

Chapter 6

Sustainable Poverty Alleviation and Mountain Development in Nepal: Status, Experience and Strategy

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6.1 General Overview of the Economy

Physical and demographic features

Nepal stands in sharp contrast to other countries of the Hindu Kush-Himalayan (HKH) region with respect to its geophysical make-up and development potentials, constraints, and priorities. Physically stretching 880 km from east to west and 150-200 km from north to south, Nepal is a small country occupying a land area of about 147,000 sq.km. Despite its size, it is an extremely diverse country covering within its narrow width a wide range of ecological belts: most distinctly, the flat plains of the 'Terai', the slopey terrain of the middle hills, and the snowy peaks of the mountains. Accordingly, the climatic conditions vary greatly, ranging from warm tropical in the south to cold temperate in the north. The religious and linguistic divisions also tend to follow the ecological divisions. The mountain population is dominated by the Tibeto-Burman speaking, largely Buddhist groups, the hill population by the Nepali speaking Hindu groups, and the Terai population by the Indo-Aryan Hindu groups, mainly speaking Maithili and Bhojpuri. Nepali is the national language, but some 35 other languages and dialects are also spoken. The caste and ethnic compositions are of marked diversity; the population is divided into more than 65 different groups based on caste and ethnicity.

Nepal's population is currently projected at close to 23 million. There is no symmetry in the distribution of population and land area across the ecological regions. Population distribution rather follows closely the distribution of cultivated area. The mountain region, lying between 4,877 and 8,848 masl, covers about 35% of Nepal's land area; but a very small portion, about two per cent, of this land is cultivable. Consequently, it was home for only about seven per cent of the country's population in 1991 (CBS 1999). Similarly, the hill region, which starts from an altitude of 610 metres, covers 42% of the land area, and, with one-tenth of its land being cultivable, this region accounted for 46% of the population. In contrast, the Terai region covers the smallest portion (23%) of land area, yet, with nearly half of its land area being suitable for cultivation, this region accounted for the largest proportion (47%) of the country's population in 1991.

The levels of infrastructure and economic opportunities also vary considerably across these regions. While all of the Terai is generally accessible, many parts of the hills and most of the mountains are inaccessible by road. Because of relatively greater accessibility to economic infrastructure and better prospects for agriculture in the Terai, a large number of people from the hilly areas have migrated to this region, especially since the eradication of malaria in the 1960s. Studies indicate that this region also received a considerable inflow of migrants from neighbouring countries, particularly in the 1970s. As a result, the rate of growth in Terai population has been the highest among the three regions, and this trend continued at least until 1991. Between 1981 and 1991, the Terai population grew at an annual rate of 2.75%, while the annual growth rates in population in the mountains and hills were 1.02 and 1.61%, respectively. The annual growth rate in national population during the period was 2.08%.

In 1991, Nepal had a population density of 125.6/km² of total land area and 7.9 persons per ha of cultivated land (Sharma and Kayastha 1998). On the total land area basis, the mountain region had the lowest population density (27.8/km²) while the Terai region had the highest (253.6/km²). On the basis of cultivated land, however, the hill region had the highest population density (9.6 persons per ha) followed by the mountain region (8.8 persons per ha), while the Terai region had the lowest (6.6 persons per ha).

Economic background and interdependence

The history of Nepal's planned development efforts dates back almost half-a-century. The country is now in the midst of its Ninth Plan (1997-2002). In the past four decades, some progress has been achieved in infrastructural development. However, the overall pace of economic growth has been slow and far below that experienced by other countries in the region. Real gross domestic product (GDP) growth rate in 1997/98 is estimated at about 2.7% compared with 4.8% in the previous year (Table 6.1).

Nepal is an overwhelmingly rural and agrarian economy. Nearly 85% of its people live in rural areas and earn their livelihood primarily from agriculture and related

Table 6.1: Nepal: key economic indicators 1992/93 - 1997/98

	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98
Nominal GDP at Market Price (NRs' billion)	165.3	191.6	210.0	239.4	269.6	285.7
Share of Agriculture (%)	42.3	42.1	40.7	40.5	40.4	39.4
GDP Growth Rates at 1984/85 Price (%)						
Overall	3.3	7.9	2.9	5.7	4.8	2.7
Agriculture	-0.6	7.6	-0.3	4.4	4.1	1.0
Non-agriculture	6.5	8.1	5.3	6.6	5.2	3.9
Crop Production Growth Rates (%)						
Overall	-4.7	13.3	-4.0	12.4	3.8	-0.8
Food Crops	-7.9	16.8	-7.9	15.4	2.9	-1.5
Cash Crops	3.4	5.3	5.8	5.9	6.1	0.7
National Urban CPI (% change)	8.9	8.9	7.6	8.1	7.8	4.0
Gross Domestic Savings (% of GDP)	13.6	14.7	14.8	13.8	14.0	9.5
Gross Domestic Investment (% of GDP)	23.1	22.4	25.5	27.3	25.3	20.7
Exports (% of GDP)	10.1	9.7	8.0	8.0	8.1	9.3
Imports (% of GDP)	22.9	25.9	29.1	30.0	33.4	29.9

Source: HMG/MoF 1998/99

activities. Although the share of agriculture in the GDP has fallen significantly from 72% in 1975 to less than 40% in 1998, a vast majority of the rural people, in particular women, continue to depend heavily on this sector for income and employment opportunities. Women constitute about 60% of the agricultural labour force, have little access to alternative employment opportunities, and are among the poorest in the country. Overall, agriculture employs more than 80% of the total labour force compared with a meagre four per cent employed by the manufacturing sector. The level of rural unemployment is estimated at 14%, and underemployment at around 40% (HMG/NPC 1998).

Agriculture drives the engine of economic growth in Nepal. However, the growth of this sector has been slow and unstable. Crop production, which dominates agricultural production, has remained largely traditional and subsistence oriented. Similarly, traditional practices and low yielding breeds of animals characterise most of the livestock production, and this is the second- most important activity (and the most important one for poor households) in rural Nepal. Consequently, the annual growth in total agricultural output averaged only three per cent during the Eighth Plan (1992-97), with even negative growth rate in its first and the third year.

* As of the publication of this document the value of the Nepalese rupee to the dollar is 73.15. it has risen from approximately 55 in 1992.

As a result, poverty has been rampant in Nepal. With a per capita income of \$222 in 1998/99, Nepal is one of the least developed and poorest countries in the world, both socially and economically. High and sustainable economic growth and poverty reduction have been and will continue to be the main development agenda for Nepal.

In Nepal, poverty and underdevelopment processes are particularly striking in the hilly and mountainous areas that physically cover more than three-quarters of the country. The natural and environmental dispositions of these areas are different from those of the plains. These areas are characterised by inaccessibility, fragility, marginality, diversity, niche, and human adaptation mechanisms, often called 'mountain specificities' (Sharma 1996). Nepal's own experience has suggested that any development intervention that does not take these specificities into account may threaten rather than facilitate the sustainability of the environment and human life in mountainous areas. As such, sustainable development of these areas is often a challenge, and this challenge is increasingly serious for Nepal. The challenge stems partly from the failure of past development policies and programmes to achieve their intended results, and partly from the widely expressed concerns that growing population pressure coupled with lack of growth in economic sectors will accelerate the depletion of natural resources, leading to grave environmental consequences.

In general, the Terai region is better equipped with social and economic infrastructure than the remaining two regions. Most parts of this region are linked to adjoining Indian towns by roads, and the borders are also long and open. Goods and services flow freely between this region and the bordering Indian towns. As a result, the range of income and employment opportunities available in the Terai is wider than in most parts of the hills and mountains. The effect of this high level of integration between the Terai and the huge market across the border has also been that Indian policies have had greater impact on agriculture and prices in the Terai than those of Nepal. From the price policy perspective, Nepal's position is like that of 'a flea on an elephant's back' to such an extent that, regardless of where the flea wants to move, it will ultimately move in the direction in which the elephant moves (Wallace 1990).

