Chapter 12 Enterprise Development for Poverty Alleviation with Sustainable Resource Management: Trends, Experiences and Policies in the HKH Region

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12.1 Introduction: Rationale, Concept and Nature of Enterprise Development

The rationale

Economies of mountain areas have traditionally been dominated by subsistence agriculture. Limited non-food needs have mostly been met by remittances from outmigrants. Mountain economies have thus remained at a low level of equilibrium between needs and supplies, mostly endogenously maintained with only limited exogenous inputs. Over the years, this equilibrium has been seriously disturbed and has become unstable on account of the following two trends: one, a rapidly growing population in mountain areas has necessitated extension of food crop cultivation to marginal and fragile lands and forest areas, resulting in a decline in the average fertility of land, thus making subsistence agriculture both ecologically and economically unsustainable. Environmental degradation and poverty, with food insufficiency as its major manifestation, have consequently become widespread characteristics of mountain areas. Secondly, improvements in access to other areas, with the development of transport and communications, have exposed the mountain people to the vastly different and improved lifestyles of people in other naturally better endowed and developmentally advanced regions, thus raising their aspirations. This situation warrants not only alleviation of poverty among the population, but a progressive and sustainable increase in their levels of income. Yet this cannot be guaranteed by continuation of dependence on subsistence agriculture; and, therefore, diversification of their economic activities from food-centred subsistence agriculture to more gainful use of limited arable land for growing high-value commercial crops and to non-agricultural and non-land based activities becomes necessary in this context.

The concept

A shift in the mode of production, from being principally subsistence oriented to being focused on income from sale, brings the market into the picture and, therefore, implies that the producers are ready to bear market-related risks, besides whatever natural and man-made risks and uncertainties are generally involved in production. That is why enterprise, the risk-bearing function of producers, becomes an essential element in any diversification of economic activities away from subsistence agriculture. In common parlance, however, the term enterprise is often used to mean production unit, product, and the risk-bearing function. In the context of predominantly agricultural economies, development of non-agricultural products has often been described as the only form of development of enterprises. That is, however, too limiting a use of the term enterprise is seen in terms of the introduction of commercial crops within agriculture, and diversification outside agriculture mostly takes place only as a subsequent development.

In view of the fact that the risk absorbing capacity of entrepreneurs in mountain areas is limited by the small size of their resource base and inaccessibility to markets, and the scope for diversification of economic activities is limited because of the small, scattered, and often fragile resource base, enterprises in these areas have to be based primarily on products that

- i) use the minimum amount of limited arable land;
- ii) do not severely disturb ecological balance by large-scale and indiscriminate use of environmentally sensitive and non-renewable or not easily renewable resources;
- iii) are not heavy, bulky, and perishable entailing high transport costs and loss in transit;
- iv) do not use heavy raw materials that need to be imported from outside the region;
- v) are not in direct competition with products from more advantageous locations in the plains; but are based on comparative advantages (niche) in their production in mountain areas; and
- vi) are of value-adding rather than of a mere extracting nature, in order to maximise economic returns per unit of resources used locally.

Conditions for enterprise development

Identification of products and activities is only the first, though very crucial, step in the development of enterprises in mountain areas. Inaccessibility, thin spread of resources and materials, lack of forward and backward linkages, and deficiencies in infrastructure and services render commercial production extremely risky. Selection of appropriate products and activities may reduce the risk to a certain extent. Still, the risks associated with marketing products are high due to the problems of scale of production and access to markets. Therefore, provision of infrastructure and institutional and organisational mechanisms for supply of inputs and for marketing, with a view to ensuring a minimum scale of operations, becomes essential for the survival and growth of enterprises in mountain areas.

Another necessary condition for development of enterprises for commercial production in mountain areas is the provision of food security. An important reason for mountain people to continue food-based subsistence agriculture is the lack of food from outside because of inaccessibility and lack of purchasing power. Thus, subsistence agriculture has been primarily a strategy for survival. Food security, in the sense of local self-sufficiency in food production is, in any case, now seriously threatened because of the increasing population and stagnant productivity of limited arable land. It has, therefore, to be seen not in terms of local production of all the required food, but in terms of income to purchase food and its physical availability in local markets. With increasing incomes and, therefore, assured demand, private trade could take care of food supplies, but, in the initial phases of switching over from food production to commercial enterprises, food security may have to be maintained in inaccessible and poor mountain areas through public provision of food, possibly at subsidised prices.

12.2 Stages of Development and Products of Mountain Enterprises

Given the limitations of resources and their use, inaccessibility and isolation, and under-developed infrastructure and markets, the choice of commodities that could be advantageously produced in mountain areas is obviously limited. Yet, diversity of resources and the capacity of mountain people to improvise, innovate, and persevere has led to the prevalence of a highly varied product structure in many mountain areas, albeit on a small scale and mostly without significant remunerative returns. Most of them have been produced either for self use, like the food crops, or for meeting the basic consumption and production needs of local communities, either exchanged under the traditional systems of mutual obligations, or sold to acquire cash for buying items for basic needs not produced on the home farm. Thus, the village blacksmith made and repaired agricultural and household tools and implements; the oil presser crushed farmers' oilseeds to produce oil; craftspeople made mats, baskets, and other items of household use from local agricultural and forest produce; carpenters prepared timber for house construction and made household furniture; and priests rendered religious and ceremonial services for farming households. Traditionally, they received food in exchange from the farmers, not based on economic values alone but as part of community obligations. Profit or increased incomes was rarely a motive in such a production system.

The above 'idyllic' portrait of a mountain community is, however, no longer true of increasingly large areas of the mountains. Improved accessibility resulting from development of transport and communications, increasing movements of people in and out of these regions, and, consequently, greater exposure to lifestyles, technologies, and markets outside have led to increased aspirations and opportunities for diversified production structures to raise income levels. The nature of diversification in an area depends on its resource base and the degree of accessibility. But, historically, the following stages in enterprise development have been followed in most mountain areas.

Livestock-based enterprises

Since subsistence farmers keep some livestock to support agriculture (for ploughing and supply of manure) and for essential consumption items (milk, milk products, and, occasionally, meat), the most natural option they identify for raising their incomes in the wake of declining adequacy of agriculture to meet their needs is animal husbandry. The scope for development of livestock-based enterprises for products such as milk, milk products, and meat, of course, depends on the proximity and transport links to the market. On the other hand, development of enterprises in woollen products will, in addition, depend on the competitive quality of local wool, skills for production of woollen products, and marketing arrangements.

Enterprises based on diversified farming

With improvements in accessibility, farmers are willing to risk diversion of their limited land - their basic source of survival - from low-yield food crops to high-value items like vegetables and fruit and, further, to plantation crops like tea and to cultivation of spices. These items involve relatively greater marketing risks than animal husbandry products, as they require more market information, which may often be imperfect and also involve wider markets with unpredictable fluctuations in demand and prices. Therefore, development of enterprises based on livestock depends on a minimum level of development of transport, communication, and marketing channels.

Nature and natural resource-based enterprises

Natural resources have always played a pivotal role in the survival strategy of mountain people. For most of their basic needs — food, housing, and health — they have depended on natural resources. The idea that these resources could also be used to increase incomes primarily came from external influences. In fact, it is the people from outside who have received most benefit from the commercial use of mountain natural resources such as water, forests, and non-timber forest produce like medicinal herbs and plants. Mountain tourism, a unique nature-based product of the climate,

scenic beauty, and adventure niche of the mountains has also had little beneficial impact on local people; as is the case of commerce based on timber, hydroelectricity, and non-timber forest produce, both the operators and beneficiaries of tourism have been outsiders with relatively better knowledge, resourcefulness, and enterprise than the mountain people. It is only recently, with development of transport and communications, greater knowledge, and awareness, and also the need to look for new avenues of income, that mountain people have ventured into these lines of activity. But now, greater awareness about the environmental sensitivity of mountain natural resources and, therefore, restrictions on their use have placed the onus for their protection and conservation on mountain people.

