

Chapter 6 . Conclusions

The growing conflict between short run needs for food, fodder and fuel needs and long term environmental sustainability, under conditions of subsistence agriculture in the hills, is quite apparent. The overall economic and environmental scenario for the hills appears to be extremely bleak if demand conditions continue to overload the carrying capacity of the hill resources. And yet for all their fragility, the hills also possess substantial economic and environmental development potential. These potentials remain largely untapped and will continue to remain unexploited if the existing problems associated with hill agriculture are not realistically examined and some bold decisions taken to radically alter the basic structure of hill agriculture.

6.1 Alternatives to Subsistence Farming in the Hills

The case for commercialization of hill agriculture which is the most fundamental aspect has already been made. While there are many examples of successful integration of hill agriculture with the wider market economy, the heterogeneity of the hills means that each area and ecozone requires very careful examination in terms of local environmental conditions, access and marketability, local food conditions and necessary investments. Unless a deliberate search is made to identify areas of comparative advantage, the hill farmer is likely to continue struggling with subsistence production systems. This is undesirable both for the hill farmer and hill environment. Efforts to marginally improve subsistence production systems are likely to be unsustainable. This is because the hill farmers lack resources to pay for these services and inputs and government cannot continue to subsidize them indefinitely.

6.2 Relieving Population Pressures on Hill Lands

The issue of population redistribution is also important as it implies a comprehensive understanding of the dynamics between population and resources. In many areas, population pressure on limited resources has

reached a point where irreversible changes are beginning. At the same time where pressure is partially reduced or checked for a number of years, regeneration of biomass can be most encouraging. It is, therefore necessary to identify those pockets where long term sustainability is threatened and the extent to which population from such areas can be redistributed to other locations. Redistribution can be to uplands and lowlands in hill areas, between rural and urban areas in the hills and between the hills and the Terai plains. The effectiveness of various combinations of incentives and controls have to be carefully appraised for motivating hill households to relocate themselves.

6.3 More Effective Organization of Agricultural Development

Hill agriculture development requires flexible and responsive management, capable of organizing innovations on a sustained basis. The present organization and management of agricultural development however, is not oriented towards meeting this major challenge. It is extremely limited in scope and coverage in terms of research and extension. While there has been significant growth in number of agricultural institutions, these changes have not been effective in the development of hill agriculture.

Some types of agricultural organizations have been successful in development of cash crops in the Terai. There is a need to study the nature of these organizations and explore the possibilities for developing them in transforming hill agriculture. Those organizations that have managed and coordinated a whole range of functions under one roof from production to marketing, and have a factory-base for processing have been relatively successful. In order to maintain factory-production, such organizations have conducted experiments, trials and demonstration, multiplication, propagation, testing of planting materials, distribution of farm inputs and credit supply. They are also engaged in extension, transportation, storage and processing.

Experience with hill development activities in India also suggests that this has been a relatively successful model, particularly in Himachal Pradesh for horticulture development.

In order for the above approach or model to be successful, the need to have effective farmer organizations is also quite evident. Without strong farmer organizations, even the above model is unlikely to be effective. Both these aspects have to be seen as two sides of the same coin.

6.4 Comprehensive Area-Based Planning

One of the most significant developments in the Bagmati zone has been the gradual integration of the entire zone as hinterland of the Greater Kathmandu valley region. Extension of the road network from Kathmandu has brought practically all the districts of the Zone under the orbit of the greater Kathmandu valley. While the road network to some of the districts is not as extensive as in others, it is evident that Kathmandu Valley will be exercising significant influence on the structure of development in the hinterland. The rapidly changing urban demand structure will be a major source for stimulating changes in rural production structure. The GKV will be the source of supply for many of the important inputs and services required by the hinterland. It will also be the major source of investment capital for the region. While these represent some of the positive aspects for increasing economic integration, there are also possibilities for dualistic development. This means the centre grows at the cost of the hinterland, depriving the hinterland of much of the resources and skills necessary for balanced regional development. There are already indications of a polarized process of development which will tend to get stronger over time if the hinterland fails to be more productive. Many parts of the hinterland are already beginning to indicate unfavourable trade balance with the GKV region. This is mainly because the GKV region is functioning as an entre-pot with hinterland imports being controlled by this region. A more closer examination of the economic structure of the GKV region shows that the economic power of this primate region, in large part, stems from its political role as the capital of the country. As the seat of the central government it, therefore claims a large share of tax revenues which pay for the high imports of the region. Traffic flow data reveal

that the ratio of incoming freight to outgoing freight for the GKV region is as high as 5.8, indicating that it imports more than it exports, which has the tendency to drain the periphery [Ender 1980]. The construction boom and the soaring real estate prices in the valley are siphoning off rural capital that is badly needed for investments in rural areas.

From the point of view of spatial and regional development, the emergence of potential hinterland for the GKV region is a major change in the hill economy. The implications of these changes for spatial and regional planning in Nepal are far reaching. It is no longer plausible to perceive rural development activities in isolation of the changes in the GKV region, without considering the potentials for specialization and trade in different parts of the hinterland. The physical and institutional infrastructure is already in place. The number of urban centres with different service bases are increasing and intra regional trade linkages are growing. Over time, regional forces of development will acquire their own momentum in the Bagmati Zone. If changes are perceived and planned at this regional level, it is more likely that spatial development will proceed in a less lopsided manner, than if planning continues without adequate recognition of the broader spatial opportunities for development.

Very few activities are economically viable at the district level where subsistence production predominates. Roads and other infrastructures will continue to be very costly and ineffective. This is because at this scale of economic production, there are just no profitable opportunities for higher consumption of infrastructure and services. In order to overcome these problems, production should be organized at a much larger scale with focus on bigger and better markets. This would not have been feasible without the basic infrastructure that now exists in the Bagmati Zone. A major opportunity now exists to push for a strong regional development process in motion.

In the past, the regional development concept lacked a meaningful economic content. A stage has been reached in the Bagmati Zone where it can be given a meaningful direction and the starting points are the development of agriculture through specialization and trade; through increasing rural-urban marketing linkages

and through greater inter regional exchange of products, based on comparative area advantages.

The need for far more careful regional planning exercises, to identify key areas of investments for balanced regional development of the Bagmati Zone is now very apparent. This means incorporation in the planning process of changes occurring at the Zonal level. Historical evidence regarding the forces of development does not support the transfer of capital, skills and innovations to weaker areas. There is an inevitable polarity in the spread of development forces which will further lead to inequitable development if interventions are not carefully designed. The process of market integration in the hills of the Bagmati Zone will expand even more rapidly in the future. But this will not help the poorer regions without organized efforts to integrate poorer areas in an economically desirable manner. Furthermore, there is also the growing problem of environmental stress that makes even greater demands on planning.

Regional development in the context of the hills is not an easy approach in an area marked by strong variation in resource endowments, access and development potential. The basis of regional development should be agricultural development based on ecozone specialization, with strong inter ecozone and rural-urban linkages. This is not a new idea but the time has come for organised implementation in the Bagmati Zone. Currently, development programmes are randomly spread out over different districts with very little inter linkages. Thus resources and institutional efforts are being seriously diluted with only marginal impact on the transformation of subsistence hill agriculture. Many of the current programmes provide only partial antidote for overcoming short run crisis of subsistence, and do not really help with the development of economically and environmentally sustainable hill agriculture. Planning must therefore, reassess this whole situation if fulfillment of basic needs is to become a reality in the hills and current environmental degradation is to be checked.