas, development of cheap power has been considered critical as an alternative source of energy to

firewood. The focus on power development in the hills has been on propagating small - scale hydroelectric plants, which not only have shorter gestation periods but are also environmentally less damaging than larger projects. Furthermore, the scope for retaining benefits locally is greater. Studies of electrified villages reveal that the use of electricity is restricted to domestic lights and the availability of cheap electricity has not replaced the use of firewood. Only a few manufacturing units are using electricity and there has been no obvious diversification of economic activities.

With regard to the impact of roads, some differences in the composition of economic activities between the linked and non - linked villages have occurred. The linked villages in the hills display fewer traditional activities and a greater number of modern activities as compared with the non - linked villages. No changes are marked in the agriculture of the villages. Comparing the hill situation of linked areas with that of the plains, the linked villages in the plains show increasing shares of their local products in trade and relatively higher prices for their products. No such change is evident in the hills. Roads have increased the mobility of hill people but this has generally served to increase movements for purchase of outside goods and services not related with growth in exports of the hills.

Observations from these two experiences indicate that limitations of infrastructure development in the hill areas are integrally related with the nature and structure of the hill economies. The fact that the production economy of the hills has been unable to develop even after infrastructure developments is probably a very significant factor, indicating the need for moving away from traditional agricultural activities. Despite the limited effects of infrastructure on the hill economy, people continue to accord it highest priority ; reasons for this might be more social than economic.

The discussions raised a number of questions about the interpretation of the impact of infrastructure development. It was argued that it is difficult to explain the increasing demand for roads and power supply in the hills only on the basis of social factors. There must be many important economic factors requiring more careful examination. The issue of the time factor was also raised, and it was indicated that some evaluations may be premature in view of the time required for growth in positive benefits from infrastructure development. The fact that ancillary investments have not followed infrastructure investments could also be responsible for limited production effects on the hill economy. Other points related to the reduction in drudgery due to infrastructure development and the need for understanding labour displacement effects of investments in roads, as well as their total employment effects. The fact that transport development has made a closed economy into an open one has had both positive and negative consequences and it may be of great value to study these changes carefully.

The issues of spatial linkages that characterise the hill and mountain districts of the Region and the function and development of small towns, were further topics of discussion. The oldest small towns tended to be located along

trade routes, or in areas with seats of government. Religious institutions, education, and health services also arose there, and thus provided a cluster of activities and services. In addition, recreation and economic activities of traditional crafts needed by the mountain economy have been developed in these towns.

The history of many small towns in Nepal indicates that they originally started as seats of local government and slowly have become mainly agricultural townships. Recently, with the development of infrastructure, new growth in town development has been evident in certain areas of the hills of Nepal. Migration to these towns is increasing and their service centre role is becoming important for rural areas. The settlement patterns of the Tibetan plateau and the mountain areas of Yunnan were briefly presented. Encouragement has been provided by government loans to start shops or trading posts, thus motivating migration to small towns.

Policies relating to small towns can promote the development of non-farm sectors of employment in a number of ways. First, policies and programmes can develop the provision of agricultural inputs, marketing institutions, and a cluster of basic health and educational services in small towns. Second, these towns may be supported by other activities such as hotels, tea shops, tourist lodges, trade, and recreation.

A brief overview of the Planned Urbanisation Workshop ^[1] and the pending Rural - Urban Linkages Programme in six valley areas was presented. The valley areas of Lhasa, Peshawar, Srinagar, Dun Valley, Kathmandu, and Thimphu were included in the discussions. The Workshop emphasised economic linkages, environmental considerations, and institutional structures.

Human Resource Development

Development should not be seen merely in terms of maximising incomes, or of rapidly transforming the traditional economy. Emphasis must be placed on human resource development (HRD) as an end in itself, as well as a factor contributing to raising living standards. Thus, human resources should be developed through the enhancement of skills to improve access to income and employment opportunities, and also to provide opportunities to develop full manpower potential of the labour force.

It is worth noting that the success of economies such as those of Switzerland and Japan has been founded not on the exploitation of abundant natural resources but rather on the skills and talents of the population; human resources have been developed over an extended period. In Nepal, this process is still at an early stage; despite the achievement of increasing literacy five-fold, the national literacy level is still only 30 per cent.

1. Refer to ICIMOD Workshop report, *Towns in the Mountains*, for details.

In recent decades, national governments and other agencies have been active in a number of sectors concerned with the social well - being of the people in the hills, e.g., the provision of formal education, improvements in health care, and the installation of potable water supplies. Complementing these activities have been efforts to enhance appropriate skills, relating to specific development initiatives such as the construction of infrastructure, tourism, and trekking, as well as training in functional literacy and (particularly for women) nutrition and health education.

An example of a specific initiative in this sector is the programme in China concerned with marketing training in rural areas. This is aimed at assisting the poorer and less - educated farmers to benefit from recent changes in the organisation of the rural economy. But skill development programmes are not always successful. It has been found that the agricultural training provided to many ex-Gurkha servicemen in Nepal was often of little benefit when they returned to their villages.