Value-addition by processing and manufacturing

In most of the above cases, enterprises engage in growing, extracting, and collection of material with very little processing. As such, even when the material is used subsequently to make high-value products, incomes derived by the mountain people from the sale of primary produce are meagre. Once, however, an area is quite well connected by transport and communications and access to technology and markets improves, processing takes place locally and income derived from the processed output increases significantly. In addition such development also reduces the risk of loss in transit of such perishable items as milk, vegetables, and fruit. Mountain people and those interested and engaged in the development of mountain areas would like to see more and more mountain enterprises engaged in processing and value-adding activities, but the process of change is slow and difficult due to inaccessibility and the small scale and dispersed availability and production of primary materials, as also to the lack of adequate attention to mountain-specific issues in the policies framed by the mainstream governments.

These stages in enterprise development may not necessarily occur in the sequence described above. Interventions resulting in improvements in accessibility, opening up of new markets, scientific and technological breakthroughs, availability of energy, and new organisational and institutional initiatives have led to speedy transformation of the pattern of activities and enterprises from those confined to growing and collection of material to meet essential local requirements to processing for wider and growing markets in some mountain areas. In addition, many mountain areas also have activities and enterprises based on traditional local skills that co-exist with any of the above to a varying extent and varying potentials for income generation. They are mostly, but not always, based on local raw materials, cultural traditions, and past reputation. They include handicrafts, special woollen products such as carpets, and, also, in some areas, metal crafts and cultural artifacts.

12.3 Products and Stages of Development of Enterprises in the HKH

It is in the above context and understanding that an attempt has been made in the rest of this paper to portray the trends and structure of enterprises for various products in different areas of the Hindu Kush-Himalayan region. The paper is based primarily on a series of case studies recently undertaken to document the experiences of enterprise development covering different areas and some specific products and aspects such as credit, training, and policies relating to enterprise development in mountain areas in Bangladesh, China, India, Nepal, and Pakistan. It also draws upon findings from the earlier work of ICIMOD on diversification of farming systems, off-farm employment, and tourism.

Product structure of enterprises

Enterprises in most mountain areas in the HKH region are generally in an underdeveloped, if not primitive, stage. They produce a wide variety of goods and services primarily to cater to the subsistence needs of local people. Most of them are tiny in size and household based in character. In the majority of cases, enterprise activities are secondary to the main household vocation, viz; agriculture, and are carried out to earn cash to buy non-farm products that are basic necessities. Most production is, thus, for local markets; and earning some income by using otherwise idle hours, rather than profit, is the main motive.

In such an economic environment characterised by a general lack of 'enterprise', the attempts to use local or regional niches for production of items having a comparative advantage with a view to selling them in outside markets are still very limited. As a result, the product structure of mountain enterprises is dominated by such activities as small-scale processing, trade, and repair services. This is true of most of Nepal, Chittagong Hill Tracts (CHT) in Bangladesh, most hilly and mountainous areas of Pakistan, and north-eastern areas of India.

For example, in the **CHT**, 97% of enterprises in the non-farm sector are in the microenterprise sector (i.e., each enterprise is employing less than 10 workers). Trading enterprises, including hotels and restaurants, dominate the micro-enterprise scene, accounting for 59% of the total. Enterprises in community and personal services come next with another 29%. Manufacturing enterprises account for nine per cent and financial and business services three per cent. Most (55%) enterprises are located in urban areas, but manufacturing enterprises are more urban-oriented (62%) (Mondal 1997).

Micro-enterprises in the manufacturing sector are distributed widely over more than 20 major product groups. Wood and other forest product based enterprises, wooden furniture, plywood, saw mills, and bamboo and cane products account for the largest group, around one-third of the total, bamboo and cane products alone for 22%. The next largest number of enterprises is in tailoring (23%). Rice mills, sweetmeats, hand tools, and jewellery are other important categories, each accounting for at least five per cent of the total enterprises. On the whole, the product structure is dominated by two broad groups - forest products and food products. Besides forest-based products, honey processing is the only other mountain-specific product accounting for about 2.5% of all enterprises. Handlooms, however, are the most widespread

enterprises in the CHT. There are as many as around 50,000 units, with about 67,000 looms, employing over 61,000 persons. These units are family based and employ mostly (96%) women.

Similarly, in **Nepal**, with over 80% of the area and about 50% of the population in hilly and mountainous areas, the product structure of enterprises is similar to that of any less developed area in the plains. Over 95% of industrial enterprises are in the small and micro sector. Of over 900,000 registered enterprises in the small and cottage sector, 30% are in processing of grains, oilseeds, and other agricultural products. The next largest group is of construction enterprises, accounting for eight per cent of the total. Metal products, textile weaving, furniture, garments, hotels and restaurants, and repair workshops are other significant categories, each accounting for over two per cent of enterprises. About one-fourth of the enterprises are in other services, important among them being training, consultancy, transport, travel, and advertising (Gurung 1999).

The product structure of enterprises, however, varies greatly among districts and regions. This is seen even within the same region. For example, in eastern Nepal, significant differences are seen between the two districts, Ilam and Bhojpur, studied by us. **Ilam**, with a relatively better agricultural base than Bhojpur, has a product structure dominated by agro-processing enterprises - rice and flour mills, accounting for 43% of units registered with the Cottage and Small Industries' Development Committee (CSIDC). Garment (16%) manufacturing is another important enterprise group. Nepali paper (lokta) and broom are two specific products based on local natural resources, but with wider markets in Nepal and elsewhere. Tea processing units have also emerged as significant based on locational advantage. Dairy enterprises have also emerged with improved connectivity to towns and markets. Ilam is also an established centre for production of local handloom cloth or dhaka. Other products such as metal products, noodles and potato chips, and service enterprises in printing, consultancy, electric, and electronic training that are growing in Ilam reflect a response to the needs of a growing economy, as is the case elsewhere (Sharma 1998).

The majority (72%) of enterprises in Ilam are located in rural areas. This is the case not only for agro-based activities, such as grain processing and dairy products, but also in product lines like garments and handlooms. Better connectivity among places seems to have not only led to rapid growth, but also to the dispersed location of enterprises in the district. On the other hand, limited connectivity seems to have led to a concentration of enterprises in just two urban areas in **Bhojpur** district. Rural areas that account for 94% of the population have only 50% of the micro-enterprises. Metal crafts, a traditional industry in Bhojpur, are among the largest product groups in terms of the number of micro-enterprises. They account for one-fourth of the total enterprises. The only other group with a large number of units (36%) is construction. Rice mills form a sizeable group of enterprises (14%). The other products with a significant number of enterprises are handlooms (5%), lokta paper (4%), hosiery and furniture (3% each).

In the **Northern Areas of Pakistan**, although small trading outlets still continue to be the major category of enterprises, new product lines such as poultry, dairy, garments, hotels and guest houses, and carpentry have gained in importance in recent years, thanks primarily to the efforts of the Agha Khan Rural Support Programme (AKRSP) (Mohmand 1999).

New niche-based products

Despite the preponderance of traditional items in the product structure of most mountain areas, development of new niche-based products, based on a comparative advantage with dynamic growth potential as a result of access to outside markets and a potential for value-adding processing locally, has been observed in a number of areas. Some examples are given below.

There appears to be a deliberate and conscious effort in **Western Sichuan** (China) to focus on specialised products based on mountain-specific resources. In the structure of enterprises, about two dozen different products in the agro-based, animal husbandry based, aqua-culture, non-timber forest produce based, and wild plant based categories have emerged as important and fast growing in the region. They range from sugar cane and sugar and flue-cured tobacco, which may not be mountain-specific, to products based on highly specific mountain resources such as seabuckthorn, *dioscorea*, and songrong mushrooms. In between there are more common products such as fruit and off-season vegetables, spices, and woollen products in which mountains have a comparative advantage (Rongsen 1998).

Enterprises in product lines with a comparative advantage in mountain areas have also developed in a number of areas and locations in other parts of the HKH region, though not on the same scale and in as systematic a manner as in Western Sichuan. The most important among these products are a result of the diversification of farming and animal husbandry. Development of horticulture in **Himachal Pradesh** (India) and the transferral from cereal production to vegetable farming in **Garampani** (Nainital District) and other locations in north-western India, cardamom production in Sikkim in north-eastern India, tea plantation and processing in Ilam District in eastern Nepal, and livestock and dairy development in areas close to the Kathmandu Valley in Nepal are examples.

