

7. A POLICY AND INVESTMENT FRAMEWORK FOR POVERTY ALLEVIATION AND FOOD SECURITY IN NEPAL

The proposed policy and investment framework for Nepal summarized in this chapter focuses on the need for pro-poor growth and enhanced entitlements of the rural population, which includes not only those who are poor in terms of income but also those who lack equitable access to economic and social assets, whether private or public in nature. The rural poor are given special attention owing to their special circumstances. The major disadvantages of this sector are relatively poorer health conditions, higher illiteracy, lower job security and productivity, and vulnerability to discrimination, particularly among the women and ethnic minorities. The Interim Poverty Reduction Strategy Paper (I-PRSP) of the NPC takes full cognizance of the multi-dimensional nature of poverty in Nepal and proposes some innovative initiatives.

7.1 Background and Policy Contours

Nepal has predominantly been a socially stratified agrarian society highly dependent on agriculture and allied activities. Viewed historically, it represents a classic case of “subsistence affluence” in years of normal weather and geological conditions. Despite social inequities, the people have evolved methods of mutual support and co-operation in dealing with nature and wild animals in conditions of geographical isolation. This has generated an unusual co-existence of both high levels of social capital and caste-based social stratification.

China is Nepal’s neighbour to the North while India faces it on the other three directions. The country has deftly maintained its proud traditions despite having trade and cultural links with both countries. These links have traditionally been stronger with India, influencing Nepal’s choice of development strategy and policies during the past fifty years. These five decades of enhanced exposure to the modern world have affected the economy, society and governance at all levels.

In line with other developing countries, including India, Nepal embarked on a strategy of development based on Five-Year Plans that featured heavy reliance on the State in the mid-1950s. In view of the country’s stage of development and the dominant paradigm of the time, this was to a large extent unavoidable. Beginning in the mid 1980s and accelerating in the 1990s, attempts were made to accord a larger role to the private sector, dismantle parastatal organizations and withdraw distortive market subsidies. These policies have imposed short run stress on the economy, creating difficulties for policy makers and implementing agencies. The synergy between market, state and civil society essential for socio-economic development in a well functioning market economy cannot emerge in the absence of an orchestrated strategy and without considerable nurturing. Poverty alleviation strategy and policies have to contend with the temporary frictions produced by these shifts and institutional changes.

A South Asian perspective on economic trends in Nepal is provided in Appendix Table 28. Five important patterns relevant to development of a policy framework need to be highlighted.

First, population growth and continuing demographic pressures are most pronounced in Nepal and Pakistan. Nepal's population increased from 12.8 million in 1975 to 23.4 million in 1999. Total fertility rate, at 4.3 in 1999, is more than double that of Sri Lanka. In the absence of sharp demographic transition, policymakers will have to deal with the issues of employment generation, food availability and access to food as central planks of a strategy of economic development.

Second, Nepal's domestic savings rate, at 13.14 percent of GDP, is among the lowest in Asia, while the potential for raising this substantially at a per capita income level of US \$249 is rather low. Accelerating rates of economic growth would be feasible only through a judicious mix of increased dependence on foreign savings and maintenance of a low incremental capital: output ratio. Issues of choice of technique in the face of globalization also need to be confronted.

Third, Nepal's share of GDP generated through international trade has been rising since 1965 and, at 35 percent, is higher than that of Bangladesh or Pakistan, but much lower than that of Sri Lanka or the countries of East and South East Asia. Forces of globalization, in the light of capital scarcity and labour abundance, should be seen as opportunities in a strategy of Nepalese economic development. In this context, foreign direct investment and increased multilateral as well as bilateral aid should be considered to be vital to as well as complementary to domestic savings in accelerating economic growth in the Tenth Plan.

Fourth, income share of the top 20 percent of country's population, at 46 percent, is higher than that of her neighbours, including Pakistan. The share of the bottom 20 percent, at about 8 percent, is lower than that in Bangladesh or Pakistan. Social stratification coupled by a highly skewed distribution of land ownership seem to be reinforcing these outcomes. As such, equity issues have to be confronted in the Tenth Plan on a priority basis. At a per capita income of US\$222, most Nepalese are poor compared with the rest of Asia or even South Asia. Policy makers need to pay attention to the issues of economic inequality, including inequality in land holdings. The managers of the Asian Development Bank, World Bank and special funds created for poverty reduction and debt relief need to be very receptive to requests of country's policy makers when presented as part of an orchestrated strategy to deal with poverty and nutritional insecurity.

Fifth, policy makers, with support from appropriate international agencies and initiatives, have been successful in reducing infant mortality rates (IMR) from 180 per thousand in 1965 to 75 per thousand in 1999. Similarly, improvements in life expectancy and share of gross national income (GNI) spent on education rose from less than 1 percent in 1965 to more than 3 percent in 1995, figures which are indicative of policymakers' commitment to human development. As argued in the Nepal Human Development Report (1998), efforts need to be stepped up further and sustained. The relative position of Nepal within Asia – even South Asia – remains at or near the bottom in this context. The Tenth Plan needs to address the issue of accelerating human development of the excluded sections of society.

Thus the policy framework must focus on these five contours of social and economic development strategy and constraints. A big push in the Tenth Plan to increase the economic growth rate via increased investment that also accelerates the creation of employment opportunities is of paramount

importance. The issues of macro-economic management and required fiscal discipline were discussed in Chapter 4 of the present study. The I-PRSP very appropriately accords a high priority to the need for efficiently managing the macro economy, including its fiscal and monetary aspects in the Tenth Plan. The inflationary pressures that emerged during the Eighth and Ninth Plan periods have had detrimental effects on the incidence of poverty in Nepal. This is because of the fact that asset-poor households will find their entitlements eroded in inflationary situations unless their wage income (the basis of their entitlement to a market-based access to food) rises proportionately.

In the past decade, despite attempts to achieve stability, the price index rose from 177.6 in 1990 to 350.3 in 1998. Food prices, in line with overall price trends, grew at about 10-11 percent per annum. The collapse of entitlements of wage earners and net buyers of food in the absence of matching growth in wages and incomes has resulted in higher rural poverty as noted in Chapters 3, 5 and 6. Growth of GDP at 4 percent per annum, with the agricultural sector growing at only 2.2 percent in real terms and population at 2.8 percent during 1990-98, has been grossly inadequate. Per capita agricultural output and food output growth has been negative. Policy response in terms of the APP and shift of focus of the Ninth Plan to poverty alleviation was timely and appropriate, but needs considerable strengthening. The strategy and approach of the Tenth Plan currently under preparation must ensure that the response to growing rural poverty is appropriate in terms of both rates of growth of the economy and the agricultural sector as well as the sharing of the fruits of economic growth. As such, the strategy needs a big push to create agricultural growth that is pro-poor and ensure that the benefits are shared equitably.