Because the greatest agricultural potential and the maximum concentration of people are in the Terai, government development strategies and policies have been traditionally designed to suit the needs of this region. These strategies were devoid of any mountain perspective and contributed to rapid depletion of the natural resource base and decline in livelihood options in mountain regions. This has also had adverse downstream effects in the form of a deteriorating environment for agricultural production, declining productivity levels, and rising frequency in the occurrence of natural disasters in the Terai region. It is becoming increasingly clear that sustainability of the mountain environment is not only a mountain-specific issue, but also a key to the sustainable development of Nepal as a whole. This calls for a development strategy that responds to the mountain specificities and which is designed from a human

perspective. There is evidence that only with such a strategy can development take place and be sustainable locally.

Objectives and organisation of the paper

The objectives of this paper are to review the status, experience, and trends in Nepal's economic development and poverty alleviation and suggest possible strategies and institutional options for improving the situation. The paper is organised as follows. After this introductory section, the current status of natural resources and past trends in their depletion are examined in the next section. Section 3 presents the trends in agricultural productivity, food security, and poverty in Nepal. An overview of poverty alleviation efforts by past governments is presented in Section 4. The fifth section outlines the poverty alleviation strategies and policies adopted by the Government at present. Section 6 discusses the emerging challenges, opportunities, and institutional options for rapid economic growth and poverty alleviation. Finally, the emerging strategy and policy imperatives for sustainable mountain development and poverty alleviation in Nepal are discussed in the seventh section based on the lessons learned from successful cases of development.

6.2 Status and Trends in Natural Resource Management

Land and water are the primary natural resources of Nepal. The land, which is used for different purposes – for example, farming, forests, shrubs, and pastures – has been the most abused of all natural resources. This has happened mainly because agriculture remains the main source of livelihood in rural Nepal, and, therefore, land is the most important source of subsistence and, hence, the most preferred asset. The intensive cultivation of land, especially in the mountainous regions, has led to different types of environmental hazard: deforestation and soil erosion being among them. Nepal is rich in water resources, but the profitable use of water has been far below the potential level. Some mineral reserves have been identified, but these are also unexplored for potential economic use. There are concerns that air pollution and water pollution have risen to serious levels, but such problems are largely confined to a few and the most populous cities. A more detailed discussion of Nepal's position with respect to its natural resources follows.

Land

Nearly 21% of Nepal's total land area of 14.7 million hectares is cultivated, and an additional six per cent of this is classified as cultivable (HMG/EPC 1993). Forests, shrubs, pastures, and others account for the rest. Of the total cultivated land, 60% is classified as wet land and the remaining 40% as dry land. The cultivated land is divided into 2.7 million holdings, with each holding averaging 0.94 ha in size. The average holding is further fragmented into an average of four parcels. As such, farming in Nepal is typically characterised by small and highly fragmented holdings, with low economies of scale in production. Nonetheless, further fragmentation is bound

to occur over time under the existing legal framework which protects the right of sons to inherit the land owned by their fathers.

About 15% of the holdings, comprising about nine per cent of the cultivated land, are farmed by tenants. The owners themselves cultivate the rest. Of the tenanted land, genuine tenants operate about one per cent, while households who also own some land of their own operate the rest. Share tenancy is the most common contractual arrangement in either case. More than one-quarter of the households in the Terai region are landless and fall into the landless category. In contrast, almost every mountain household owns some land and landlessness is uncommon. Hence, poor households in the mountainous regions are primarily those households that either have insufficient land to produce crops or no access to market to sell surplus.

With the growing population pressure on existing land, more and more marginal lands, including steep slopes, have been brought under cultivation over time, causing severe environmental consequences. It is estimated that some 240 million cubic metres of topsoil are lost every year from Nepal. The loss of topsoil means the loss of soil nutrients, and this further means a decline in native soil fertility level. Eventually, this means that increasingly large amounts of nutrients will need to be applied to replenish the soil and retain the previous levels of crop productivity. Declining crop productivity forces a household to expand cultivation to new lands, including the more marginal, slopey wastelands, in order to produce enough food. This leads to repetition of a vicious cycle – declining productivity, rising poverty, and growing food insecurity. The mountain people are often the greatest victims of this.

Forests

The massive depletion and degradation of forest resources have been a matter of most serious concern in Nepal. Nepal's forest area, which was 45% in 1964, declined to 37% in 1986 and further to 29% in 1998. However, the rapid loss of forests is attributable not only to the increased pressure on existing farmland, but to increased demand for forest resources.

In Nepal, forests support human and animal life and agriculture in several ways. For example, forests supply firewood on which more than three-quarters of all Nepali households depend for their daily energy requirements, for cooking for example. The proportion of such households is even greater in mountain regions, from 91 to 100%.

Forests also supply timber, fodder, grasses, leaf litter, and many other products that are necessary for daily household use and agricultural production. They also provide raw materials for wood-based industries and promote tourism: an important source of foreign exchange. Hence, the massive decline in forest quality and area has had many adverse impacts on human and animal life and agriculture in Nepal. Some 58 species of animals are already endangered (HMG/NPC 1998). The frequency of floods and landslides has also been reportedly rising over the years. For example, 71

of the 75 districts in the country were affected by such natural disasters in 1996 compared to 49 districts affected in 1994 (Mishra and Kayastha 1999).

Water resources

Nepal has a great potential for developing water resources, but this potential remains largely underdeveloped. The country possesses about 2.27% of the world's water resources. It is reported that Nepal's annual renewable water potential is 232 billion cubic metres, but less than eight per cent (17 billion cubic metres) is exploited.

Similarly, the country's total hydropower potential has been estimated at 83,000 MW, of which production of 25,000 MW is considered financially feasible; but the actual production at present is only 254 MW or 0.3% of the total potential. This has served only about 14% of the total population, mainly located in cities. The cost of power generation has been high, and leakage has also been high. More than one-quarter of the power supply goes on leakages. This and the high operation and maintenance costs have resulted in frequent increases in electricity tariffs. Between 1991/96 and 1996/97, the electricity tariff for domestic consumers increased by 180%, from NRs 1.78 per unit to NRs 4.99 per unit. Thus, the efficiency of the power sector is questionable.

More importantly, Nepal has not been able to make proper use of its water resource potential for expanding irrigation and drinking water facilities. Only about one-third of the potential agricultural land and about 40% of the cultivated land receive some form of irrigation. Year-round irrigation facilities remain limited. Many potential irrigation schemes are yet to be developed, and most of the completed ones suffer from lack of proper operation and maintenance. As a result, water supplies are unreliable.

The drinking water situation in Nepal is no different either. Official estimates suggest that 61% of the population have access to drinking water facilities, and about one-fifth of the population to sanitation facilities. However, these figures are likely to be overestimated and the actual size of the population having access to such facilities is probably much smaller, both qualitatively and quantitatively. This is indicated, for example, by the fact that the number of households actually served by the Nepal Drinking Water Corporation in the cities, including Kathmandu, is less than claimed. With respect to the timeliness, quantity, and quality of water supplied, effective coverage is limited and the quality of services delivered highly questionable.

The main problem in Nepal is not lack of natural resources, but the inability to manage these resources in an efficient manner. The current poor management of natural resources has stemmed from several factors, including political, administrative, and institutional factors. For example, many irrigation and power sector projects in the past suffered from weak design, delayed implementation, and poor operation and maintenance. All these factors raised their costs and adversely affected the pace of development in these sectors. In general, development projects in Nepal have

suffered from inherent institutional deficiencies, lack of transparency and accountability, and inadequate political commitment. The overall consequences have been far reaching; and these include poor performance in agriculture and rising food insecurity and poverty in Nepal.