Development of local, natural resource based products for elite and tourist markets has also led to emergence of new enterprises in some areas. Nepali paper made from lokta (*Daphne spp*) and nettle and natural fibre-based products like allo (*Gerardiana diversifolia*) in Nepal, and bhimal (*Grevia oppositifolia*) in the central Himalayan area of India are typical examples of such developments. These products have been in existence in these areas for a long time on a small and localised scale and have been used to cater to some common and specific local needs. They were produced using indigenous manual technologies on a small scale by artisan groups. Handmade paper was used to write scriptures and horoscopes and nettles and fibres of allo and bhimal were used to make ropes and baskets and bins. Efforts have recently been

made, mostly through government and NGO project interventions, to produce lokta paper for greeting cards and calendars, while nettles and fibres of various plants are being used to produce textiles and fancy garments.

Mountain tourism

Most common among the products with a comparative advantage in mountain areas, and one that has seen rapid development in several areas, is **tourism**. Mountain tourism has been in existence for quite a long time as a leisure activity, mostly for high-income groups from other parts of the respective countries as also for foreigners. It has increased over the past few decades for reasons of both increasing interest of people in the mountain environment and adventure and special efforts on the part of policy-makers and tourism entrepreneurs to market mountain tourism. Thus the number of tourists has increased manifold in Nepal and the central and western Indian Himalayan region, and new areas have been opened up for tourists in Nepal, India, and Pakistan in recent years.

While tourism-related enterprises have grown in number with the increased influx of tourists in to mountain areas, tourism has also acted as an entry point for development of enterprises in other activities that directly or indirectly support tourism. Thus, while the number of lodges, hotels, restaurants, trekking enterprises, tourist information outlets, and adventure sports' outfits has increased, development of tourism has also provided an impetus to vegetable production, poultry raising, handicrafts, and other activities. Growth of tourism-related enterprises has been by far the fastest in Nepal, followed by the central Himalayan region in India, and to a certain extent also in the Northern Areas and NWFP in Pakistan, but with a varying impact on the development of enterprises and benefits to local people in different countries and different areas and locations within a country.

The overall contribution of income originating from tourism (although **not** income retained in the tourist areas and regions) has been quite impressive. In Himachal Pradesh and the Uttar Pradesh hills in India, tourism was estimated to contribute over 2.0 and 2.5 billion Indian rupees¹, respectively during the mid-1990s, accounting for about 20% of the domestic product in each of the areas. In Nepal, tourism was estimated to contribute about 4% of the GDP and 20% of the foreign exchange earnings. In Pakistan, tourism earned about 120 million US dollars in 1992. China earned 3,947 million US dollars from tourism in 1992, although the contribution of mountain tourism was relatively small. The experience of tourism development in different countries, regions, and areas shows that types of tourism and impacts of tourism are very diverse in different situations. For example, in the hill areas of Uttar Pradesh (India), low-budget domestic pilgrims are predominant; high-yield foreign tourism featured prominently in Nepal; and resort and recreation tourism was the main form of tourism in the Northern Areas in Pakistan. It is, however, seen, as will

There were 40.00 Indian rupees to the US dollar (December 1999). Today there are 46.05.

be discussed later, that the benefits from development of tourism to local communities have generally been minimal and environmental effects have often been negative (Sharma 1995).

Growth performance of different types of enterprise

While tourism has demonstrated relatively rapid growth in most areas, enterprises in other products have shown a variable growth performance. In different countries and areas, the pattern of growth has varied. Natural resource-based products, particularly those with wider and growing markets than others have fared well: lokta paper, tea packaging, and amliso (broom) made sweeping brushes are such examples in the case of Nepal. Agro-processing enterprises were doing well, but not growing, they (e.g., rice mills) mainly catered to local processing requirements. Enterprises in skill-based enterprises, with larger markets, such as handlooms and garments, showed varying performances, their success seemed to depend mainly on the resourcefulness of individual entrepreneurs. On the other hand, some traditional craft-based enterprises were not performing well - metal crafts in Bhojpur were facing problems on both the raw material and marketing front. They use imported raw materials that have become costlier over time, and they also face competition from urban products. So, 90% of the enterprises studied experienced a negative growth in output over the past five years. None of them wanted to expand their businesses.

In the Chittagong Hill Tracts of Bangladesh, micro-enterprises, in general, grew rapidly from 1991-1997. Employment and the number of enterprises are growing faster than investment and value added, implying that the average size of enterprises is declining in terms of capital and value added, although increasing in terms of employment, but productivity and income per worker has declined steeply. It appears that new enterprises are mostly induced by economic distress rather than induced by demand and the market. Forest resources and enterprises based on agriculture did better than the skill-based ones. Yet, tailoring gave a better income than saw milling to the entrepreneurs, as the former used mostly unpaid, family labour while the latter made extensive use of paid labour (Mondal 1997).

In the case of Western Sichuan, enterprises in products based on medicinal herbs and plants seem to have performed best, although most activities based on natural resources have been doing fairly well. Medicines and drugs made by using local herbs and plants are among the most significant high-value products that have also been aggressively marketed abroad. Animal husbandry-based enterprises have grown, but their growth prospects are in decline because of shrinking grass lands. Thus, woollen product enterprises have become stagnant because of competition from largescale production in other, particularly, urban areas, and similar enterprises, as has been the experience of leather product enterprises. Mineral-based products in the mountains have also not been able to withstand competition, due to the lack of economies of scale; an enterprise is able to turn out only small amounts of products, as only limited quantities of minerals are available at any one location. Given the problems of inaccessibility to inputs, technologies, and markets, entrepreneurs have often chosen and carried out production of commodities that do not require new inputs and technologies but which have a ready market, preferably locally. Since farming has been the traditional occupation of most entrepreneurs, new products taken up for enterprises have been primarily land and livestock based (e.g., vegetables, fruit, and dairy products in India and Nepal). Problems of technology and markets have sometimes led farmers to reject new products introduced through projects and programmes (e.g., soyabeans in Garampani and rabbit farming in Ilam). In other words, products that farmers had chosen themselves on the basis of market potential and which required minimum external inputs performed better than those thrust on them by development and extension agencies and organisations and that were dependent on outside sources for inputs and technology. Programmes and external support have helped, but mostly when they have focussed on strengthening the production and marketing base of activities that entrepreneurs have been carrying out and/or have chosen on their own.

12.4 Processes and Factors in Enterprise Development

In most cases, therefore, the shift from subsistence-oriented production to enterprisebased production first took place in the form of market orientation of agricultural, natural resource-based, and livestock-based activities, primarily because of the skill and resource base endowment of households. The extent to and pace at which a subsistence food-based activity has been replaced by enterprise-oriented commercial crop production was, of course, dependent upon the availability and price of food procured from elsewhere and accessibility to markets for commercial products. The two factors have often gone together, depending on development of transportation. Also, public provision of food at affordable prices (e.g., in India) has provided reasonable food security to people in some mountain areas, so that they have been able to engage in commercial crop production. Thus, between the two districts studied in eastern Nepal, Ilam, with greater connectivity within and outside, through its relatively better developed road network, has about 19% of the cultivated area under commercial crops, Bhojpur, with a limited road network, has a corresponding figure of only four per cent. On the other hand, in Garampani area in Nainital district (India), proximity to the road (all the villages studied are located at a distance of from two to seven kilometres from the road), combined with fair price shops supplying subsidised food grains, has facilitated the placement of as much as 62% of cultivated area under commercial crops, mostly vegetables and fruit (Badhani 1998).

How does the emergence of enterprises, particularly in new products, take place ? What is the relative role of endogenous and exogenous factors ? Does it have to be always steered by a programme or a project? In fact, it is seen that, in most cases, one or a few enterprising persons, after receiving exposure to products and markets elsewhere, grasp the potential and take the plunge. Favourable location in terms of proximity to a road and market, of course, plays an important role, but availability of cheap credit, inputs, and other support services under a programme has played mostly a supportive and only rarely a catalytic role. For example, tea plantation was introduced in Ilam on the initiative of a District Governor who was inspired by a visit to Darjeeling, a famous place for tea production in India, across the border. His plantation was emulated by others, including smallholders as well, because of the availability of a market in Darjeeling. Another enterprising tea farmer, later on, saw the value-added and profit potential in tea processing and packaging, and this was also subsequently emulated by others. In the mean time, the establishment of Nepal Tea Development Corporation helped in terms of technological developments and marketing.