Considerable strengthening of the agricultural production base is required. The Tenth Plan needs to aim at raising land and labour productivity by about 20 percent by reducing the gap between potential and the actual levels in all regions of rural Nepal. Using the two-way flow of information, the Tenth Plan needs to incorporate decentralized goals, targets, constraints and needed inputs including labour, for each of 75 Districts. The linking of top-down and bottom-up approaches needs to be seriously pursued. Newly introduced institutional reforms and decentralized decisions making processes should be nurtured, tested and strengthened during the finalization of the Tenth Five Year Plan.

Apart from the short-term goal of raising land and labour productivity by dealing with institutional, supply and technical constraints on the achievement of potential with the existing production and resource base, the Plan must address the need for a strengthening and expansion of the agriculture sector's production base. For the medium term, i.e. about ten years, investment in the supply and use of yield-raising agricultural inputs, including research and development has to be augmented. The twin goals of achieving higher, sustainable and more stable agricultural growth cannot be realized without a major input of investment in water management and irrigation. There must be greater use of organic manure, more balanced use of chemical fertilisers, greater use of improved seeds and improvements in extension services. Research and development has to be pro-poor. All these initiatives need to be employment generating and not labour saving. Each of these components involves the issue of choice of technique. The role of the state in generating synergy between market and public institutions in this context can hardly be overemphasized. Technical inputs from FAO and the co-operation of various international research institutes under the Consultative Group on International Agricultural Research (CGIAR) system is of paramount importance. Similarly, through bilateral arrangements, Nepalese

agricultural policy specialists can access the required know-how from countries that have recently dealt with similar issues. For example, in India, Himachal Pradesh has a successful horticulture development strategy, Kerala has decentralized and participatory planning, while Punjab has developed an agricultural university-based extension service combined with market-based input distribution.

Agricultural economies of rural Asia have always been centred on small farms that include maintenance and use of livestock. In this sense, almost all farms in Asia are mixed farms. In Nepal, particularly in the mountain and hill areas, reliance on livestock has traditionally been even higher. Livestock has provided a sort of famine insurance and has been an important form of asset accumulation for the poor. History indicates that livestock has the potential to act as a major instrument for pro-poor and shared growth that can provide food security and enhance entitlements in rural Nepal. This is particularly true of the hill and mountain regions as has been highlighted in I-PRSP. However, as noted in Chapter 6, important policy contradictions have emerged here and must be addressed as Nepal's otherwise successful community forestry programme has effectively closed off grazing areas to people who are not members of the forest users groups, thus depriving animals of fodder and pasture during the transhumance cycle. This has had a seriously negative impact on the livestock systems of the hills and mountains (particularly the latter) and hence negatively affects food security in these already food-insecure areas.

Growth performance of the agricultural sector during the Eighth Five Year Plan was far below targeted rates. Observed growth during the first few years of the Ninth Plan, although somewhat better than the previous period, also fell short of the target. Understanding the reasons for these shortfalls is central to the success of the Poverty Reduction Strategy. The issues raised in the I-PRSP have been correctly flagged but need critical analysis. These issues have to be at the heart of the Tenth Plan approach and the target setting has to be bold but realistic.

In the absence of any meaningful increases in the prices of Nepal's primary exports (emerging trends point in the opposite direction), at least some of the growth in the value of agricultural output has to come from increases in physical quantity, partly through an increase in the use of inputs and partly through productivity gains. The APP dealt with these issues but relied heavily on the increase in input quantity and quality to achieve higher growth rates. Outcomes during the first few years of the Ninth Plan, as discussed in Chapter 3, are somewhat encouraging but needs considerable further improvements.

There is a parallel need to improve the quality of local products. In the case of foodstuffs, a vital part of this is meeting international food safety and phytosanitary standards. In addition, physical specifications are often important which require, among others, that certain specifications be met in processing and that fresh produce have a guaranteed minimum shelf life. Even with traditional commodity exports like rice, there is a need to be able to enter into contractual guarantees regarding quality, quantity and delivery dates, and this needs considerable organizational improvement in the production and farm-to-market chains.

The I-PRSP recognizes that agricultural productivity in Nepal has been quite low and that its growth has been much lower than in neighbouring countries. Over the period 1961-63 and 1991-93 yield

growth in Nepal has been low (1.25 percent per annum), so that the country has failed to maintain its position of the 1960s as the country with the highest crop yield in South Asia. Adoption of the APP and the shift of focus of the Ninth Plan had been expected to deal with this problem. In Chapter 5 (for detailed analysis see Annex 1) comparisons between short periods of pre-APP and post-APP years shows that post-APP productivity for most of major crops and sub-sectors is somewhat higher. However, these increases are partly due to favourable weather conditions and partly due to the effect of changing policy and institutional environment. In any case, these do not meet the targeted growth rates of the Ninth Plan. APP's performance ratio needs to be improved further. This is particularly so in the context of Nepal's likely accession to WTO. Unless agricultural productivity grows, the country will not have competitive advantage in most commodities and will not be in a position to benefit from globalisation.

7.2 Strengthening the Agricultural Sector Production Base

7.2.1 Short-term goal

In view of low level of agricultural productivity and its sluggish growth, the Tenth Plan needs to address the possibility of bridging part of the yield gap between the actual and the potential yields within existing technology and farming practices. Our village level analysis highlighted the fact that yield rates in three of the four villages were substantially below those observed in the districts of their geographical location. The reasons for these yield gaps were identified as (i) the villagers' ignorance about the existence of APP and (ii) Government's strategy of delivering high yielding inputs for use only in the priority crop sector having been rather unsuccessful. Similarly, the livestock improvement programmes of the APP and the Ninth Plan have had virtually no effect on the livestock economy of these villages. Using PRA methods, the researchers brought out the fact of lack of co-ordination between various implementing agencies at the district level. This is elaborated in Chapter 6. Potentially, it is possible to improve the yields of the APP's priority crops by about 20 percent without major additional investments in agricultural and rural infrastructure, and agricultural research and development. To achieve this, the Tenth Plan approach and the agricultural ministry's APP implementation strategy must take into account important information, availability and credit need requirements of the agricultural sector in all the three ecological belts and five development regions, especially in districts with highest incidence of poverty. This is particularly important for the mountains and hills especially in the mid and far western development regions. These requirements are outlined below.