6.3 Trends in Agriculture, Food Security and Poverty

Trends in agriculture

Nepal is an overwhelmingly agrarian economy, with agriculture employing over 80% of the labour force and generating nearly 40% of the gross domestic product. Within agriculture, crops, livestock, and horticulture dominate the sector activities and contribute, respectively, 46%, 32%, and 14% of the agricultural GDP. Cereals (rice, maize, wheat, barley, and millet) account for nearly 90% of the cropped area (excluding vegetables, fruit, and pulses) and 56% of all agricultural production (excluding livestock and fisheries) in quantitative terms. Small and marginalised farmers operate nearly 90% of the 2.7 million agricultural holdings.

Agriculture not only drives the engine of growth, but also holds the main key to alleviation of poverty, which is pervasive and widespread. However, the growth of this sector has remained, at best, slow and unstable during the past three decades; decades which mark the period of the Green Revolution. While many countries in Asia, including south Asia, were experiencing rapid gains in agricultural productivity during the period, Nepal was most of the time struggling to maintain its previous productivity levels. Consequently, Nepal's crop yields, which were the highest among the south Asian countries from 1961-63, have now become the lowest in the region.

Between 1961-63 and 1991-93, the overall annual growth rate in yields of major crops in Nepal was actually negative (-0.07%), while it was 2.71% in India and 1.59% in Bangladesh (HMG/NPC 1995). During this period, Nepal's rice and wheat yields grew annually at the rate of 0.54 and 0.29 per cent, respectively. In contrast, the corresponding growth rates in India were 1.92 and 3.46% and, in Bangladesh, 1.55 and 3.59% respectively. Total production of cereals in Nepal increased considerably during the period. However, this was largely due to an increase in the area under food crops, rather than due to an increase in their yields, as has been the case in other countries in the region. As shown in Figure 6.1, the trends in yields of major food crops during 1974/75-1997/98 are truly disappointing. Not only have the yields remained low due to poor growth rates, their annual fluctuations have been wide and persistent.

Among the three ecological regions, the yields are lower in the hills than in the Terai and lowest in the mountain region. Table 6.2 shows the three-year average yields of major crops covering two periods – 1988-90 and 1996-98. In most cases, the yields have either declined or remained more or less stagnant between the two periods.

Figure 6.1: Trends in yields of major food crops, 1974/75 - 197-98

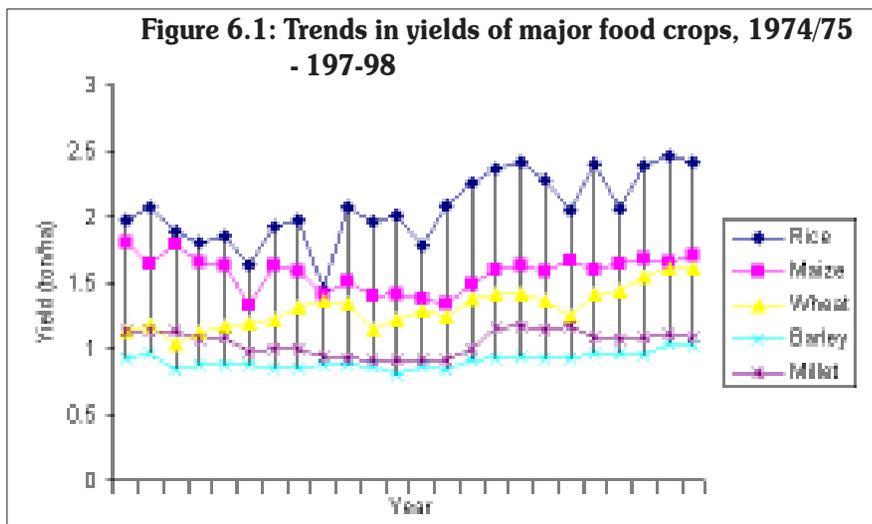


Table 6.2: Yields of major crops by ecological region, 1988-90 and 1996-98

(Average yield in tonnes/ha)

Crop	Mountain Region		Hill Region		Terai Region	
	1988-90	1996-98	1988-90	1996-98	1988-90	1996-98
Paddy	1.97	1.93	2.25	2.24	2.35	2.07
Wheat	1.04	1.18	1.22	1.52	1.30	1.64
Maize	1.40	1.59	1.49	1.62	1.72	1.90
Millet	1.03	0.92	1.10	0.87	1.29	1.01
Barley	1.16	0.99	0.92	0.97	1.02	0.89

Source: CBS (1999)

A number of factors may be associated with the poor growth of agriculture. Most of the agricultural production occurs in rainfed conditions and is subject to substantial risk from the vagaries of the weather. The risky production environment reduces the profitability of investment in farm inputs, particularly fertilisers. Moreover, farmers often lack the capacity to finance such inputs, and external financing is not easily available. Partly because of these factors and partly because of institutional problems leading to unreliability in terms of fertiliser supplies, the rate of fertiliser application to crops has been very low, except in a few pockets and for a few commodities. There are concerns also that agricultural research has not been responsive to farmers' needs and preferences with respect to the type of technologies suitable to their production environments; and, in addition, the extension system is weak and marketing opportunities for farm products are limited. Thus, the main causes of poor agricultural

development are inadequate supplies of key inputs, poor irrigation facilities, a weak extension and research system, and lack of marketing infrastructure and networks (DANIDA 1995).

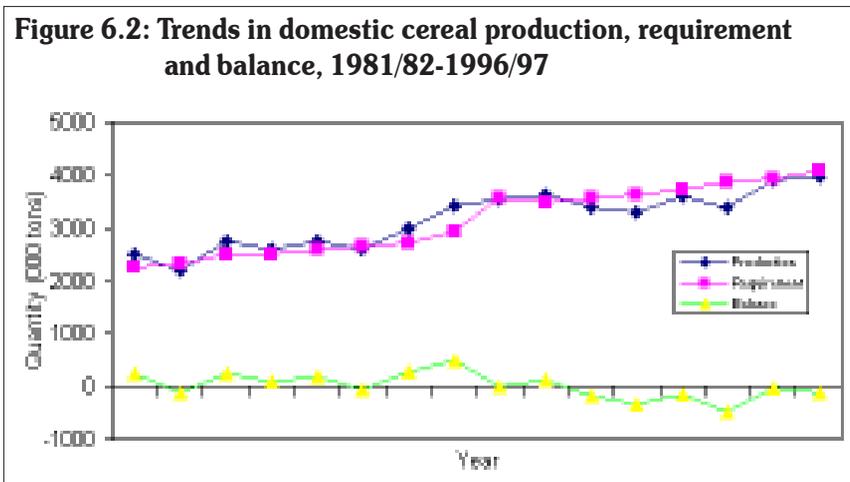
Trends in food security

The poor growth of productivity of food crops has had an adverse impact on food security in Nepal. Over the years, as further expansion in the area under agriculture has become increasingly less feasible, the growth rate in cereal production has fallen short of the population growth rate, resulting in reduced per capita food grain availability. From 1980/81-1990/91, cereal production increased annually at the rate of 2.30%, while the population increased at the rate of 2.50%. Consequently, the per capita cereal production declined at the rate of 0.2% per annum (HMG/NPC 1994). The net effect of all this has been that Nepal has gradually shifted from being a net exporter to being a modest importer of cereals.

Figure 6.2 shows the trends in domestic cereal production, requirements, and balance from 1981/82 –1996/97. The gap between domestic cereal production and requirement is rising, albeit in an irregular manner, indicating a worsening trend in terms of food self-sufficiency and a growing need to import food.

The effect of poor growth in the agricultural sector, therefore, will not only worsen the food security situation, but also adversely affect the employment and income of the rural people, including the poor. The extent to which Nepal will be able to reduce its poverty level will depend to a great extent on its ability to promote agricultural growth. However, during the last decade, not only has the real growth rate in cereal production (net of population growth rate) declined, the overall agricultural growth rate has been low and extremely unstable. This obviously means a rising level of rural poverty in Nepal.