Vegetable production in Garampani area was started, about 70 years ago, by a few educated and innovative farmers with the nearby hill station, Nainital, as the market in mind. Until that time Nainital got its vegetables, not always fresh, from some distance in the plains. These farmers started with potatoes, capsicum, and tomatoes, but subsequently brought seeds of beans, peas, and cauliflowers from elsewhere and started growing them. From one supplementary crop in summer, vegetables now form the principal year-round crops, with different vegetables grown in different seasons. It is only during the recent 10-15 years that the farmers have started using the extension facilities from government departments for the use of chemical fertilisers, fungicides, and insecticides. Some enterprising farmers have now adopted such modern techniques as spray-needles for irrigation and polyhouses for seedling cultivation. Initial resistance to the change over to vegetable growing from older members of the farming households (because of their age-old attachment to food crops), from women (due to the loss of fodder), and farmers in general (because of the high risk factor and increased labour requirements) gradually weakened as the high income potential of the new activity was firmly established. However, adoption by different villages took rather a long time. After the first village, closest (about 6 km) to the market in the local town adopted vegetable growing, the next village, about two kilometres further away, adopted it after about 10 years, and the other four villages, three to six kilometres further away, after 20 years. More distant villages adopted it much later, only after a dealers' market was established locally (Badhani 1998).

That enterprises in new products could develop fast and in large numbers, more or less, at the same time, as a result of a strong policy thrust and integrated programme — including research and development, a mechanism for technology transfer, and a market as well as a transport network — is demonstrated by the development of mountain resource based enterprises in West Sichuan. Although these resources have always existed in the area, their widespread use for commercial production for outside markets has taken place only during the last twenty years. A vigorous policy promoting rural industry, first on the basis of town and country enterprise programmes run by the government and the collectives and, lately, through encouragement to individual farmers and entrepreneurs by giving them land lease contracts and auctioning off

bare and non-cultivated land. Tax exemption for new enterprises in the poorer more remote areas and development of a transport network have played key roles in this process. Other important features of this strategy to develop enterprises in poorr and remote mountain areas consisted of incentives to scientists and technologists to work on technologies specific to the products and enterprises in these areas, support to research institutions to actually demonstrate use of technologies in production through factories and workshops attached to them, and promotion of farmer /small entrepreneurs' linkages with larger companies for marketing farmers' products.

12.5 Markets and Marketing

Markets and marketing place the severest constraints on the development of enterprises in mountain areas. They cannot compete with products produced in the plains, even in the local markets, because the latter are better placed in terms of availability and cost of inputs and economies of scale to sell their products in hill and mountain markets, even after incurring transport costs, at prices lower than those of products from local enterprises. Even in products with a comparative advantage in production in mountain areas, marketing remains a problem because of lack of adequate market development and organisations for their sale. Most enterprises are small and not individually capable of product development, market development, and sale in distant locations at home or abroad. As a result, many of them operate on a very small scale, and new enterprises do not emerge, in spite of market potential, and quite often are not able to realise a fair price due to their dependence on exploitative marketing arrangements with traders and contractors.

Marketing arrangements vary with products and areas. For example, in the study area in eastern Nepal, two-thirds of the enterprises are sold directly to the consumers. All of the grain mills, in fact, served local consumers, but garment producers also sold directly to the consumers. So was the case with hosiery units. None of the Nepali paper producers sold to consumers directly - there were probably no local consumers - the product was sold to wholesalers. This was also the case with brooms. Other products, however, were sold by all three methods: to wholesalers, retailers, and (direct) to consumers. In the case of rabbit farming and sericulture, NGOs running projects to promote these activities acted as intermediaries. Only about one-seventh of the enterprises had prior orders for their products, the rest had to look for the buyers after production.

Vegetable growers in Garampani do not sell directly to consumers, this is probably true in most cases of commercialised production of vegetables. Most of them sell to dealers who then sell either to retailers in nearby urban locations or to dealers in larger market centres. About 55% of farmers sell their vegetables mostly to local dealers who are now located in 11 different places on the main road nearest to the vegetable growing villages. In order to transport produce to these centres on the road,47% of farmers use mules, 17% humans, and 37% combine both. Those selling in major urban centres at a distance of 30 to 60 kilometres away use motorised

transport after reaching the main road. Over the years, sale in major urban centres has increased, in spite of the fact that more collection centres with increasing numbers of dealers have come up on the road through the area. That is because the farmers, particularly those with larger quantities of produce, are keen to take advantage of better prices in the market outside, even though the risk factor, as indicated by fluctuations in daily prices, is greater in non-local markets than in local ones. Now about 70% of farmers sell their produce partly or wholly to these market centres; only eight per cent sell their entire produce locally. As a result, the price differences between local and external markets have narrowed: in 1988, prices at the major urban market at a distance of 60 km away were 50-60% higher than at the local market, the difference in 1997 was only about 25%. Also, dealers' credit, which is used by most farmers as vegetable farming is mostly a seasonal operation, has become less exploitative, because the availability of a more widespread and more competitive market and because the local dealers' prices are not much lower than those of dealers in other market centres (Badhani 1998).

When the volume of production is small, however, there is no access to outside markets even if the infrastructure and the demand exist. This is illustrated by the case of natural fibre-based products in the central Himalayan region of India. The field study shows that most products of agave, cannabis, and Grevia are used by the producer or other households in the village. Rope of one kind or another is the main product, only ropes made of *Grevia* find their way to the market (to the extent of about 40%). Products going out of the village to the towns closest by are again sold to villages in the area, and to some extent also to the villages that sell to the market. The market centres do not seem to act as a conduit for sale outside, but mostly as an intermediate mechanism for inter-village transactions, adding a margin to the price which the consumers in the village could have avoided if intra and inter village market networks had been developed. Nevertheless, the market centres play the basic role of finding buyers for products that otherwise would not have been produced or sold (Palni et al. 1999).

The existing markets and marketing arrangements are seen as a major constraint by entrepreneurs. About half the entrepreneurs in eastern Nepal perceive market-related problems as a critical limitation on their operations. About one-third do not want to expand their businesses for this reason, and another one-fourth want to expand but are apprehensive about finding a market for their products. Such a perception prevails among units across product lines; but, in some product lines (e.g., rice mills and metal crafts), all units have given up the idea of expanding as they do not see any outside market for their products. Nevertheless, for garments, bamboo furniture, broom-making, and wooden furniture, most units want to expand but fear marketing problems. Only for tea packaging and sericulture is the market seen as neither a problem nor a constraint in terms of expansion. Rabbit farming, which did not face a market problem initially because of NGO support, is also now in a precarious position in terms of product marketing, and some entrepreneurs do not want to expand, or even want to stop activities. Nepali lokta paper received strong marketing support from the Government, NGOs, and international organisations. HMG-Nepal has consciously encouraged use of this paper for files and notes in its offices. UNICEF was instrumental in popularising it by using it for greeting cards. Bhaktapur Craft Centre, a joint venture of HMG-N and UNICEF, is involved in the export of paper and greeting cards. It is estimated that greeting cards and paper worth over NRs 100 million are exported overseas annually. Yet, it was found in the study on Bhojpur and Ilam that about 30% of the paper-making units did not want to expand their activities because of market constraints, another 30% wanted to expand but foresaw problems in marketing, and only 40% of units did not perceive marketing as a problem.

Organised market promotion and marketing are essential for products of small mountain enterprises. It is also evident that some external initiatives by a government agency or NGO are necessary for this purpose. Still, if such initiatives do not simultaneously develop the organisational skills and capacities of the producers themselves, sustainability of the marketing arrangements will be threatened. Vegetable growers in Garampani are, no doubt, profitably marketing their produce individually, but, in their case, improved accessibility and expanding markets have enabled them to tackle the marketing problems. Also, it has been found that, with perishable commodities like vegetables, prompt action is required, and this is often difficult if the actual sale is carried out through organisations involving layers of management and authority. A branch of the regulated market centre (mandi) was proposed at Garampani, a building was also constructed for this purpose; but it did not start functioning as the farmers did not find it preferable to direct sale. The building is now used by other government departments! Interventions may thus prove futile and involve waste of resources if they take place without proper needs' assessments. Vegetable and fruit marketing societies established in the area are, however, marketing soyabeans successfully.