Streamlining fertilizer availability, quality and prices of fertilizers and access to credit for the purchase of fertilisers. Recent policy changes seem to have created bottlenecks on the above four fronts. The sudden transfer of responsibility to the private sector has created bottlenecks that need to be addressed through a policy change. The problems of small farmers in the mountain and hill districts need to be addressed on a priority basis, given the shortfalls in food availability that they face during a large part of the year. The I-PRSP indicates awareness of the fact that the demand for modern inputs has declined and the targets of APP have therefore not been achieved. These serious constraints need to be dealt with urgently.

Reducing gaps between actual and potential irrigation through increased public and private investment. Recent changes in policy regarding credit and subsidy facilities for the sinking of shallow tubewells have affected the rate of expansion of the irrigated area. Our analysis of irrigation expansion and the instability in agricultural output during 1990s (see Chapter 3 and Annex 1 for details) suggests that all facets of water management strategy in each of the three ecological regions require priority attention. Investment on this account has to create complementarity between private and public investments on a medium term basis. In the short-run the goal ought to be maximization of area under irrigation with given levels of available facilities. In other words, the gap between actual and potential should be reduced.

Effective decentralization of agriculture-related service delivery systems. To ensure participation of the farmers and their representatives at the district level in newly created decentralized, participatory institutions for decision-making, the delivery system of fertilizer and enabling conditions for irrigation (public and private) need to be transferred to district level decision-making bodies. Equally important is the inclusion of agricultural extension services for APP priority crops in the decentralized, participatory decision-making processes to make them more responsive to the needs of small farmers. Thus the policy adopted for decentralized decision making needs to be operationalized and made effective through strengthening the capacity of district authorities. The Ministry of Agriculture and Co-operatives and the Ministry of Water Resources and their departments should create a synergic two-way information flow for this purpose. In this respect, special attention will have to be paid to translating a decentralised decision making process in the agriculture sector through preparation and implementation of district-specific APPs following participatory approaches. This is expected to remove the confusion about the APP at the district level that was observed during district level workshops as discussed in Chapter 6.

Emphasizing productivity-enhancing and employment-creating strategy in the rural sectors. The high incidence of under-employment in rural areas requires that the potential for creating more on-farm and off-farm employment opportunities in rural areas be used to the extent feasible. Efficient use of irrigation and fertilizers (with or without expansion) is productivity enhancing and employment creating. To the extent that this happens, the benefits will be widely shared, pro-poor and food security enhancing.

Better targeting of micro credit schemes. Rural credit, particularly the various micro credit schemes, need to be better targeted to ensure greater and more efficient use of yield raising inputs, irrigation and improved animal husbandry activities. To this end, the newly created decentralized decision-making institutions are accorded a larger role. These activities need to be sensitive to the existing gender bias against women and excluded communities.

Emphasizing a system of continuous monitoring and evaluation. Continuous monitoring and evaluation of the functioning of decentralized delivery systems through objective, transparent but simple procedures are of paramount importance. In this pursuit, the capacity of the APP Monitoring and Analytical Unit (established in March 2000 within MOAC after termination of IAU at NPC) needs to be enhanced in terms of both its capacity and resources. The emerging bottlenecks, problems of co-ordination that currently take a long time to identify and remedy, will have to be handled quickly by this

unit. This has been recognized by I-PRSP; the Tenth Plan needs to incorporate this as part of the decentralization process.

The suggested corrective measures do not require major additional investment in the short-run but instead rely heavily on changes in delivery and co-ordination mechanisms to ensure access to and use of modern inputs such as chemical fertilizers as envisaged in the APP. Withdrawal of subsidies on chemical fertilizers and groundwater irrigation has been blamed for recent fluctuations in fertilizer supply and investment decline in groundwater irrigation, implying that concerted effort will be required on the part of the government. This is needed to build up the confidence of the private sector in the Government's commitment. Public and private sector must also collaborate in enhancing business promotion campaigns.¹ At the same time, improving credit flow to the rural areas is needed as a means of dealing with the short-term consequences of subsidy withdrawal.

7.2.2 Medium term goals

The APP has a 20-year time horizon and envisages raising the rate of growth of the agricultural sector from less than 3 percent to 4 percent during the Ninth Plan period and to 5 percent thereafter. To achieve this, a big investment push is needed in the Tenth Plan. To ensure that investment in the agricultural sector is pro-poor and sustainable, technical progress should seek robustness, stability, yield enhancement and labour intensity. This requires a synchronised drive to improve the access of the poor to assets (physical, natural, human and financial), technology and natural resources. Their participation in decision-making institutional arrangements is of paramount importance for ensuring that they do not continue to be excluded from the benefits of accelerated growth. To achieve these goals following measures are recommended.

Ensuring substantial investments in productivity raising inputs. Investments (public as well as private) in yield-raising inputs that provide sustainable agricultural growth with reduced variability need to be substantially increased. These would include irrigation, water management, organic manure, a balanced mix of chemical fertilizers and labour intensive crop husbandry techniques. Policy strategies can ensure that public investment is complimentary to private investment in these efforts. With an appropriate mix of policies, each one of them is potentially employment enhancing. Government borrowings from ADB and the World Bank plus assistance from donors, would be growth enhancing when used efficiently. Expansion of micro rural credit facilities targeted to small and marginal farmers would ensure that the growth, by increasing equity, is also pro-poor. A substantially enhanced monitoring and evaluation system, including procedures for social audit to ensure achievement of equity objectives, would enhance the degree of confidence among all the stakeholders. International banks, donor agencies and direct beneficiaries of these investments would generate through these monitoring and evaluation procedures pressures from both below and above for successful and efficient implementation of specifically designed projects and programmes as part of the Tenth, Eleventh and Twelfth Five Year Plans. Potential livelihood consequences of these initiatives are quite substantial.