Figure 6.2: Trends in domestic cereal production, requirement and balance, 1981/82-1996/97



Trends in poverty

The official estimate of poverty provided by the Nepal Living Standards' Survey (NLSS) carried out by the Central Bureau of Statistics during 1994-95 places 42% of the population below the poverty line. In urban areas, the percentage of population below the poverty line was estimated at 23% compared to 44% in the rural areas (HMG/NPC 1998). One quarter of the Nepalese population has been identified as poor and 17% as the hard core poor. As shown in Table 6.3, the mountain regions have the highest poverty level of 56%. This region has also the highest proportion of poor (29.3%) and hard core poor (26.7%). Thus, the incidence of poverty is higher in rural than in urban areas and particularly extreme in the more remote parts of rural areas.

Table 6.3: Incidence of poverty by region

Region	Percentage of Population below Poverty Line		
	Total	Poor	Ultra-poor
Mountains	56.0	29.3	26.7
Hills	41.4	21.3	19.7
Terai	42.0	28.7	13.3
Urban Nepal	23.0	13.2	9.8
Rural Nepal	44.0	26.4	17.6
Nepal	42.0	24.9	17.1

Source: HMG/NPC (1997 - 2002)

The extent of poverty in Nepal is much higher when an international comparison is made. The NLSS estimated an average annual per capita consumption of NRs 6,802 (about \$130) for the whole country. About 53% of the population consumed less than one dollar per day, while those consuming less than one-and-a-half dollars per day comprised 76% (World Bank 1997). The social indicators of development, including the gender gap, also present a very gloomy picture. Illiteracy, lack of adequate health and sanitation services, malnutrition, and illness are some of the common features of rural Nepal, especially in the remote areas. In general, women and children are more deprived of basic services than men. The overall living conditions of a vast majority of the rural population are abysmal and harsh.

Estimates of poverty levels over time are not directly comparable due to differences in methodologies used. As such, the trends in poverty levels cannot be assessed precisely. However, when the nutrition-based poverty line criterion is applied to the data generated over the years, there is more or less a clear trend of rising poverty, particularly in the rural areas of the country. As shown in Table 6.4, the percentage of rural population living below the poverty line appears to have risen from 37.2% in 1977 to 43.1% in 1985 and further to 47.0% in 1996. Careful observation and informed judgement also support the assessment that the poverty trend in Nepal is nowhere on the decline. Obviously, the situation is extremely frustrating and discouraging to all concerned with Nepal's poverty and underdevelopment.

Table 6.4: Nepal: trends in poverty incidence*

Source	Survey Year	Rural Nepal	Urban Nepal	Overall Nepal
Survey of Income, consumption and employment conducted by NPC	1977	37.2	17.0	36.2
Multipurpose Household Budget Survey conducted by NRB	1985	43.1	19.2	42.6
The Eighth Plan (1992-97) document prepared by NPC	1992	-	-	49.2
Monitoring micro Impact of macro policies conducted by APROSC	1992	-	-	49.0
Nepal Living Standards Survey conducted by CBS	1996	47.0	23.0	45.0

Source: Guru-Gharana, 1997.

* Based on the percentage of population below poverty line income which was estimated on the basis of the minimum calorie consumption requirement defined by the National Planning Commission.

6.4 Overview of Past Poverty Alleviation Efforts

Given that a vast majority of the Nepalese population make a living from agriculture, the poor growth of this sector appears to be the main cause of the growing incidence of poverty and food insecurity in the country. Past efforts to promote agricultural growth have not met with success. The success of other poverty alleviation policies and programmes has not been significant either. Poverty alleviation has been and will continue to be an overarching development goal for Nepal. A more detailed assessment of the various types of poverty alleviation efforts and their general impact follows.

Nepal has implemented different types of poverty alleviation programmes over the past two decades. Prominent among them are the integrated rural development programmes, targeted credit programmes, and food subsidy and transfer programmes. However, the overall impact of these programmes has been limited and their effectiveness questionable insofar as their outreach to the poor is concerned.

The integrated rural development programmes, which were supported by many donors, were for the most part unsuccessful with respect to poverty reduction. Not only were these programmes costly, they were also heavily top-down. The implementing agencies hardly felt the need to involve the poor themselves, let alone ensure their ownership of them. Similarly, the subsidised food distributed through the Nepal Food Corporation (NFC) did not benefit the poor. Rather, most of it went to better-off consumers in Kathmandu and to the army and civil servants in remote districts.

In the past two decades, the Government has implemented a number of targeted credit programmes with the goal of poverty reduction. These include the Small Farmers' Development Programme (SFDP), Intensive Banking Programme (IBP),

Production Credit for Rural Women (PCRW), Micro-credit Project for Women (MCPW), Rural Self-reliance Fund (RSRF), and others in more recent years. The impact of these programmes has been, at best, unclear. In many of these programmes, important linkages are missing (Upadhyaya 1999a). Their designs do not match their goals, and their implementation procedures do not follow their designs. For example, the prominent goal of SFDP, which has been a major poverty alleviation programme of the Government, is to provide financial services to poor farmers and landless households with no collateral to offer on a group-guarantee basis. However, it has ever since designed its credit policy in a manner that requires double collateral. That is, it requires both physical collateral and group guarantees from its borrowers. Similarly, the programme was designed to help its group in a particular area to develop into a sustainable community-based financial institution and to eventually phase out from that area. However, the process has only begun recently after more than two decades of implementation. Of course, other factors, such as those mentioned earlier, that are applicable to all development programmes also apply to targeted credit programmes.

Several policy measures have been adopted in the past to promote agricultural development and, thereby, reduce rural poverty. Some of these include: emphasis on research and extension, increased public spending on irrigation development, price support and input subsidies, increased public spending on education, development of rural infrastructure, and expansion of rural credit facilities.

Agricultural research has generally failed to develop technologies that respond to the needs and problems of the farmers, especially those of poor farmers (Upadhyaya 1999b). Even the available technologies, which are mostly applicable to irrigated conditions, have not reached the farmers, resulting in a low adoption rate at farm level. Public spending on irrigation development has seriously suffered from lack of farmer participation, poor operation and maintenance, and weak coordination among line departments. Moreover, the lands owned and cultivated by the poorer households, especially in the hilly areas, are of generally inferior quality, with low native productivity levels and limited potential for irrigation development.

Similarly, agricultural price support policies have been poorly designed and ineffectively enforced, failing to achieve their intended objectives. Support prices were generally announced at harvest time rather than at planting time and, therefore, the policy has hardly had any impact on farmers' decisions about crop types or inputs to be applied to them and to what degree. Moreover, due to the open border with India and also due to the limited capacity of Nepal Food Corporation (NFC) to procure cereals, the price support policy had no significant impact on market prices. Irrigation and fertiliser subsidies have only increased pressure on the limited, government financial resources and caused supply constraints. Poor farmers hardly use fertilisers.

Increased spending on education has not benefited the poor either. Large amounts of public expenditure on education have gone for higher education to which the poor

have the least access. Similarly, development of physical infrastructure has taken place over the years, but this has mostly been concentrated on relatively accessible and politically influential areas; the more remote areas, where the inhabitants are mostly poor, have received a negligible share of public expenditure.

There are indications that subsidised credit facilities have not reached the poor, as they have had little access to formal sector credit facilities. According to the results of the Nepal Rural Credit Review Study, only about 20% of all rural borrowers, which included very few poor, had access to formal financial sources in 1991-92. Thus, a vast majority of the rural poor continue to depend on various informal sources to meet their credit needs. Requirements for collateral, rigid and cumbersome delivery procedures, and high transaction costs appear to have been the major constraints facing the poor in gaining access to institutional credit. As such, the poor do not benefit from the interest subsidies, as they borrow mostly from informal sources.