Yet, producer-based marketing organisations have greater chances to succeed insofar as they can prevent buyers from playing small producers off against each other, thus improving terms of trade and also pooling resources for market promotion. Technical and organisational support from government and non-government agencies is necessary for this purpose. Thus the Gilgit Agricultural Marketing Association (GAMA) and Baltistan Apricot Marketing Association (BAMA) are reported to be doing well in Gilgit and Baltistan under the AKRSP supported programme for marketing seed potatoes and apricots, as also for vegetables, mainly grown by women. Results of the BRSP training of village marketing specialists, formation of a Kisan Marketing Association, and support for developing new markets in Quetta, Shirkatgarh, Karachi, and Islamabad, for different products would also be interesting to observe in future, as these efforts are relatively recent.

One interesting case is that of the development of transport - trade organisations by farmers, truckers, and retired government officials coming together to market vegetables in Western Sichuan, to prevent underpricing by intermediary traders.

Another mechanism possible for marketing the products of mountain enterprises might be a tie-up with large organisations and companies. This has taken place very effectively in the case of marketing herbal products and drugs in Western Sichuan. Farmers have linkages with manufacturing companies for the sale of unprocessed or semi-processed materials and small manufacturers have linkages with larger companies who sell their products in other parts of China and in other countries. In certain circumstances, the system may, however, turn out to be exploitative and farmers and small producers may fail to get fair prices, but the system assures the market and the impact of its possible exploitative nature could be minimised by collective sale through producer organisations, as is the case with several organisations in Nepal, some of which came together to form the Fair Trade Group (FTG), Nepal, in order to market handicrafts (Shahi and Kachhapati 1999).

12.6 Inputs: Access and Programmes

Next to the market, it is access to inputs like raw materials, credit, and technology that poses a serious handicap for the entrepreneurs in mountain areas. Availability of an adequate quantity and quality of raw materials is obviously necessary, and so is the access to the credit required at an affordable cost. But, in their efforts to reach more widespread markets, enterprises need the know-how and technologies to upgrade their products to suit new consumers. Access to new product designs and improved technologies and suitable energy to use them assume special significance in this context.

Raw materials: sustainable use and regeneration of natural resources

As indicated earlier, significant numbers of enterprises in mountain areas are based on local raw materials; and they have been doing better than the skill-based enterprises using non-local raw materials. Some of the latter (e.g., metal crafts and handlooms in eastern Nepal) are facing serious shortages of raw materials and, therefore, are on the decline. In addition, even those based on local resources face problems of both declining supply and restrictions on use. Even in a situation like that of the dynamic and fast-growing enterprise structure in Western Sichuan, some product lines dependent solely on the collection of existing natural resources are facing the risk of resource exhaustion (e.g., bamboo shoots, songrong mushrooms, and some species of medicinal plants). The number of enterprises has declined as a result of the lack of an adequate supply of raw materials and the consequent decision by the local government to discourage them. A 'resource tax' has also been imposed to discourage use of dwindling natural resources. Similarly, enterprises based on animal husbandry are increasingly facing the problem of declining grasslands (some grassland areas in Hongyuang and Ruoergai are reported to have become deserts!). The new policy measure to provide access to each farming household to the limited land area allocated to it has meant downscaling herds and activities based on them.

In some cases, the enterprises have only restricted access to raw material resources, either because the resource is among the protected items (e.g., some rare species of

medicinal plants) or because it grows in the protected forests. For example, the bark of the Daphne tree, used for production of Nepali lokta paper can be collected by a registered enterprise only with the permission of the Forest Department. Permission is granted after due consideration of the request to collect bark of a given quantity from a designated forest area within a stipulated time period and on payment of a royalty charged for every kilogramme of bark collected. Similar restrictions on the raw material for wooden furniture also prevail. Such regulations are, no doubt, necessary but, at the same time, lead to inadequate, and not always timely, supply and higher cost of raw materials. A significant percentage of entrepreneurs in these product lines in eastern Nepal considered 'problems in the supply of raw materials' as an important reason for the relatively slow growth of their enterprises. Instead of a ban or severe restriction on use of plant species threatened by extinction, measures for regulated use and incentives for regeneration as practised in several places in Western Sichuan, China, may serve the goals of both income generation and resource conservation.

Technology and energy

Traditionally,enterprises in mountain areas have traditionally used indigenous, mostly manual, technologies for their production. That was because the technology was good enough for the type and quality of products that were meant primarily for local use and, also, because improved technologies and capital to acquire them and energy to use them were not available. With the development of opportunities to take advantage of non-local markets, research and development and technology have emerged as important factors in enterprise development in new products and for improvement in the quality and design of existing products. They have played an important role in the development and large-scale production of natural resource base products in Western Sichuan, while its absence has left the development potential of, say, natural fibre-based products in the Indian Himalayan region, untapped. Lack of sufficient research support for product improvement has led to some problems in the marketing of lokta paper and products made from rabbit wool in Nepal.

Use of improved technologies to process available natural raw produce and agricultural produce is often seriously constrained by the lack of energy. In most instances in eastern Nepal, enterprises that needed energy for production were using firewood (mainly for heat energy in the production of Nepali paper, dairy products, and metal crafts). Some, mostly rice, mills used commercial fuel, primarily diesel; and only a very small number used electricity, which, in any case, was available only in a limited number of urban locations. In all, 45% of enterprises used some form of energy, mostly, as mentioned, firewood; yet lack of energy was considered by many (45%) as a major problem, next only to access to credit and markets (Sharma 1998). Lack of suitable and adequate quantities of energy forces sale of primary or semi-processed materials, thus decreasing the scope for value-adding, and it is also a constraint to increasing the scale of production. Even in the case of vegetables and fruit, lack of storage facilities, which need a constant supply of power, forces producers

to sell instantly even if the market is not favourable. This is borne out clearly in the case of vegetable growers and fruit growers in the Garampani area.

To the extent that firewood constitutes the main source of energy for production, enterprise development could have an adverse effect on the environment. Also, firewood as an energy source does not provide the quality and efficiency required for processing and production in most cases. Alternative energy sources, particularly electricity, could meet the objectives of both increasing efficiency and scale of production and checking environmental degradation. Indiscriminate use of forest resources without simultaneous efforts for their regeneration could also have an adverse effect, as is evident in the case of bamboo shoots and some species of medicinal plants in Western Sichuan and lokta in eastern Nepal where certain measures to check unlimited exploitation are in place. While restricting use may be necessary, it is also necessary to encourage users to regenerate resources through replantation and conservation.

Credit

Credit continues to be a key constraint to the development and expansion of enterprises. Most enterprises do not have access to institutional credit. Only seven per cent of enterprises studied in eastern Nepal used bank credit and 60% see credit as a major problem in their operations and expansion. In the Chittagong Hill Tracts, bank loans constituted 25% of the total loan amount, but, in terms of the number of enterprises, the percentage was around ten (Mondal 1997). Even with the several programmes providing micro-credit, coverage is as yet only about seven per cent of the target group in Nepal. Further, credit provided by these programmes is often too small to sustain development of enterprises on a commercially viable scale. The average amount of loans provided by different programmes in Nepal ranges between NRs 6,000 (Centre for Self-help Development - CSD) and NRs 12,000 (Nirdhan) (Dhungana and Thapa 1999). Even though most enterprises operate on a small capital base (average investment size of enterprises in the CHT was estimated to be Tk 38,000 and in eastern Nepal NRs 50,000), most of the capital had to be borrowed from informal sources. In the CHT, a good proportion of the loans (46%) was, of course, taken from 'friends and relatives', but about 30% of the capital requirements had to be met by borrowing from traders and moneylenders at an interest rate ranging between 25 to 150%. In the case of Eastern Nepal, about three-fourths of the capital requirements were met through own and family savings (the corresponding figure for 'self-financing' was reported to be only 10% in the CHT) and about 13% with loans from 'relatives'; but they also charged an interest rate not very much lower than that charged by moneylenders who supplied about four per cent of the capital requirements. Interest rates charged by banks, relatives, and moneylenders were reported to be 16, 24, and 27% respectively, their corresponding share in total borrowed capital being 29, 54, and 17% (Sharma 1998).