Re-emphasizing land reform. Land, like the other natural resources society uses for sustainable human welfare, has always been the subject of public policy, not least because considerations of

sustainability and equity necessitate that natural resources be treated differently from produced sources of wealth and property. Social forestry, regulations about the use of pasture land and protected forests are part of this policy milieu, as are national land use policy and land ownership regulations. Agrarian relations and land use systems are central to a strategy of agricultural development aimed at providing national and household level nutritional security. Attitudes to property rights determine the attitude to community and social institutions. Farm size and productivity debates and the overwhelming evidence that small farms employ more labour per unit of land, more of variable inputs and therefore have higher yields, mean that redistributive land reform can raise land and labour productivity. Efficiency and equity can be enhanced considerably even by a relatively mild degree of land reform. This advantage of small farms arises from the use of family labour at stages of development that Nepal is currently experiencing. Reform that transfers land from very large landholders to small farmers and agricultural labourers without further fragmentation of land holding can potentially be equity- and efficiency-enhancing. This is predicated on the assumption that the resource constraints poor people face in terms of access to agricultural inputs and capital are dealt with through public support in the initial years.

As one element of the strategy of pro-poor, shared and accelerated economic growth, land reforms that take full advantage of the above win-win potential would be welfare enhancing. Experience in developing countries has amply demonstrated that improving the assets of the rural poor promotes efficiency by stimulating higher productivity and economic growth while land redistribution is crucial to delivering more assets to the rural poor. Highly unequal land ownership has the opposite effect of reducing economic growth and diverts its benefits away from the rural poor. Allowing for land quality, land productivity of smaller farms is also usually found to be at least twice that of the largest ones.

Increasing investments in the livestock sector. Implementation of livestock sector development programmes has fallen short of the APP's vision on several counts. Lack of credit facilities for poor farmers, taxes on livestock and livestock products, slow growth in the livestock feed sector, lack of capacity to produce improved breeds, slow progress in promoting quality livestock health services through the private sector and inadequate livestock research and extension services have all affected the pace of commercialization of subsectors like cattle, buffalo and poultry farming. Thus there is scope for substantial expansion of investment to improve the livestock economy, particularly in the mountain and hill regions. Improvements in the livestock assets of small farmers and landless labouring families would enhance nutritional security and promote growth. The cattle economy of the household in mountain and hill areas is crucially dependent on publicly owned pastures and community regulated social forestry facilities. A symbiotic interaction between the increase in the quality and quantity of cattle owned and maintained by households and the sustainable capacity of these publicly owned natural resources needs to be targeted. The role of participatory, local decision-making involving all the stakeholders in ensuring that such a sustainable symbiosis emerges can hardly be over-emphasized. Initiatives in this area have to come from the government's livestock improvement programmes by suitable modification of the rules of access to these critically scarce public resources, and through provision of micro credit to the poor for buying and maintaining livestock. Farm animals are considered the poor person's wealth, and provide a high degree of household security against economic shocks.

Reorienting agricultural research and development towards APP priorities. Research and development and technical progress can make a powerful contribution to rural poverty reduction provided the rural poor have a say in its development. The strengthening of interactions between the public and private sector and between donor agencies and civil society is crucial for developing countries like Nepal which are heavily dependent on yield growth of food staples but have limited scientific capacity. The existing system of classifying research programmes under NARC makes it difficult to match the research topics with APP priorities. Classification of research projects is based on commodities and disciplines, not on inter-disciplinary problem-oriented themes. The purpose of research projects is sometimes ambiguous and their contents too broad to relate to APP priority areas. This indicates that there is ample scope for improving the content of research proposals in order to conform to APP priorities. Further, co-ordinated networks of interdisciplinary teams of scientists do not exist at the regional research facilities of NARC except at Lumle and Pakhribas stations. The need for agricultural research to address the specific needs of poor farmers has not previously been recognized except at these two stations. However the recently introduced competitive research grant system presently being institutionalized through the creation of a National Agricultural Research and Development Fund (NARDF) is a positive development in this sphere.

On the extension front the APP strategy for technology development and dissemination is to follow a 'package' approach in directing priority inputs towards priority outputs. This strategy has been adopted by the MOAC as the Pocket Package Programme (PPP), but there have been several flaws in its implementation. First, stakeholders' participation has not so far been sought when the pocket areas have been delineated. Second, the Programme is not backed up with full commitments from concerned line agencies dealing with priority inputs and outputs. Third, the areas selected in many districts are very small. Fourth, comparative advantages based on agro-climatic conditions have not been considered while defining the Programme components. Fifth, associated programmes, particularly those related to soil fertility, intensification of production systems, pest management, on-farm demonstration and farmer's training, have not been properly linked to the PPP. Thus the efforts of NARC and MOAC need to be directed towards correcting these gaps and inconsistencies in technology development and dissemination. The decentralization of agricultural and livestock extension needs urgently to address these issues.

Discouraging child labour in the agricultural sector. About 44 percent of Nepal's population is below the age of 15. About half of the children in the age group 10-14 are working in the agricultural sector. Given the very low level of productivity of these young workers and the enormous potential long run social cost of employing them, moving them from the labour force to school education is imperative if the inter-generational perpetuation of household poverty is to be halted. There is a need for conducting an orderly withdrawal of children from agriculture and redirecting them to education including vocational training in areas such as agro-processing and other non-agricultural rural activities to which agriculture has strong backward and forward linkages. Freeing child workers from agricultural labour would create employment opportunities for adults who are currently seeking employment through seasonal migration.

Enhancing employment opportunities in the agriculture sector. A major reason for rural young adults seeking seasonal employment in India has been lack of employment opportunities within the rural economy of Nepal. Investment in crop husbandry and animal husbandry that raises productivity can, with

appropriate policy support, be employment creating. Withdrawal of children from the agricultural labour force would also create employment opportunities for the adults to be able to work productively and possibly at higher levels of wages and incomes than are available in existing alternatives. Such an employment programme needs to be linked with a number of employment guarantee schemes and provision of social safety nets as discussed below.