The negligible results achieved by the various poverty alleviation programmes of the government have raised doubts as to the appropriateness of the design and the seriousness with which these programmes are implemented. Among the common features of these programmes are (i) a partial approach, with a singular focus on credit supply, (ii) lack of clear links between poverty reduction and programme components, (iii) inadequate targeting and participation of the poor, and (iv) non-responsiveness to the felt needs of the poor. These features along with the inherent institutional deficiencies of the implementing institutions rendered most of the programmes ineffective. The programmes proved costly and unsustainable at the local level, and the implementation process appeared largely external and supply-driven.

6.5 Present Government Policies and Strategies

Shift in policy paradigm

The re-establishment of democracy in 1990 led to the emergence of a new development paradigm in Nepal. The new paradigm has provided more space and opportunity for all segments of the society to participate in development. The expressed intentions of the Government have been to play a facilitating role rather than the controlling role which was the case earlier. Decentralisation, deregulation, and local self-governance are considered to be the pillars and foundation blocks for new development strategies. Emphasis has been placed on development strategies that promote a broad-based, balanced and sustainable growth of the economy. Most important of all, poverty reduction has been highlighted as the main development goal of the governments in office since then.

The Government implemented the Eighth Plan (1992-97) with three main objectives – sustainable economic growth, poverty alleviation, and reduction in regional disparities. The growth objective was to be achieved largely through private sector involvement and people's participation at local level. The poverty reduction objective

was to be achieved through a number of different programmes promoting substantial and sustainable economic growth. Intensification and diversification of agriculture were among priorities emphasised by the Plan. Despite the enthusiasm and expressed commitment of the Government, many of the priority programmes failed to receive the necessary policy and institutional support and resources from the Government, and the progress of the Eighth Plan as a whole was below target in most sectors (HMG/NPC 1998).

The agricultural perspective plan (APP)

The fact that agriculture continues to determine the pace of economic development in Nepal has been well understood by the Government. Accordingly, the Government adopted a long-term Agricultural Perspective Plan (APP) in 1995 as an agriculture-led growth strategy for poverty reduction and overall economic development. The goal of the APP is to double the agricultural growth rate from 2.5 to 5% and to reduce the poverty level from 49 to 14% over a period of 20 years (HMG/NPC 1995). In view of the past constraints and future potential for growth, the APP focuses on four priority inputs – fertiliser, irrigation, farm roads and electricity, and technology.

The APP has adopted different strategies for the Terai and the hills and mountain regions. The Terai strategy takes into consideration the vast potential for irrigation development and growth of cereal production in this region. The perspective plan expects to double the irrigated area in the Terai from 43% at present to 86% by the end of the plan period. The area under year-round surface irrigation is expected to increase by more than 50% and that under groundwater irrigation almost sixfold. An increase in area under well-controlled irrigation together with increased use of modern technologies and fertilisers and improved rural infrastructure are expected to boost cereal production in this region. It is expected that the agricultural research and extension systems will be strengthened, the level of fertiliser use will increase from 35 kg/ha in 1994/95 to 152 kg/ha by 2014/15, and the rate of road construction during this period will almost double to 515 km/year.

The strategy for the hill and mountain regions takes into consideration the natural comparative advantages of these regions to produce a range of high-value, low-volume commodities. The strategy for these regions is demand-driven and complementary to the Terai strategy. The increased incomes from the Terai strategy will raise demands, and thus the market, for the high-value commodities produced in these regions, and this in turn will increase demand for the cereals produced in the Terai region. The hill and mountain strategy also requires an improved research and extension system, rural road networks, and fertiliser supplies to achieve its goal.

To achieve its goals of growth and poverty reduction, the APP has identified livestock, high-value crops, agribusiness, and forestry as its priority output sectors. Cereal production will be concentrated in the Terai. Emphasis will be on increasing the productivity levels through an improved supply of the priority inputs mentioned above. The main challenge is to promote a sustainable farming system in the

mountainous regions, and this will require maintenance of biological and ecological integrity of natural resources and promotion of high-value agricultural production and off-farm employment activities to increase household incomes.

The ninth plan (1997-2002)

The APP has provided the basis for adopting a long-term vision for poverty reduction in Nepal. The Ninth Plan of the Government, being implemented now, is built on the APP and has poverty reduction as the single most important goal to be achieved over the next 20 years (HMG/NPC 1998). The overall strategies proposed by the Ninth Plan include integrated development of the agricultural and forestry sectors, reduction in economic and social disparities among communities and regions, empowering local bodies and cooperatives for sustainable development of different economic sectors, and expanding social and economic services to the backward communities and regions.

The Ninth Plan aims to bring down the poverty incidence by 10% – from 42% at present to 32% in 2002. High and sustainable growth of agriculture through effective implementation of the APP is considered to be a key to achieving this goal. In addition, emphasis has been placed on developing the physical, social, and economic infrastructure in remote regions and on raising the socioeconomic status of backward and downtrodden communities. More importantly, the Plan has stressed the need to direct all sectoral development activities towards the single purpose of poverty alleviation.

A number of poverty-focused sectoral and targeted programmes are to be implemented during the Ninth Plan period. The sectoral programmes include high-value agricultural production, promotion of agro-industries, rural employment generation, and expansion of primary health care, drinking water, education, and family planning services for the rural poor. The targeted programmes are focused on (i) very backward and remote areas, (ii) deprived, ethnic and downtrodden groups, (iii) landless rural families, (iv) small farmers, (v) specific groups, such as the Kamaiya (bonded labourers), and (vi) urban poor and unemployed groups. Social mobilisation is the basic approach considered for developing these target groups.

The APP and the Ninth Plan are the main policy documents of the Government. They both reflect the urgency felt by the Government about bringing about high and sustainable economic growth and reducing poverty levels in the country. However, a number of factors relating to the existing capacity and commitment of the Government raise doubts as to whether the activities planned will be implemented in a timely manner and the targeted goal of poverty reduction achieved. More specifically, there are concerns that the Government has remained crippled by its inefficient bureaucracy, non-transparent institutions, and lack of accountability. As a result, the policies do not match the procedures. The associated challenges and issues appear to be far too serious for the Government alone to meet. There are opportunities for development, but it will be prohibitively costly for the Government alone to deliver the required

social and technical services to use these opportunities. Thus, there is need to take stock of the emerging institutional options and use additional channels of service delivery for this.

6.6 Emerging Challenges and Institutional Options

Emerging challenges and issues

In the widest sense, the most serious challenge presently facing Nepal is to achieve high and sustainable economic growth and reduce poverty and food insecurity. Poverty has many different dimensions – for example, economic, social, political, environmental, and psychological dimensions. Economic poverty, however, appears to constitute the core of the poverty problem. Economic poverty can have several manifestations, and each of these can contribute to aggravation and generation of other forms of poverty. Increased food insecurity and social instability and insurgency may be among these manifestations. There are also clear signs of these becoming prominent in Nepal. Hence, persistence of high levels of economic poverty may lead to a complex gamut of problems, eventually threatening the sustainability of human life.

Sustainability of the mountain ecosystem has been a major challenge facing the entire Hindu Kush Region, and Nepal cannot be an exception. Rather, given the extent of poverty and underdevelopment in the country, in general, and in mountainous regions in particular, Nepal appears to be in the most vulnerable position in this respect. Due to the difficult topography and poor physical and economic infrastructures, the range of livelihood options is limited in these areas. Subsistence farming is the singlemost important economic activity, but this is becoming increasingly unprofitable and taxing to the environment. Government resources are limited, as is its capacity to efficiently allocate the scarce resources for the sustainable development of these areas. Given their ecological make-up, mountainous areas do possess some distinct development opportunities within the farm sector, but provision of the social and technical services needed to enable people to use these opportunities is severely constrained by many factors. The key element, however, is that, in those areas, there is a need to shift from the traditional subsistence approach to farming to one that involves promotion of low-volume high-value commodities based on local comparative advantages.