Several micro-credit programmes have been introduced by the governments and non-government organisations to improve the access of the poor to institutional credit.

In Nepal, micro-credit programmes, such as the Small Farmers' Development Programme (SFDP), introduced in 1975, Production Credit for Rural Women (PCRW - 1982), Banking with the Poor (BWTP - 1991), Regional Rural Development Banks (RRDBs - 1992), Micro-Credit Project for Women (MCPW - 1993), Nirdhan (1991), and the Self-Help Banking Programme (SHBP - 1991), have together provided credit to over 300,000 persons over the years for various income-generating activities. These and other minor programmes significantly improved access to credit for the poor in Nepal, particularly during the nineties. The tendency to avoid the risk of failure on the part of different agencies has resulted in concentration of programme activities in areas with relatively better potential; and areas with really limited access to credit have largely been left uncovered, except by a few government sponsored and run programmes. Only SFDP operates in all 75 districts and PCRW also has a wide geographical spread (18 out of 20 Terai, 24 out of 39 hill, and 13 out of 16 mountain districts), all other programmes concentrate mainly or only on the Terai and hill regions.

A serious limitation to these programmes from the point of view of enterprise development is that their focus is primarily on poverty alleviation, capacity building, and self-help, rather than on the requirements of an enterprise. They do not cater to input, technology, and marketing requirements of enterprises and, in any case, they provide, on an average, too little credit to create and sustain a viable enterprise on a commercial basis. Even an 'enterprise' - focused programme like the Micro-enterprise Credit Programme (MECP), run by AKRSP in Pakistan, has provided loans of PRs² 7.300 only on an average. Such is the case in India too with a large-scale governmentsponsored loan-cum-subsidy programme called the Integrated Rural Development Programme (IRDP) through which about 40 million poor households have been covered since its inception about two decades back, in different parts of the country, including the mountain areas. The programme, although aimed at promoting selfemployment based on income-generating activities, has been basically an anti-poverty programme, with an average loan of IRs 8,000 per assisted household; and, therefore, its impact on enterprise development has been minimal. There have been other programmes also that aimed at enterprise development on the basis of government subsidies and bank credit. A Scheme for Self-employment among Educated Unemployed Youth (SEEUY) earlier and its new variant, the Prime Minister's 'Rojgar Yojana' (PMRY) have been most important among them. The PMRY, introduced in 1993, assists educated unemployed youth from relatively poor households in establishing an enterprise in any sector of activity, with financial assistance of up to IRs 100,000 consisting of 15% government subsidy and 85% bank loan. During the period from 1993 - 1997 about 819,000 potential entrepreneurs were provided with assistance, of which about eight per cent were in the hill and mountain regions of the country (Awasthi et al. 1999).

² There are 58.35 Pakistani rupees to the US dollar.

Thus, while access to institutional credit has improved through various efforts on the part of government and non-government agencies, many present and potential enterprises in mountain areas are not able to start or expand their businesses due to lack of capital. Either they have no access to institutional credit or find it unaffordable, due not so much to formal costs but to a great extent to the hidden and open 'transaction costs'. Savings' groups have been able to accumulate funds, but, in many cases (as seen in Nepal as well as in the Northern Areas of Pakistan), have not been able to use them because of the lack of planning and effort to develop enterprises linked with savings' programmes.

12.7 Women and Micro-enterprises

Development of commercial enterprises seems to have had a mixed impact on mountain women. Women participate significantly as both entrepreneurs and workers in micro -enterprises. For example, in the study area in eastern Nepal, 38% of enterprises were run by women; and a similar percentage of workers in enterprises were women, mostly employed as unpaid family workers. Most of the women entrepreneurs are, however, operating tiny units in non-growing or slow growing product lines. Relatively larger sized enterprises in dynamic product lines do not even employ many women, paid or unpaid.

Emergence of new enterprises has given new work opportunities to women, and they are now sharing responsibilities in all aspects of enterprises. For example, the change over to vegetable growing in the Garampani area has led to a two-fold increase in hours of work for both men and women; but since work for men has increased more rapidly than for women, the gender imbalance in the workload has decreased. A woman now works 1.15 times more than a man under the new crop mix compared to over three times with the earlier cropping pattern. Also, commercialisation has led to a reduction in the out-migration of males, so that the work burden on women is less than before. Now men join women in weeding, manuring, and harvesting, which in a farming system dominated by food crops was carried out more or less exclusively by women; and women also participate in marketing, an activity exclusively confined to men earlier. The total workload of women has increased not only because of more work on the farm, but also because of the necessity to collect fodder from the forest due to lack of crop residues earlier derived from food crops.

In the mountains of Western Sichuan, women have become key players in economic activities over the past two decades with a large number of men migrating out to take advantage of the opportunities in fast-growing regional and national economies. Growth of enterprises based on wild plant resources has led to a greater participation of women, particularly in collection of materials. Women are also playing important roles in some plantation crops such as fruit and eucalyptus and in floriculture and sericulture. Their incomes have increased manifold, and they have better control over their household economy. In silk weaving mills in Ningnan, 90% of the employees are women, many of them in supervisory positions, even though they come mostly

from farming families. Still, because of a lower level of education and limited avenues for training, women do not generally occupy directorial, managerial, and engineering positions in most enterprises. Efforts are now being made to pay special attention to girls' education and training through schemes like 'Spring Bud' to facilitate schooling of girls and special training programmes by many factories to enable them to climb up the occupational and hierarchical ladders.

Training programmes for entrepreneurship development (EDPs) in India and Nepal have paid special attention to potential women entrepreneurs, including those in mountain areas. Some programmes have been specially organised exclusively for women, while, in others, a good proportion of trainees have been women. In Nepal, the Women Entrepreneurs' Association of Nepal (WEAN) and the Women's Development Division of the Ministry of Local Development organise EDPs for women only. Others also organise EDPs exclusively for women, occasionally and in other programmes also women account for a significant proportion of trainees. The percentage of women among trainees in two districts, Kaski and Tanahu, during the two years 1994-95 and 1995-96, was, for example, 63, as three of the six programmes were exclusively for women (Gurung 1999). In the training programmes studied in the three hill areas in India, women made up 37.4% of trainees; the proportion was higher in Himachal Pradesh (43%) and low (5%) in Uttar Pradesh (Awasthi et al. 1999).

In terms of the success rate, women trainees do not seem to be doing as well as men. A smaller percentage of women than men trainees in EDPs have been able to start enterprises: in Nepal, the respective percentages were 33 and 47 in New Business Creation (NBC) programmes, under the Small Business Promotion Programme (SBPP), and 31 and 33% in the training programmes by IEDI (Industrial Enterprise Development Institute) and CSIDB in Kaski and Tanahu districts during 1994-96 that were studied in detail. In India, 29% of women compared to 38% of men EDP trainees could start an enterprise: in the U.P. hills women did better (50%) than men (33%) and the same was the case in Assam (28% compared to 20%), but, in Himachal Pradesh, women's start-up rate was 30% compared to 50% for men. In the Group Enterprise Development Project in the state of Nagaland in North Eastern India, women starting projects constituted 58% of all cases, primarily because of the 19 societies trained, about half were either women's or women-dominated societies.

Thus it appears that women form a substantial proportion of EDP trainees, primarily because several programmes are run exclusively for women; in general programmes their participation is still low, and they are much less able to use their acquired skills to start businesses mainly because of lack of access to other inputs and resources, particularly credit and markets.