- Private investment in improving the quantity and quality of livestock, increasing the use of yield-raising agricultural inputs, investment in land improvement and in better farm implements and equipment would require expansion of both short- and medium-term agricultural credit. In developing a farm credit strategy, poverty- and gender-sensitivity can be incorporated and further strengthened. A system of continuous monitoring and evaluation of credit programmes would ensure that resources are used efficiently and productively in specified activities.
- The Planning Commission's I-PRSP highlights the need for streamlining APP input delivery to ensure that fertilizer reaches remote areas, is of high quality and is used in nutrient-balanced combinations. Promotion of use of bio-fertilizer and suitable technology packages that provide for sustainable yield improvements is one of the imperatives of the Tenth Plan strategy.
- The newly established Poverty Alleviation Fund (PAF) to strengthen, co-ordinate and support activities that have the goal of poverty reduction is a welcome initiative. Since PAF is an umbrella fund, not in itself an implementing agency, its resources need to be channelled through the Tenth Plan programme and annual budgetary allocation. Allocations from the PAF must be subject to rigorous monitoring and evaluation, yet PAF's ability to remain flexible and responsive to the changing needs of poverty reduction must also be assured
- Management of the forestry sector has important implications for poverty reduction and environmental sustainability. Apart from the negative impact on the livestock sector of higher altitudes, social forestry has been a successful innovation in Nepal. It has large potential to be an effective instrument of poverty reduction. In many areas the involvement of women, representatives of lower castes and other traditionally excluded groups in the expansion and management of these programmes has been a very positive feature. Similarly, regulated and orderly use and management of pasturelands needs strengthening. It is not feasible to expand the number of livestock in the households of the poorer families without a corresponding change in their access to public and quasi-public goods such as forests and pasturelands, but equally clearly this access must be environmentally sustainable.

7.3 Strengthening Participatory Institutional Arrangements

The community based participatory approach to creating micro-meso-macro linkages has a good track record, but is a recent innovation in Nepal. In Chapter 4 (and Annex 2) recent institutional arrangements and decentralization attempts in Nepal were critically evaluated. It was found that the issue of devolution of authority to local governments, in contrast to decentralized decision-making processes, remains unresolved. Consequently, local government institutions and sectoral line agencies have yet to

evolve a synergetic interaction. In the meantime, a degree of duplication, overlap, and tension in programme implementation has remained. The district level workshops as part of PRA brought these issues in sharp focus. The problem of accountability mechanisms both horizontal and vertical at the meso and macro level also remains and needs to be confronted. The mechanisms for budget allocation at the district and sub-district levels and resource sharing are still in the process of being designed. The mechanisms for monitoring and co-ordination at the district level are tentative and weak. The identified gaps need to be addressed urgently. Nevertheless, some progress has been made on the decentralisation front, such as the recent decision to transfer control of a number of line agencies, including the DADOs and DLOs, to DDC control. The MOAC was the first of the line ministries involved in this process to issue decentralisation guidelines to its district level staff. This progress notwithstanding, the modalities of decentralised operation still have to be worked out and several issues are as yet unresolved.

The interaction between local government and the National Planning Commission, as well as the legal framework of the Local Self-Governance Act (1999), represent an attempt to shift the focus of service delivery arrangements in line with the poverty reduction strategy. In the meantime, inadequacies remain due to the following:

- Lack of communication and co-ordination mechanisms among the central government, ministries and departments and the various local government institutions;
- The fact that local government institutions are not required to address national goals and targets in their planning and resource allocation processes;
- Complete lack of interface between national and local planning;
- Inadequacy of resources available to local government to deal with poverty issues;
- Limited knowledge of, and sensitivity to, poverty concerns among local elites;
- The continuing practice of the national government running poverty reduction programmes outside of local government structures and the tensions and avoidable stress this generates; and
- Inadequate capacity of local bodies to fully embrace provisions under LSGA.

These are the teething problems of a major transition. The community-based participatory approach to creating micro-meso-macro linkages has considerable potential for successfully delivering a viable poverty reduction strategy for Nepal. One of the major pay-offs of this approach to decision-making is that it creates community effects in making situations better or worse very quickly, and this facilitates flexible and prompt policy responses. Despite being a stratified society with a rigid caste structure, Nepal has a high endowment of social capital due to the need for local level co-operation in dealing with nature, wild animals, and public and quasi-public resources. Some of the areas that need strengthening are discussed below.

- In planning and management decisions pertaining to public and quasi-public resources like protected forests, social forestry, pastures and water bodies, it is of paramount importance that the poor are empowered so that disadvantaged groups such as landless labourers and rural women can be involved in a direct and formal way.

- To nurture growth of community leadership, opportunities for participation need to be extended as widely as possible. Those demonstrating potential for leadership need recognition and respect, but not direct monetary rewards. A very large pool of national and international NGOs already functioning in rural Nepal have partly assisted in providing opportunities for community leadership, but they have also created patron-client dependency relationships. The participatory decision-making processes at a horizontal level would nurture community leadership and discourage patron-client relationships. These are of paramount importance for the empowerment of excluded sections of society.
- The PRA-based village level analysis carried out under the present study clearly brings out very encouraging possibilities of involving the poor in decisions affecting them directly. In the present study the PRA teams within three to five days of stay in the village were able to get detailed, gender-sensitive information on households' perception of their strengths, weaknesses, problems and potential solutions.
- Similarly, consultative district level workshops based on discussion of the results obtained from village level PRA brought to light the problem that links between the line agencies and decision-making bodies were weak as were their links to the village level and household level groups on whose behalf decisions were being taken. Very few farmers and household members from the survey villages participated in the district meetings. This link needs to be created and then carefully nurtured.
- There is a need for a synthesis between the 'top-down' and the 'bottom-up' approaches to national planning. The exciting possibilities created by the NPC's decision to have the Tenth Plan approach paper discussed and debated at the district level before finalization, is a step in the right direction. It is an exciting innovation and needs to be nurtured. It has succeeded elsewhere, for example in Thailand, Malaysia and India's Kerala State.

Reforms currently in progress to increase efficiency and accountability of the civil service need to retain sensitivity to the issues of transparency, financial discipline, responsiveness and perceived needs at the grass-root level. Successful models of decentralization are those that create positive learning effects for all participants and stakeholders, including the bureaucracy. Development and strengthening of the capacity for planning, monitoring and co-ordination of programmes at the local level include the need for financial discipline. The Tenth Plan needs to address the issue of mechanisms to ensure effective, sensitive and positive learning mechanisms in the implementation process. Nepal's own experience shows the positive contribution of local stakeholder participation in the effective and sustainable management and conservation of natural resources systems. This is because local users have comparative advantage over government agents in managing resources, so that they can design more efficient rules and more easily monitor and enforce them.