The ecological diversity existing in Nepal provides farmers with a unique opportunity to produce a wide range of high-value agricultural commodities, such as off-season vegetables and fruits, and to generate high incomes even from limited areas of farmland. However, commercial production of these commodities – which is generally suitable for hilly and mountainous areas – is limited because of, among other things, lack of technical knowledge among farmers, inadequate market information and infrastructure, and a subsistence orientation to farming.

Given that vast majorities of people, including the poor, depend on agriculture for their livelihood, poverty reduction in Nepal will not be possible without substantial

and sustainable growth in this sector. Agriculture must emerge as a profitable enterprise and it must respond to the market and to the needs of the processing sector; meaning it must grow commercially. However, several factors – including the socioeconomic, institutional, physical, and political factors – have presently constrained the commercial growth of agriculture in Nepal. Among these, the following factors have appeared to be particularly limiting.

- Production is traditional and subsistence oriented, and thus it is characterised by low economies of scale.
- Supply of modern production inputs and technologies is irregular and unreliable, and this leads to low productivity and returns from limited lands.
- Markets for the products are distant and cannot be accessed by individual farmers within affordable cost limitations.
- Farmers lack adequate cash flows to finance investment in agricultural production, and external financing is not readily available.
- The costs of technical and financial service delivery at the level of individual farmers are usually high, and the weak institutional capacity of the line agencies involved raises these costs to prohibitively high levels.
- Farmers lack an organised forum to initiate collective efforts to plan and manage development and to establish effective linkages with external agencies.
- The poor people often lack knowledge of their entitlements and possess limited capacity and strength to demand better service delivery.

The above factors point to the need for organising farmers in a manner that enables them to achieve economies of scale in production, access to distant markets, and to receive development services and inputs more effectively and efficiently. This typically involves a framework that draws on people's initiatives and on their local development potentials and priorities. The framework should place people rather than programmes on centre stage. Such a framework will require service delivery through institutions that are introduced and managed by the people themselves at the local level. Understandably, it is outside the purview of government institutions to adopt such a framework. But this should not be a constraint in itself, as new institutional options have been emerging in recent years.

Emerging institutional options

Following democratisation and economic liberalisation, there has been a significant shift in the approach to development in Nepal – from the previous centralised, top-down approach to a more participatory and bottom-up approach — in recent years. Efforts have been made to create more of an enabling environment, through new legislation and policies, so that people can organise themselves and plan and manage their own development. As a result, in the past few years, many different types of formal and informal organisations have emerged in the country.

In the more commonly practised typology, these organisations are categorised as non-government organisations (NGOs), cooperatives, and many other types of community-based organisations engaged in specific economic sectors (e.g., forestry, dairy farming, and savings and credit). The latter types of organisation are typically those that are owned and managed by the people locally. As such, they can provide the type of institutional framework discussed above to promote and sustain local development. The past few years' experience with cooperatives, savings and credit organisations (SCOs), and forest user groups (FUGs) in different parts of Nepal provides ample support for this view.

Cooperatives can provide an effective institutional framework to promote and sustain development at the local level. NGOs are an efficient means of providing the social and technical services required to develop and strengthen such cooperatives. More specifically, NGOs can contribute to sustainable poverty reduction by enabling farmers to undertake commercial production of high-value agricultural commodities and to organise themselves into cooperatives (Case I).

It is understood that Nepal does not have a successful history of cooperative movements. The cooperative movement introduced in the late 1950s, which rapidly gained momentum in the sixties and seventies, mostly failed to achieve its objectives. The cooperatives that emerged in the process did not provide the above type of institutional framework for local development. However, this was because political interests had led the movement and the process of cooperative development was entirely external to the community. Under the legal, regulatory, and policy environment that prevailed at the time, the cooperatives were neither organised by local initiatives nor managed by local people. Failure of the cooperative movement in the past is a case of an improper approach to cooperative development rather than a case of failure of cooperative principles. In fact, a careful review of development problems and prospects in the country would suggest that cooperatives are probably the only institutional mechanism for poverty reduction presently available to Nepal.

Informal sources have traditionally been a predominant source of finance, especially in rural areas. These sources include both individuals and groups; and the former mainly includes moneylenders, landlords, traders, friends, and relatives. However, in recent years, hundreds of different types of community-based savings and credit organisations (SCOs) have emerged in different parts of the country. A vast majority of them are still informal. These SCOs are owned and managed locally by their own members in a participatory and democratic manner. The greatest strength of these SCOs lies in their ability to mobilise savings locally and to meet the small credit needs of the rural people more efficiently and effectively than banks or the targeted credit programmes (Case II).

The trend in forest degradation from the sixties through to the eighties was so severe that some studies had even depicted a 'doomsday scenario' for Nepal around this time. However, not only did that not happen to be a reality, but the past trend also

Case I. NGOs can efficiently promote and cooperatives can effectively sustain high-value agricultural production as an approach to reduction of rural poverty

The case presented here is of the off-season vegetable production programme implemented by the Centre for Environmental and Agricultural Policy Research, Extension and Development (CEAPRED) – a Nepali national NGO – during 1992-94 along the Dharan-Basantpur Highway in Dhankuta district of eastern Nepal. The general approach adopted by CEAPRED for this involved (i) organisation of small and marginalised farmers, especially women, into groups, (ii) introduction of monthly savings' schemes within the groups, (iii) provision of on-site training on different aspects of production and marketing, (iv) provision of training and exposure trips for improved market access, (v) consolidation of these groups into cooperatives, and (vi) strengthening of cooperatives through various training and observation tours. The results have been remarkable with respect to a rapid increase in farm incomes and sustainability of the impact through the cooperatives without any external assistance.

The above programme involved 1,300 small and marginal farm households located within 2-3 hours' walking distance along the highway. The participating farmers, who were mostly women, were organised into 85 production groups, and provided with a series of different types of production and marketing training and exposure visits. Alongside the production activities, the groups were encouraged to mobilise regular savings. During the two-year project period, the farmers marketed over 5,000 tonnes of different vegetables worth NRs⁶ 25.7 million (Table 6.5). Major markets for the vegetables were the bordering towns of the Indian States of Uttar Pradesh and West Bengal. The average vegetable cultivation area per household increased sharply, as did the quantity of vegetables consumed by them, suggesting a positive nutritional impact of the project. Similarly, the average household income from vegetables increased from NRs 2,480 before the project to NRs12,850 at the end of the first year and further to NRs 19,150 at the end of the second year of the project. The overall impact on food security, measured by the ability of the households to save after meeting the domestic consumption requirements, was also significant and positive (Table 6.6). By the end of the second year, eight farmer cooperatives were registered from the production groups. Six of these cooperatives had procured a truck of their own to transport the vegetables. The cooperatives were provided with basic training on financial record keeping and management.

The project was phased out in 1994. Since then the cooperatives have been managing the production and marketing activities; and over the past 5 years of their management, there has been a significant increase in the area, production and consumption of vegetables. It is learned from the Sindhuwa cooperative that the quantity of fresh vegetables marketed per day during peak season, which was up to 20 tonnes in 1994, has now reached 60-80 tonnes. Likewise, both the vegetable area and average household income have increased several fold, suggesting that the cooperatives have not only sustained but also scaled up the activities.

⁶ Currently there are 73.70 Nepali rupees to one US dollar.