Efforts have been made in recent years to improve women's access to credit through various micro-credit programmes run by government and non-government agencies. In India, 40% of the beneficiaries have to be women in a nationwide credit-cum-

subsidy programme (IRDP) for self-employment based on household enterprises. In Nepal, at least two programmes, the PCRW and MPW, are meant exclusively for women. Even in other programmes, particularly the SFDP and BWTP, women are the main focus and have wide coverage. Overall, the proportion of women beneficiaries in micro-credit programmes is around 52%. The NGO - run programmes in Pakistan also have exclusive windows for women. As a result, there has been a significant improvement in access to institutional credit. Yet, overall access to credit for enterprise development in mountain areas continues to be low, and for women still lower. Further, in most cases, the loan amount, particularly in the case of women, is too small to start and sustain any enterprise on a substantial scale.

12.8 Policies and Programme

Policies-general

It appears that in most of the countries and areas, a policy regime favouring development of enterprises, focusing on products with a comparative advantage in mountain areas, is missing. Policies and programmes - industrial, sectoral, or input specific - are general for promotion of enterprises anywhere and in any product. As a result, mountain areas are not able to benefit from them due to their special disadvantages. Promotional agencies have played a role through their extension, credit, and input-supply related activities, but their reach and extent of assistance have been limited and not always sustained over time. As the programmes are common to all areas, the temptation to achieve larger targets with limited resources has led these agencies to concentrate more in easily accessible areas in the plains with greater potentials for success than in mountain areas, and this means that rather limited coverage is given to the hills and mountains. This has also been the tendency in the externally funded NGO run programmes (e.g., in credit programmes in Nepal). Sometimes, the policies and programmes are well-meaning and also effective, but limited in their scope and, therefore, in potential effect. One example is that of agriproducts like ginger and pineapples in Meghalaya, India, where the efforts have been confined to marketing raw produce, without any attention being given to processing and value adding (Hazarika & Bhatia 1999).

A serious limitation of most of the programmes is that they have more or less exclusively focused on a single aspect or input (e.g., training, credit) and do not include all the important aspects of enterprise development. Enterprises in mountain areas have limited access to most inputs and services, skills, risk minimising measures, credit, technology, and marketing; and provision of just one or the other has limited chances of succeeding in their development. NGOs like the Agha Khan Rural Support Programme (AKRSP) and the recently created Sarhad Rural Support Corporation (SRSC) and Balochistan Rural Support Programme (BRSP) have tried an integrated approach with relatively better success than others (Mohmand 1999). In the case of AKRSP, credit is combined with training in business enterprise development, development and supply of technology packages for different activities, and

developing organisations for collective marketing of the produce (e.g., Gilgit Agricultural Marketing Association - GAMA and Baltistan Apricot Marketing Association - BAMA). The programme is run through village organisations (VOs) and women's organisations (WOs). Overall impact in terms of expansion of existing enterprises, emergence of new enterprises, increase in the incomes of households assisted, and loan recovery has been evaluated to be significant. The impact has been particularly favourable in the case of women in terms of participation in enterprise activity and income. Significant favourable impacts have also been seen in such indicators of household welfare as nutrition, children's education, and women's status.

SRSC and, more recently, BRSP, have also adopted a similar approach to AKRSP in their different programmes, including those on micro-enterprise development. SRSC started by making an assessment of the potential for different activities and identification of promising lines of business in different areas of their operations. The Productive Investment (PI) programme of the Corporation, under which building of small-scale infrastructure (e.g., link roads, minor irrigation, land levelling/ development, water harvesting, and water supply) can also act as a useful supplement to enterprise development. The micro-enterprise programme of BRSP, which is of more recent origin, also follows a similar model to that of AKRSP and SRSC.

Policies relating to mountain tourism

As mentioned earlier, the impact of tourism in mountain areas of the HKH region has been mixed. Economically, there are found to be more 'leakages' than 'linkages'. In view of the weak production base in most tourist areas, most products used by tourists have to be imported, while the local people have also to bear the burden of the high prices of essential goods that prevail due to tourist demand. So most income derived from tourism flows out of the tourist areas. Environmental impacts are generally extremely negative, manifest in, for example, acute water and garbage problems in cities like Simla in India; pollution in water bodies like Phewa Lake in Pokhara, Nepal; and Nainital Lake in India; the large amounts of non-degradable litter and pollution, both in land and water bodies, in heavily frequented treks in Nepal; and water and river pollution, pollution of soils and glaciers, and deforestation and congestion in the Swat, Kagan, and Kalam valleys in Pakistan (Sharma 1995).

The weak economic and negative environmental effects of tourism are primarily a result of the lack of adequate focus and orientation on local communities and mountain environment in national policies. Most countries have explicitly stated policies on tourism and also have institutions in place to promote tourism development. The primary focus of these policies and institutions is on tourist promotion for maximising revenue and foreign exchange. Specificities of mountain tourism in terms of uniqueness of its 'products', such as environment, nature, tranquillity, and adventure, are often overshadowed by emphasis on 'facilities' in promotional efforts and, therefore, fragility and environmental sensitivity of tourism resources are neglected.

Participation by local people in and, therefore, benefits to local communities from tourism do not receive priority in tourism development programmes, in general. Efforts expended in Nepal, particularly by the King Mahendra Trust for Nature Conservation (KMTNC) in the Annapurna Conservation Area offer an example of how the concerns for conservation and benefits to local people could be addressed. It is important that mountain tourism is promoted as a part of integrated area planning for environmental and economic development. Efforts in that direction are still lacking, though most governments and organisations are becoming increasingly more conscious, particularly of the need to protect and use the environment as a tourism product.

Entrepreneurship development programmes (EDPs)

Training for the development of entrepreneurship skills has been recognised as an essential input in enterprise development and many Entrepreneurship Development Programmes (EDPs) are being conducted by different government and non-government organisations to impart entrepreneurial and managerial skills to existing or potential entrepreneurs. To begin with, EDPs were conducted mainly for the large, urban-based organisations in the organised sector. Recognising that a major part of the enterprise activity in developing countries takes place in the small-scale and unorganised sector, training organisations have introduced programmes for small and micro-enterprise (SME) sectors as well. New organisations have also been created to cater to the needs of such enterprises in rural areas. The Entrepreneurship Development Institute (EDI) of India and its counterpart at the individual state level, promoted with the assistance of national financial institutions, and the newly-created Industrial Enterprise Development Institute (IEDI), developed out of the German supported Small Business Promotion Project (SBPP) in Nepal, are examples of such developments.

The need for training to impart entrepreneurial and managerial skills, particularly to people in areas and environments with very little exposure to business enterprise, such as the rural and remote mountain regions, is obvious. Producers and craftsmen in these areas have carried out production of various items utilising traditional skills inherited from generation to generation, mainly to cater to local needs and with the primary motive of survival and subsistence. But they do not possess the entrepreneurial skills required for production for the market and facing the risks involved in it. Some recognition of the fact that small rural entrepreneurs require different programmes than those running or planning relatively larger enterprises in urban areas is reflected in the new training programmes developed and run by training organisations, but similar recognition of the special needs of enterprises in remote mountain areas does not seem to have as yet been internalised in EDPs.

Yet, trainee entrepreneurs from mountain areas have been participating in EDPs, particularly in programmes that have been organised in these areas of late. Of the various EDPs to provide training to over 1,500 persons per year in Nepal, quite a few are conducted out of Kathmandu and in hilly and mountainous districts. The Cottage and Small Industries' Development Board (CSIDB), which has recently

diversified its training activities from purely crafts' training to EDPs, conducts programmes in all districts of Nepal. The same is true with the Women's Development Division of the Ministry of Local Development which runs village-based programmes in most parts of the country. The Women Entrepreneurs' Association of Nepal (WEAN) has training programmes in diversified locations. The IEDI has training programmes mostly in Kathmandu and urban areas of a limited number of districts. But the IEDP has been a lead organisation, from its SBPP days, in developing and implementing EDPs and their model, in terms of both contents and methods, has been adopted by most other organisations in Nepal.

Also, although the EDPs have not proved very effective, in general, in helping trained persons to start an enterprise, the success rate has not been lower in the mountain areas than elsewhere. The overall success rate, in terms of trainees who have started an enterprise, has been around 30% in Nepal, and it was found to be 32.5% in a survey carried out in Kaski and Tanahu districts. Those in Kaski district, with Pokhara as a major urban centre, showed a slightly higher (34%) success rate than in Tanahu district (32%). It may be also noted that the Kaski trainees underwent training by IEDI and those in Tanahu by CSIDB, and the overall performance of IEDI trainees has been found to be better than those of CSIDB. According to an evaluation of the persons trained under its New Business Creation (NBC) programme up to August 1995, 44.3% had started a business, and another 40.7% of cases were in process. In the case of CSIDB training, the success rate during 1994-95 was found to be around 28% (Gurung 1999).