Despite such efforts at upgrading skills, there remains a marked shortage of technical manpower in the hills. This is particularly evident in urban settlements, where rural migrants are compelled to work in unskilled jobs, while technical manpower for well - paid skilled and semi - skilled jobs is imported from the plains. An anomalous situation has arisen whereby those attending existing training programmes seek office jobs, leaving the demand for technical personnel unsatisfied.

While this is one aspect of the problem, another is that in many instances available skills have not been correctly utilised. Certain sections of the hill people traditionally supplying technical skills which have now been made redundant through socioeconomic processes are not finding alternative employment opportunities. The still larger problem, however, is the rapid growth of a labour force seeking employment outside conventional sectors. Imparting appropriate skills and providing gainful employment to this labour force will undoubtedly be the major challenge in the field of human resource development for the hill economies.

The development of hill areas cannot overlook the prevailing conditions of the economy and the environment. These create the need for special skills and capabilities that have yet to be carefully evaluated. In this context, the predominant involvement of women in low - skilled, low - paid but back - breaking jobs in the hills was identified as a major issue in the formulation of human resource development policies. The need for training programmes for women in a large number of activities, where productivity improvements are possible, have to be more clearly identified. There is also a need to train women for jobs which are not traditional roles defined by gender.

Policies and Programmes

Overviews on policies and programmes related to off - farm employment were presented for Nepal, India, China, and Bangladesh. Policies of the countries in the Region generally indicate that off - land economic activities would not be able to absorb the majority of new entrants to the labour force, and hence various forms of intensification of agriculture, horticulture, livestock - rearing, afforestation, and soil and water conservation activities, are being advocated.

India for the first time, in its Seventh Plan, has included a chapter on Hill Area Development. The guiding principles are : to secure a basic life support system with judicious utilisation of natural resources ; infrastructure development ; and restoration of the ecology. In China, since 1978, the new responsibility system has resulted in the peasants' motivation to undertake new enterprises, many of which are off - land activities, with vigorous development of the rural economy. Nevertheless, the evidence of both permanent and seasonal migration away from the hills in all countries except Bangladesh signifies the people's verdict that better employment and income generating opportunities are available outside the hills and mountains.

In Nepal, the first six periodic plans focused on infrastructure construction and maintenance. By the end of the Fifth Plan, a policy of using labour - intensive techniques for construction was evolved. The policy for Hill Area Development in India also emphasises infrastructure development, while recognising the ecological dangers of such construction activities. The construction of large dams also may be dangerous and the benefits need to be carefully weighed against costs and the disrupting effects on the hill people. In the new five - year plan for the Chittagong Hill Tracts Board of Bangladesh, road construction connecting all three *Upa - Zilas* (administrative units below the district) and distributing electricity constitutes over 60 per cent of the budget. In the three Chinese mountain areas, the development of communication and transport was advocated. The state is responsible for trunk routes, and the local authorities for the feeder routes, with the help of individuals.

The policy of self - sufficiency in foodgrains in the hill and mountain regions has been criticised. In China, this has led to deforestation and only marginal increases with severe degradation of the ecology of the mountain areas. In Nepal, the policy of foodgrain self - sufficiency in hill and mountain districts has caused marginal land to be brought under the plough, without great increases in food production. India's policy advocates diversity of land use which is most ecologically suitable : horticulture, agriculture, and fisheries in Himachal ; soil conservation, forestry, and pasture in U. P. ; and poultry, sericulture, and tea in Darjeeling. In short, a general concern in current national policies of the Hindu Kush - Himalaya is the restoration of the ecological balance and caution with extending plough cultivation.

Special programmes directed toward poorer sections of the population have resulted in a wide variety of both land - based and off - land economic activities. In the Himalayan States and Union Territories of India, between 1980 and 1985, there was a shift away from the primary sector (agriculture and animal husbandry) to the secondary and tertiary sectors. Nepal's experience with the Small Farmers Development Programme, although still heavily involved in animal husbandry investment, reflects a shift toward off - land activities. The Bangladesh Grameen Bank activities now emphasise cottage industries. The potential of these special programmes of primarily small and short - term loans to absorb hill people in non - land based activities should be promoted. If policy about these special programmes is directed toward non - farm employment, rapid changes could be achieved.

The emphasis on skill formation and development of technical manpower discussed under human resource development is related to a variety of policy implications. In China, three of the four policies for mountain regions focus on skill formation : adult technical training in varied trades and businesses ; sending mountain people to more advanced areas to learn ; and organising cooperatives to send surplus labour seasonally or year - round for jobs elsewhere as a means of learning skills and accumulating funds. In Nepal, training programmes for vocational skills primarily meet demands for development programmes, but there are also programmes designed to support income - generating schemes for women. In India, one of the special programmes for self - employment has a training component. The voluntary movements like *Chipko* (meaning " to embrace ") emphasise training local people to be sensitised to ecological dangers. In principle, the countries of the Region have very important programmes of skill formation and have recognised the need for this in the mountain areas.