7.4 Gender Sensitive Rural and Agricultural Development Strategies

The report of the Secretary General of the United Nations to the General Assembly on Improvement of the Situation of the Women in Rural Areas in July 2001 highlighted the need for a high degree of gender sensitivity in planning and implementing rural development strategies. The Convention on the Elimination of All Forms of Discrimination against Women obliges state parties to take into account the particular problems faced by rural women in view of their significant roles in ensuring household nutritional security. FAO (1997) analysed the issues affecting women in rural Nepal. Results of the PRA in four villages clearly bring out the fact that women in rural Nepal work longer hours than men, work predominantly in agriculture, have limited geographical mobility and are discriminated against in access to school education, health facilities and other public goods. There is therefore an urgent need for positive discrimination in favour of women in the national strategy for agricultural and rural development. Women should occupy a prominent and visible place in the participatory local level institutions created to link the 'bottom-up' approach to national planning. For this to happen, the following issues need to be addressed.

- From village level committees upwards, women should be represented at all levels of decision-making that affect public and quasi-public resource management such as community and leasehold forestry, management of pasture land, water bodies, and public investment in agricultural and rural infrastructure.
- In view of the very high participation rate of women in the labour force, especially in agriculture, the extension services have to be sensitized to the need to focus on the flow of information to women at the household level. In view of the existing local context of gender relations and class and caste divisions, innovative methods of reaching the target group should be designed and adopted.
- Rural women are closely associated with the use of local environmental resources and management of bio-diversity, particularly in the Hill and Mountain regions. Women may not be immediately able to take advantage of the opportunities created by trade related aspects of intellectual property rights, but the possibility of their being in the front line on management, production and claims to intellectual right on medicinal plants and exotic plant products in the medium term seem to exist.
- Women's participation in the management and production of livestock products in rural Nepal is rather high. Improvements to the quantity and quality of livestock need to be linked with potential expansion of opportunities for rural women. The livestock sector also has high potential for linking with agro processing in which Nepalese women potentially can play a leading role.
- Rural women, as shown by PRA results, work long hours under difficult conditions, often without proper technologies to ease their productive and reproductive work. Hence, their wage level and measured marginal products continue to be lower than those of men. This discrepancy needs to be frontally attacked by empowering women through introduction of appropriate improved technologies in the livestock and crop production sectors to lessen their workloads and enhance their productivity.

- Rural women are still tied to the household and farm economy. In devising employment guarantee scheme and investments in public agricultural and other rural infrastructure, there is a need for sensitivity to the needs of women who have access to off-farm employment opportunities.
- Urban women have to a significant extent successfully reclaimed their rightful place in household dynamics, in that they have a degree of control and choice over their productive and reproductive activities. Enjoyment of this right is not on the horizon for most rural women. Successful attempts to assist in this context would have extremely high social returns in addition to benefiting women directly. The social benefit of improved access to family planning and to information and health facilities would help the entire household and not just the women alone. Children would be major beneficiaries of consequent improvement in household food security.
- There is a huge gender bias against women in schools and in terms of access to health facilities and other quasi-public goods. Positive discrimination in favour of women and girls in devising, creating and delivering these facilities is of paramount importance and unless women are empowered through proper education, the chances that above recommended actions bring positive impact would be low and less sustainable.
- Nepalese rural women need to have legally secured entitlement to assets such as land, water, information and technology. They also need access to human assets like health, nutrition, education and skills. Providing some of these would require changes in the legal framework, while others would entail the involvement of women at all levels of a participatory decision-making processes.

7.5 Child Development, Education and School Feeding Programmes

Investment in child education and health promotes economic growth and enhances productivity. Education has the potential to speed up adoption of new agricultural technologies and improved farm practices. Educational deprivation and lack of calories, micronutrients – and, in the case of Nepal, inadequate care in childhood – creates a vicious spiral that perpetuates inter-generational poverty, creating a poverty trap. A virtuous spiral involving investment in children’s nutrition, health and education enhances welfare, promotes growth and delivers enormous socio-economic benefits. Child development is therefore considered a potent weapon in the fight against poverty.

Child participation rates in the labour force in Nepal are among the highest in Asia. The government has ratified all the relevant conventions dealing with child labour and in year 2002 entered into an agreement with the ILO to eliminate the worst forms of child labour within five years. The country has achieved considerable success in expanding its gross primary school enrolment ratios during the last 30 years. However retention rates, even in primary schools, are disappointingly low. The situation is worse for girls. Girls’ labour force participation rate is 15 percent higher than that of boys, and girls are under-represented in middle and secondary school. The NHDR 1998 clearly brings out the issue of low level of human development and continuing gender bias. Considering that a low level of human development, low school enrolment ratios and high levels of gender bias in school education are mutually reinforcing determinants of poverty, there is an urgent need for ‘circuit breakers’. No serious and

significant attempt to eliminate nutritional poverty can ignore the issue of child development in a context of inter-generational transmission of poverty.

As noted in Chapter 3, poorer households in Nepal tend to have a relatively large number of children. This finding is similar to those in other countries, including India. Targeting children for improved nutrition amounts to targeting poverty, since the proportion of non-poor children who will benefit is quite small. High priority should be given to extensive school feeding programmes as an instrument for improving child nutrition and increasing school retention rates. School feeding programmes also promote active learning capacity (ALC), which hinges on nutritional status. Controlled experiments suggest that such programmes also tend to reduce parasitic infection among children, improve their haemoglobin concentration and reduce signs of vitamin A deficiency. Consequent improvement in body mass index (BMI) has also been noted. We know from FAO (2000) that the BMI of Nepalese children (and women) is rather low and that the proportion of children born under weight and suffering from malnutrition is rather high. There is therefore considerable potential for using school feeding programmes simultaneously to address the problems of illiteracy and malnutrition among children, at least up to the primary school stage. The Managers of Japan Fund for Poverty Reduction in Asia (JFPRA) and the ADB are sympathetic to such targeting of nutritional deficiency. The ILO, UNICEF and FAO have a convergence of interests here, given their respective mandates for reducing child labour, promoting child development and diminishing nutritional poverty. Since these three concerns are part of a hierarchy of UN-supported Basic Human Rights approaches, seeking assistance for this activity from external sources would enhance welfare in the short-run and labour productivity and economic growth in the longer run. Specific steps needed in this context are as follows.