In the case of India, the estimated final start-up ratio (including actually observed, reported, and in process) was found to be 32% in aggregate, 40.5% for Assam, 38% for other north-eastern States, and 39% for Himachal and Jammu and Kashmir, in an earlier study. In a more recent study conducted in Assam, Himachal Pradesh, and the UP Hills, the success rate was found to be around 35%. Rates differed in the three areas: it was highest in Himachal Pradesh (41.5%), followed by UP (34.6%), and lowest (22.5%) in Assam (Awasthi et al. 1999).

The start-up rates have been influenced by the tie-up with supply of inputs like credit and continued support and advice as a follow-up of training. Also, a group approach covering potential entrepreneurs in the same product line has been found to be the most effective. Demand-induced programmes, as in the case of AKRSP in the northern areas, are expected to result in better start-up, but efforts at creating demand may be essential in remote mountain areas with very little experience and awareness about enterprises.

12.9 Conclusions

The foregoing narration of the experiences in development of micro-enterprises in different situations and efforts made for their promotion suggests that, even though the greater part of the Hindu Kush-Himalayan economic landscape continues to be

characterised by the predominance of subsistence-centred farming and small-scale processing oriented towards local use, significant changes are visible in development of market-oriented enterprises. The product structure of these enterprises is highly varied, but an increasing number of new products, with a comparative advantage in mountain areas, is emerging, and, in fact, it is these products that are experiencing most growth, while several traditional products have languished because of competition from urban products as well as the shrinking base of local raw materials. The most important products in which an increasing number of products and enterprises are developing in different areas are mainly based on diversification of farming, livestock, and forest resources, particularly non-timber forest produce and medicinal herbs and plants. Such enterprises are found to have scope for development in most areas with improved transport infrastructure, though they have grown faster in areas where access to a ready market and/or concerted policy and programme support have existed.

Access to markets and technology and energy to use it, credit and training, and mechanisms for minimisation of market-related risks continue to be the restricting factors to enterprise development in mountain areas. But there are several cases in which a single input like improvement in access to markets and improved technology to diversify into new products has triggered off large-scale emergence of enterprises. Interventions have helped, but mostly in cases where initial conditions of availability of niche resources and producers' familiarity and acceptance of the products existed. Most often interventions, in terms of policies and programmes, have lacked the orientation required for enterprise development in special conditions that prevail in mountain areas.

These findings and observations suggest a number of implications for approaches, policies, and programmes. The more important among them are given in the following passages.

- Diversification of mountain economies into high-value products is possible, but it requires development of minimum infrastructure and food security as primary preconditions.
- Enterprise development in mountain areas requires a systematic selection of products. Products without any comparative advantage have no chance to succeed, except to the limited extent of their local use. Also, even those with a comparative advantage require sustained efforts in product development and market promotion.
- Generally, it is local resource-based products that have experienced growth. Yet, even in their case, certain conditions seem necessary to sustain their growth. They include R & D inputs, widening the market through improvement in accessibility and promotional efforts
- The most effective strategy for conservation of natural resources does not seem to lie in the ban or severe restriction on their use, but in regulation and management with incentives for their regeneration

- The process of enterprise development has been easier, even though slow, when the products have been chosen by local entrepreneurs, based on their own resources and skills and assessment of market potential rather than when the products have been thrust upon them by donor projects or governments. Extension and expansion of activities and enterprises have been sustainable when the process is 'horizontal' from one or a few entrepreneurs to additional and similarly based individuals and households. Introduction of products with external interventions and their 'vertical' extension has often failed
- Interventions in terms of integrated provision of technology support, market linkages, and transport infrastructure have helped to transform small-scale production of items based on local resources, mostly for local use, into large-scale commercial production for national and international markets. In such cases though, interventions have been large scale, sustained, and purposively directed towards certain categories of products and in selected areas. Small-scale and scattered and single input based interventions have rarely succeeded in making a significant impact.
- Interventions, in the form of credit and training programmes, have shown some promising results; but they would be more effective if they were (i) specially tailored to meet the specific needs of enterprises and entrepreneurs in mountain areas; (ii) comprehensive in terms of linkages for different inputs and support services; and (iii) based on a product-cum-area approach.

The idea that the mountain economies in the HKH region need to get out of the subsistence-survival syndrome and diversify into marketable high-value products is widely accepted now by policy-makers and the mountain people. People in several areas have also demonstrated that such a transformation is possible on a sustainable basis, with or even without strong external support. More of these experiences need to be documented and disseminated for possible replication in other areas. Along with the documentation of opportunities that different mountain areas offer for economic diversification with sustainable management of natural resources, it is also necessary to identify obstacles and constraints to their realisation and to formulate appropriate strategies and policies to overcome them.

At the same time, it must be recognised that enterprise development aimed at production for the market is a dynamic process. A product found viable and profitable today might lose out in competition or as a result of changing consumer tastes tomorrow. A continuous process of adaptation, upgrading, and change in packaging is, therefore, necessary, particularly because mountain areas do not have unlimited options in product selection. Quick response to the changes in the market is essential and so is a sensitive and well-informed policy making set-up. Over time, development of skills to read the market and the capacity to respond to market signals is the key to success, for which development of human resources at all levels is important. A move to knowledge-based products can offer a definite advantage to mountain areas in this context.

References

- Awasthi, D.N.; Singh, N.; Srivastava, P. (1999) Promoting Small and Micro-Enterprises through Training Interventions: The Indian Experience. MEI Cases Study Series No. 99/5. Kathmandu: ICIMOD
- Badhani, K.N. (1998) From Subsistence Farming to Market-Oriented Enterprises: The Case of Vegetable Growing Farmers in Garampani Area, Nainital District, India. Discussion Paper Series No. MEI 98/5. Kathmandu: ICIMOD
- Dhungana, S.P.; Thapa, B. (1999) Credit-based Micro-Enterprise Development Programmes in Nepal. Discussion Paper Series No. MEI 99/1. Kathmandu: ICIMOD
- Gurung, M.M. (1999) Training Programmes for Development of Micro-Enterprises in Cottage and Small Industries Sector in Nepal. Discussion Paper Series No. MEI 99/2. Kathmandu: ICIMOD
- Hazarika, N.; Bhatia, A.M. (1999) Spices and Fruit for Micro-enterprises: A Study of the Potentials of Ginger and Pineapples in West Garo Hills District (Meghalaya). A Case Study Series No. 99/1. Kathmandu: ICIMOD
- Mohmand, A.G. (1999) *Micro-Enterprise Development in Mountain Areas: A Review* of NGO Initiatives in Pakistan. MEI Case Study Series No. 99/4. Kathmandu: ICIMOD
- Mondal, A.H. (1997) *Development of Micro Enterprises in CHT*. Kathmandu; ICIMOD (Mimeo)
- Palni, L.M.S.; Rikhari, H.C.; Sharma, S. (1999) Enterprise Development in Natural Fibre-based Products: A Study of the Status and Potential in the Central Himalayan Region of India. MEI Case Study Series No. 99/2. Kathmandu: ICIMOD
- Rongsen, L. (1998) Enterprises in Mountain-specific Products in Western Sichuan, China. Discussion Paper Series No. MEI 98/7. Kathmandu: ICIMOD
- Shahi, S.K.; Kachhapati, C.K. (1999) Collective Marketing of Micro-enterprise Products - The Case of Handicrafts Marketing. MEI Case Study Series No. 99/ 3. Kathmandu: ICIMOD
- Sharma, P. (ed) (1995) Tourism for Local Community Development in Mountain Areas, Perspectives, Issues, and Guidelines. Kathmandu: ICIMOD
- Sharma, U. (1998) *Development of Micro-Enterprises: Ilam and Bhojpur Districts*. Discussion Paper Series No. MEI 98/1. Kathmandu: ICIMOD