Case II. Community-based savings and credit organisations (SCOs) are more effective and efficient providers of financial services to the rural poor than banks or the targeted credit programmes of the Government

In 1994, a study estimated the number of SCOs in the country to be more than 12,158. With an average membership of 66 persons, the average deposits and share capital mobilised by these SCOs were NRs 58,076 and NRs 28,115, respectively (CECI 1996). Similarly, their average loans outstanding and cumulative disbursement were NRs 82,064 and NRs 222,870. If these average figures were applied to the estimated total number of SCOs, the total deposits and share capital mobilised by these SCOs in about 4 years' time would amount to NRs 706 million and NRs 342 million, respectively. Similarly, their outstanding and cumulative loans would have been estimated at NRs 997 million and NRs 2,709 million, respectively, and the total members served by these SCOs would have numbered 802,428. These figures compare well with the cumulative disbursement and rural outreach achieved by the Small Farmers' Development Programme (SFDP) in the past two decades.

These figures suggest a remarkably high potential of the SCOs for mobilising savings locally and responding to the small credit needs of a large number of members. Particularly striking is the amount of cumulative disbursement of NRs 2.7 billion these SCOs appeared to have achieved in 4 years. This might have been possible because of the fact that their loans were for a short period – usually for a few months – and, therefore, the turnover from their resources was high

Table 6.5: Quantity and value of fresh vegetables marketed during the second year of the project

Vegetable	Quantity (metric tonnes)	Value (NRs)
Cauliflower	397.8	4,773,884
Cabbage	2587.9	10,997,752
Radish	1612.2	4,515,485
Green Pea	239.0	3,209,567
French Bean	101.3	841,435
Eggplant	18.1	115,150
Tomato	112.9	998,124
Sweet Pepper	8.9	114,877
Rayo (Mustard Greens)	49.9	97,640
Carrot	28.7	96,590
All Vegetables	5,156.7	25,760,504

Note: At least 20% of the total production was consumed at home.

Table 6.6: Changes in vegetable area, income and consumption before and after the project (average per household)

	Pre-project	End of Year I	End of Year II*
Vegetable area (<i>ropani</i> – 70x70 sq.ft.)	2.2	4.5	6.0
Annual income from vegetables (NRs)	2,480	12,850	19,150
Annual vegetable consumption (kg)	392	427	614
Household income category (% households)**			
Can save	20	40	65
Just enough	20	23	26
Enough for 10-11 months	23	16	6
Enough for 8-9 months	19	6	2
Enough for 6-8 months	8	6	1
Enough for Less than 6 months	10	9	0

* Based on a sample of 120 households.

** Categorized based on the affordability to meet household food requirements with the present level of annual income.

Source: CEAPRED (Internal programme files)

seems to have undergone a reversal in recent years, especially in the hill and mountain regions. This has been made possible by the Forest User Groups (FUGs) that emerged largely as a result of the communities' felt need for protecting and improving forest conditions. Trends in the past few years suggest that these FUGs can conserve their forests more effectively than the Government, despite its continued efforts and the allocation of large amounts of scarce resources in the past (Case III).

The above discussions point to the presence of various non-government or community-based organisations that have the potential to serve either as efficient channels of service delivery or as institutional mechanisms at local level for both poverty reduction and sustainable economic development in Nepal. These organisations provide a possible institutional framework and options for the Government to use to meet some of the development challenges that appear to be too formidable for its own existing capacity. However, these organisations cannot serve as an alternative to Government, as it has an important role of its own to play, for example, in the development of social and economic infrastructure and in the provision of public goods and special safety nets for the poor. Moreover, the extent to which these organisations can contribute to development will depend on the environment created by the Government.

The development challenges facing the Government are enormous, whereas its capacity and resources are limited. Moreover, it is understood that the omnipresent role of the Government has not resulted in sustainable development anywhere. In view of this, it has become necessary to explore and try other institutional options. Also, in view of the promising results achieved in certain sectors in the recent past, there is evidence that such institutional options are already in place. In fact, a new development strategy seems to have been emerging in recent years. Past experience

Case III. Forest User Groups (FUGs) are effective in conserving their forests

Nepal presents a classic case of both forest degradation and evolution of user group management. Between 1950 and 1980, Nepal lost 50% of its forests. Fears were expressed that if the degradation continued at the same rate, all of the country's forests would soon disappear. In response to the severity of the problem, the government introduced the concept of local community or user group management through a law passed in 1978 which received subsequent amendments in 1979 and 1986. The legislation, however, was still control-oriented and did not provide secure management rights to the users. Consequently, it failed to bring about any significant improvement in the forest conditions. Realising the problem, and in line with the participatory development policies of the new democratic governments, a law was passed in 1993 which provided the user group with considerable control over the forest resources. This gave great momentum to the evolution of forest user groups (FUGs) in Nepal. While there were less than 500 FUGs managing some 6,500 ha of forest land before 1993, the number of FUGs rose sharply to more than 5,000 managing nearly 0.6 million ha of forest land by 1996. Almost 95% of the FUGs are located in the hills.

There is now a growing recognition that evolution of FUGs has helped to reverse the trend in forest degradation, especially in the hills of Nepal. The FUGs have been effective not only in preventing the forests from further degradation but also in improving the conditions of the forests. A common strategy adopted by the FUGs for this is to impose restrictions on its members on the frequency and period of their entry into the forests. There is evidence that, as a result of such restrictions, changes have occurred at the household and forest levels. Households have planted more trees on their own farms, reduced the size of their livestock herds, and adopted stall-feeding practices. All these have led to increased forest biomass.

points to the need for adopting a development strategy that builds on the comparative strengths of various types of institutions – government, non-government, and private sector - in providing development services at the local level, and that involves a participatory and community-driven development process. The next section elaborates on the elements of such a strategy and identifies some of the policy imperatives for its effective implementation for sustainable mountain development and poverty alleviation in Nepal.

6.7 The Emerging Development Strategy and Policy Imperatives

The emerging development strategy

There is now widespread recognition that sustainable development is an internal and human process. The process, if not internalised by the people, may be prohibitively costly and may lead to unsustainable impacts. Lessons learned from successful cases worldwide increasingly support this wisdom. Thus, a sustainable development strategy must have its roots in people – in their desire for, capacity for, and initiative in

sustaining the development process. Nepal's present challenge is to achieve substantial and sustainable economic growth as well as to alleviate widespread poverty. Based on the lessons learned from successful cases both within and outside Nepal, a three-pronged strategy appears to be necessary for poverty reduction and sustainable development in mountain areas. In simple operational terms, this strategy consists of three elements: (i) social mobilisation, (ii) capacity development, and (iii) institution building at the local level. A brief description of each of these elements follows.

Social mobilisation

Effective social mobilisation is an essential first element in the process of sustainable development and poverty reduction. Social mobilisation is often confused for, or interpreted too naively as, group formation. However, the concept is far broader in its scope and much more capacious in its results than group formation. Social mobilisation is preparing and psychologically empowering the people for development; it is bringing them to a state in which they possess a forward-looking and positive attitude; and it is a state in which they know their own development potentials, priorities, and constraints. It is a process of 'change' – a process that changes the psychology of the people from 'nothing can happen' to 'many things can happen, if and only if we are prepared and organised to make these happen'. Overall, it is setting the stage for sustainable development.

Operationally, social mobilisation, as a process, aims to create awareness among the people about the benefits of being organised – in both economic and social terms. It enables them to understand why they are poor, what their opportunities are for raising themselves above the poverty line, and how they can collectively act to make this happen. The biggest challenge in this process is to lead the people to positive, optimistic, and socially constructive opinions and actions. This is a challenge because, historically, social mobilisation has also been an approach leading people in both positive and negative directions. In any case, effective social mobilisation cannot happen without a purpose, and the purpose has to be made loud and clear. In the present context of Nepal, the purpose has to be to prepare people to collectively plan, manage, and evaluate and, as and when necessary, to redesign the development process.