- In view of our interest in positive discrimination in favour of females and lower caste people who have traditionally been excluded from mainstream socio-economic development, increased investment in affirmative action is needed in terms of school feeding. In Nepal such programmes so far been implemented in 16 districts (three Tarai districts, 11 Hill districts and two mountain districts of the Midwestern and Far Western regions) through WFP assistance. Under the Global Food for Education initiative, it is planned that from 2002 this programme will be extend to additional districts and regions, targeting areas where school attendance of girls is low, where there is little or no enrolment of lower caste children and where school dropout rates are high.
- For such programmes to be effective, pre-programme baseline studies of child health standards in the selected districts and regions will be required, followed by rigorous monitoring and evaluation. In view of the caste and class complexities in some parts of the country, providing cooked meals may not be practicable, but providing a pre-determined quantity of grains to the household in lieu of cooked meals would achieve the objectives to a significant extent. The possibility of food provided under such programmes being consumed by other members of the family cannot be ruled out. However, most of it is likely to be consumed by the children including those who are not at school. To the extent that this happens it will directly improve household food security. Lessons from WFP experience in running School Feeding Program covering 450,000 children in 4,000 schools should be taken into account in considering alternative modalities of school feeding programmes.

7.6 Infrastructure Development and Employment Guarantee Schemes

The rural poor already participate in markets for labour, food, farm inputs and credit, but they (particularly those living in the mountain and hill areas) face very high physical and transaction costs that restrict their ability to gain from these activities. With growing levels of globalization, there is a danger that they will end up as marginalized and excluded groups unless geographical isolation is confronted. The government has correctly accorded a very high priority to connecting remote areas through public investment in roads and associated infrastructure. However, physical access to markets is just one component of the problem of the low levels of participation of the poor in the market economy. Improvements in market institutions alongside provision and maintenance of rural and agricultural roads would enhance the socio-economic benefits markets bring to the poor.

As a part of the APP and the Ninth Plan, the government has increased allocation to rural and agricultural infrastructure development, particular in the shape of rural and agricultural roads. Investment on this account is expected to increase further during the Tenth Plan and beyond. The impact of such infrastructure in inducing private investment and improving linkages between sectors and regions is well understood. Their efficacy in creating employment in the short-run needs emphasizing. The results of our PRA studies clearly highlighted the fact of restricted employment opportunities within commuting distance from the village, and the consequent need for seasonal migration. Rural and agricultural infrastructure projects themselves can be important sources of short-term employment, but the potential for this will depend on the degree of labour intensity in the construction techniques that are employed.

The potential exists for considerable development of Nepal's rural non-farm sector, even in the more remote areas. This needs serious examination. It is known that compared with the urban manufacturing sector, rural non-farm work is more labour intensive, less skill-intensive, more stable and thus pro-poor. Under certain circumstances it can be dovetailed with the seasonal agricultural activities. Obvious examples are agro-processing, the grading and packaging of fresh produce and transportation of agricultural commodities and inputs. In remote areas, high transport cost, rather than being a handicap, can actually provide natural economic protection, making these areas potentially profitable for certain types of activities, particularly those where processing involves significant reduction in weight or volume. For such activity to be successful it needs to be linked to a broad-based strategy of rural development in which agriculture is one component. Government support backed by appropriate credit and skill transfer facilities is important for success in generating meaningful levels of rural non-farm employment. A two-pronged strategy of employment generation in rural areas through investment in public infrastructure projects and creation of non-farm employment opportunities as part of broader rural development policy needs to be adopted during the Tenth Plan. The initiatives proposed in the I-PRSP need to be seriously taken up in the Tenth Plan. For this to happen, particular attention needs to be paid to the following points.

- Employment creation through flexible public works in the targeted rural areas including construction and rehabilitation of small-scale infrastructures, such as small irrigation schemes proposed in I-PRSP, needs to be expanded and further developed to ensure involvement of the poorer households and remoter regions.

- The Tenth Plan needs to provide adequate resources for improvement and maintenance of existing rural roads, water bodies and other public infrastructure. This would enhance the usefulness of such infrastructure and would create employment for the poor.
- Districts with food insecurity for more than one-third of the year need to have an employment guarantee scheme or food-for-work programme that can be linked to a number of qualifying criteria, such as not having land, cattle or stable employment.
- In view of the need for greater gender sensitivity in development activities, women should get preference for those activities and jobs that they can handle without compromising their health and safety.
- On a family basis, each family can be given an entitlement to a maximum of, say, 100 days of work annually on such projects.
- Guaranteed employment under such a programme has to be either at an appropriately determined minimum wage or, in food-for-work schemes, remunerated through a reasonable quantity and quality of foodstuffs. It should not be necessary to add that women should automatically receive equal pay for equal work, but this is unfortunately not always the case.

7.7 Social Safety Nets and Welfare Supports

Our village studies revealed prevalent food insecurity among a very high proportion of the households in these villages. Such food insecurity ranged from three to nine months of the year when food consumption needs exceeded availability. Villagers' coping mechanisms did not benefit from any significant level of support from publicly managed programmes and institutions. The NFC's distribution of food supplies in the mountain and hill regions areas is largely restricted to public servants and does not provide for poor households in any significant way. Targeted public distribution of foodgrains in the absence of integrated competitive well functioning markets enhances welfare and does not distort markets. Such a programme, by its very nature, cannot be managed without an element of subsidy from the State. As long as the distribution costs are lower than the marketing margins being realized by the private trade, the subsidy needs to be viewed as direct income transfers to poorer households. Given the high cost of supplying remote mountain and hill regions, areas where the proportion of the poor is a very high must be targeted. To ensure that such targeting occurs through decentralized local level representative bodies, the public distribution of foodgrains should be supervised by these local level institutions. This, however, is dependent on robust and effective measures being put in place to prevent local elites from taking control. All such possibilities need to be seriously examined and, if found feasible, incorporated in the Tenth Plan.

In situations where community and family support is unavailable or inadequate – for example in the case of orphan children or older persons without family support – the state needs to step in. The

entitlements of such persons, in view of right to food as a fundamental right, create an obligation on the State. Nepal has a long way to go on this front. A beginning should be made during the Tenth Plan.

Apart from targeting public sector food grain distribution, it will be equally important that efforts are also directed towards mother and childcare activities, such as supplementary feeding and deworming, and on nutrition education as these help to enhance utilization of available food.