Capacity development

Making people understand what they can do is not enough to actually make them do it. In the process of social mobilisation, the people will be able to identify and prioritise their local development opportunities, but they may not possess the required capacity and skills to actually use these opportunities. Capacity development is, therefore, the next important element in the strategy, and this may involve a series of different types of training (e.g., enterprise planning, production, and marketing) and other types of capacity development measures (e.g., exposure trips, development of small infrastructural installations, and so on). The purpose is to equip people with the requisite technical knowledge and to help them organise input supply and access markets for their products and services.

The experience accumulated indicates that people often accord high priority to opportunities that generate income and lead to economic empowerment. This is quite understandable, particularly in the context of rural and mountain areas of Nepal where economic poverty is both extreme and has led to further aggravation of other forms of poverty (e.g., social, psychological, and environmental poverty). In most cases, therefore, measures for capacity development may need to focus initially on income generation or reduction of economic poverty.

It is understood that, in rural areas, small and marginalised farmers constitute the majority of the poorer households and that farming is their main source of subsistence. Difficult terrain and a poor economic infrastructure limit the range of off-farm economic opportunities in those areas. However, the ecology of these areas provides unique opportunities (niches) to produce a wide range of high-value, low-volume commodities. Nevertheless, lack of technology, extension, and other support services has not permitted farmers to produce these commodities and benefit from the naturally available mountain niches. Thus, a more effective and sustainable capacity development strategy is to unleash the potential of the people to use these niches.

Institution building and strengthening

Once the economic gains are realised, there is usually a tendency among the people to make efforts to sustain these gains. However, a number of factors – both within and outside their local control – may render the present level of activities difficult and the associated economic gains unsustainable in the long run. One possible mechanism to ensure sustainability is to institutionalise these activities at the local level; that is, to create an institution that is collectively owned and managed by local people as its members. Evidence has shown that such an institution will have the ability to absorb random shocks by keeping its members prepared to collectively face and resist such shocks. Lacking an institutional ground, individuals (or groups) often tend to break away, as and when negative forces come to play against them, leading to the slackening or discontinuation of present activities and ultimately making the impacts unsustainable.

However, institution building alone is not the remedy. The institution must be strong enough to deliver services to its members in an effective and efficient manner. This is essential to ensure that members continue to realise the benefits of being part of it. The institution must be strong enough to respond to the changing social and economic conditions and seek ways to update its capacity and capability for this. For example, it should be able to access ways to bring new technologies (to promote more profitable activities or to counteract any negative externalities resulting from the present activities) and update the old. Similarly, it should be able to prepare itself for the possibility that new markets may open that could lead to new economic opportunities in the area. To meet all these qualifications is beyond the capacity of any local institution left on its own after its establishment. Thus, considerable efforts must also be made to strengthen the institution, and this again may require several capacity building measures, depending on its present state and future challenges.

A strong institution at the local level can serve to sustain impacts in several ways. First, in the existing socioeconomic and cultural set-up there is a distinct division of society into two classes – the resource-rich and the resource-poor. The former class has the obvious incentive to retain its present position, while the latter has often accepted its position as given. Hence, any intervention that disturbs this existing division is likely to face resistance from the former class and the hesitancy of the latter. Over time, as the external intervention (in the form of a programme or project) is phased out, it may be difficult to resolve the emerging conflicts through individual or informal group efforts. However, if the latter class is organised institutionally, this will be of benefit in two ways: the conflicts will be minimised and the capacity of this class to resolve the conflict, if any, will increase.

Policy imperatives

From the policy perspective, the above strategy raises two fundamental issues. First, the strategy will require provision of services to the local community in a manner that could be too costly for the Government to engage its own machinery for this purpose. Moreover, it is normally beyond the existing institutional capacity and resources of the Government to deliver such services locally. This is where the alternative institutional options – NGOs, CBOs, and other types of local organisation – have demonstrated promise. Second, in order to exploit the development potentials available in mountain areas, the community must have access to basic infrastructure, and this is notoriously lacking at present. Thus, in order for the above strategy to bring about the desired impacts, government development policies must be guided by and directed to meeting the following two fundamental conditions.

Government's resources and efforts concentrated on infrastructural development

Lessons learned from both within and outside Nepal provide enough evidence that enhancement of the range and quality of livelihood options in mountain areas is greatly determined by the level of social, economic, and institutional infrastructural development. In particular, the lack of adequate access to roads and other physical and economic infrastructure has seriously constrained the pace of development of mountainous areas, despite their natural comparative advantages in producing high-value cash crops. For example, high-quality apples are produced in Mustang, Jumla, and other mountainous areas of Nepal, but this potential has not been used to any significant extent. The main constraint is the lack of access to roads linking these areas to market centres; the marketing cost is so high that imported apples become cheaper than those locally grown apples after reaching the markets. Similarly, the prospect for off-season vegetable production is common in almost all mountainous areas, but it is so far limited to a few pockets that have access to roads and markets in the Terai and across the border.

The experience of the Indian State of Himachal Pradesh also supports the above argument. Apple cultivation was introduced to different parts of the State around the

same time in the 1870s, but the spread of apple cultivation has not been uniform in all areas. Those areas with adequate access to a road and marketing network have experienced tremendous growth in the area and production of apples over the past two decades, while other areas have lagged behind. Significant economic and social transformations have occurred in the former areas, while the latter have remained traditional with respect to agricultural production and the level of poverty for the most part (Sharma 1996). However, it was not only the economic infrastructure but also the social and institutional infrastructure that had led the process of transformation in these transformed areas. Besides building a massive road network, a range of different types of institution was established by the Government to provide production, post-harvest, and marketing services to apple growers. Of course, farmers' own institutions, such as the cooperatives, also helped to increase the access of individual farmers to marketing and other support services in those areas.

Infrastructural development is, therefore, a necessary condition for rapid economic transformation of mountainous areas in Nepal – whether through high-value agricultural production or through other means such as promotion of tourism, hydropower, and processing industries. Such infrastructure includes social, institutional, and other types of infrastructure required to provide services that are mainly in nature public goods. It also includes building the institutions and facilities required to address and solve the so-called 'second generation problems'. However, the local people must be mobilised, empowered, and organised institutionally so that the development activities are implemented in a timely and efficient manner and the impacts are sustained through local capacity and initiatives. This also means that the Government has to consider, wherever possible and relevant, engaging alternative institutional options in the process.

Government development policies and strategies guided by and consistent with the need for more effective partnership with the non-government and private sectors

This recognises the potential of different types of non-government and private sector organisations to contribute to sustainable development. It is now evident that NGOs possess distinct comparative advantages over government agencies; for example, in mobilising people, developing their local capacities, and providing them with the required financial and technical services for economic development and poverty alleviation. Similarly, it has been observed that, once the basic infrastructural facilities are developed, the private sector becomes active in economic development, and the local communities themselves also take up new opportunities to improve their quality of living. A more effective partnership among government, non-government, and private sector institutions is thus crucial for rapid and sustainable development. Clearly, there will be a gain in efficiency if roles and responsibilities are allocated among the stakeholders in accordance with their respective comparative advantages.

The large numbers of community-based organisations – for example, dairy cooperatives, forest user groups, water user groups, and other types of self-help

groups – that have evolved over the past few years offer unique possibilities and strength to bring about locally responsive and sustainable development. In this changed context, development programmes built on the strength and resources of these organisations are likely to yield better results and to make these programmes more accountable to the people than development programmes of the past. The delivery of services will be more efficient and responsive to the needs of the programmes than in the past. It will also help to make the implementation process more transparent and stable than heretofore.

Finally, understanding the right development priorities is a key to more efficient allocation of resources for development. Lacking this understanding, there will be a tendency to distribute resources too thinly into a large number of different areas without much meaningful impact, as occurred in the past. Nepal's present development priorities are set by the need to achieve rapid and sustainable economic growth, poverty alleviation, and food security. This is a challenging task, and much concerted and collective effort is needed on the part of all sectors to accomplish this task.

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