7.8 Investment Framework and Market-State Synergies

Poverty reduction is not something that governments, development institutions or NGOs can do for the poor. They can forge partnerships and help promote the conditions in which the poor can use their own skills and talents to earn their way out of poverty. The poor themselves have to take responsibility as agents for their own development. During the first seven five year plan periods, government played a dominant role in articulating and implementing economic development strategies with a predominantly top-down approach. Since the beginning of the reform process initiated in the 1980s, the market has been accorded increasingly high priority, and some of the public institutions and their implementing instruments have been folded back. This tendency has become particularly pronounced since the beginning of the Ninth Plan. Foreign aid, multilateral aid agencies and NGOs (national and international) have been playing an increasingly important role in the provision of investment resources, as well as in the delivery of critical inputs and services. The synergy between market, civil society and the state that is essential in a well functioning market economy has not yet evolved in Nepal. NGOs as representatives of civil society can play a critical role in the development of such synergies. Signs of its emergence are there, particularly in social and welfare sectors involving women and children. The process of preparation of the Tenth Plan in itself is a pointer in the right direction. Here, serious attempts have been made to link the bottom-up and top-down approaches, and this provides a major opportunity for involving the poor in taking control of their own destinies.

A big push in accelerating the rate of growth of agricultural production would require substantial expansion in agricultural investment. The fact that such investment can be highly complimentary between private and the public sectors provides an opportunity for policy makers when they finalize the Tenth Plan document. Inputs from the international donor community, which have been rising during the last decade, need to increase even further. However, a large part of this investment need not come in the form of foreign loans, either from governments or from international development banks. The potential for Foreign Direct Investment (FDI) in agro-processing, medicinal plants and therapeutic foods and forestry based industries is quite high. Grants from JFPR in Asia and soft loans from IDA can also supplement existing investable resources. These are to be placed in the newly created PAF. Overall the share of Tenth Plan investment going to agriculture, rural development and the social sectors has to increase substantially for there to be a meaningful reduction in the incidence and levels of poverty. Increased total investment, given the existing incremental capital output ratio, would result in a higher growth rate. Specifically, the sub-sectors in need of substantially increased investment in view of APP targets, as discussed above, are summarized as follows.

- Expansion of irrigation using groundwater and other water sources will require increased investment. This can be an important basis for synergic interaction between public, NGO and private sectors. By judicious selection of irrigation projects, credit facilities and water management and sharing practices, it should be possible to implement a socially optimal water management strategy. The Asian Development Bank and the World Bank are sensitive to the need for creating such synergies.
- The recently privatized system of importing and marketing of fertilizers is in urgent need of streamlining to ensure that the market delivers outcomes that are superior to those that existed under government monopoly. In this context, competition, linking of rural credit with fertilizer purchase and development of agricultural roads would go a long way towards achieving the objective of increased use of this critical input.
- Transport and storage facilities for agricultural inputs and outputs need to be expanded if the target of 5 percent growth of agricultural output is to be achieved. The domestic and international private sectors, with appropriate state regulations, have a major role to play in this area. The possibilities of attracting more FDI should be explored urgently.
- Increased investment in major roads, feeder roads and pathways has already been flagged in the I-PRSP. This activity has to be either in the public sector or as a joint venture between the state and private sectors. Linking employment creation and employment guarantee schemes with such investments needs better articulation and implementation.
- Investment in development of livestock in terms of quality and quantity has potential for synergetic interaction between state, market and the NGOs, with the state necessarily having to play a lead role. On the investment market front, NGOs and the household can play potentially complimentary roles, provided the state backs up projects and programmes in this area during the Tenth Plan and beyond. It can do this through appropriate injections of credit, extension services and technical know-how for breed quality improvement. Agencies like the FAO can provide critical technical inputs that are unavailable within Nepal.
- Development of the forestry sector, including community and leasehold forestry, has potential for greater co-ordination and collaborative efforts between the state, communities and rural households. Nepal has accumulated a lot of positive social capital in experimenting with social forestry. The Tenth Plan needs to provide adequate resources through the newly created local level representative institutions for allocation to and implementation of projects in this area.
- In view of its limited capacity for generating appropriate, pro-poor agricultural technology and crop-specific research and development, Nepal is dependent on international crop research institutes and on bilateral arrangements with countries having similar interests, and it is of paramount importance to develop these. FAO and the international agricultural research centres can and must play an important role in providing technical inputs and facilitating appropriate technology transfer. The linkages between these institutions, NARC and the agricultural extension system need to be further strengthened.

- To ensure that the concerns of rural women (who are more than proportionately represented among the poor) are addressed, gender sensitive resource allocation and implementation of all projects is essential. Women's representation on decentralized local decision-making bodies and processes would promote appropriate outcomes.
- Children are disproportionately represented in the population deemed poor. A child-centred focus in education, health, nutrition and child development programmes must therefore be given a very high priority in the Tenth Plan. Every effort should be made to supplement the government's own short- and medium-term resources for this by approaching both the specially created fund for poverty reduction in Nepal and the Asia-wide JFPRA. Specialized UN agencies with a mandate in child development (such as the FAO, ILO, UNDP, UNICEF and WFP) need to create convergence of their technical inputs and know-how in order to enable their Nepalese planners and policy-makers to achieve more effective outcomes.
- Social safety nets and welfare schemes are necessarily a major part of the duty of the state. The NGOs who have already been active in this area can effectively be involved in efficient delivery and appropriate project formulation in this field.

The insights arising from detailed analysis reported in this study, and elaborated in the four annexes clearly indicate that the macro APP approach and the Ninth Plan strategy have not percolated down to the district and village levels. The Tenth Plan must involve local level representative institutions and arrangements to ensure correction of identified shortcomings.

In international policy making circles, poverty is now rightly regarded as the greatest threat to human security and the global ecology. Given the unprecedented opportunities that science and technology are opening up for achieving the goals of food security, clean and adequate water supply, health, education and work for all, human misery can be substantially reduced if not eliminated. The challenge facing the planners and policy-makers of Nepal in the process of finalizing the Tenth Plan is to respond creatively so as to translate available opportunities into achievable outcomes.

Note on Chapter 7

¹ While government has already announced its fertilizer policy, similar policy pronouncements covering ground water irrigation is yet to emerge.