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U.S. Development Assistance
Strategy Assessment

Nepal

June 1977

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Table of Contents

	<u>Page</u>
Preface	
I. Nepal as a Unique Development Situation	1
II. Nepal's Economy and Development	3
III. Significant Development Sectors and Issues in Nepal	12
A. Agriculture	12
B. Off-Farm Employment	18
C. Human Resources Constraints as a Factor Affecting Development	25
D. Health and Nutrition	30
E. Population	34
F. Environmental Degradation	36
G. Transportation as a Dimension of Development in Nepal	38
H. Effectiveness of Outreach to the Rural Areas	39
IV. Rural Development in Nepal: A Strategy for AID	42
V. U.S. Political Interests and Commitments	55
Annex - Other Donor Assistance to Nepal and Coordination of Development Assistance	57
Appendix - List of Persons Consulted by the Team	64

Preface

During the three and a half weeks it spent in Nepal, the Strategy Review Team met with a large number of individuals both official and private, Nepalese and foreign. All were unfailingly generous with their time and open and frank in their comments. Their cooperation is greatly appreciated and the team wishes to take this opportunity to extend a vote of thanks to all of them for their efforts on our behalf.

The team would like to thank particularly the officials of His Majesty's Government of Nepal (HMG) who took time from their busy schedules to meet with us at least once (and in some cases twice) for lengthy periods of time. Uniformly, these officials impressed us with their widespread knowledge of Nepal's development problems, their commitment to helping the broad masses of Nepal's population and their willingness to exchange ideas in a frank and open manner. Indeed the team found the cooperation and accessibility of Nepalese officials to be almost unique to its collective experience.

Certainly, this report is the better for their effort.

I. Nepal As A Unique Development Situation

On first examination Nepal strikes the observer as being a typical Relatively Least Developed Country (RLDC) with low productivity, low per capita income, rapid population growth, inadequate physical infrastructure, limited institutional development, shortages of skilled manpower, limited physical and financial resources, and an economic structure heavily dependent upon subsistence agriculture. A closer examination reveals, however, that while possessing all of the above characteristics and problems, Nepal is far from being a stereotype RLDC and in fact possesses a number of characteristics and features that make it unique in Asia and the world at large. While these characteristics and features are discussed in detail in the pages that follow, it seems well to mention them in summary form at the outset given their importance to the approach taken in, and the conclusions drawn by, this report.

One of the most critical factors unique to Nepal is its landlocked location between the two most populous nations of the world, China and India. While geographic barriers have held China's role to a geo-political one (though a small amount of trade does take place across the northern border) India's role is both geo-political and economic. Most of Nepal's commodity exports find their market there and India remains the major source of Nepal's imports. The open border combined with the size of the Indian economy makes the Nepalese economy (and Nepalese economic policy) extremely dependent upon developments in India.

Another factor unique to Nepal is the extreme inaccessibility of many parts of the country. Two-thirds of the country are covered by range after range of mountains (known as the "hills" in Nepal), culminating in the mountains of the high Himalayas. This topography makes communication and transportation extremely difficult, slow and costly in many parts of the country. The cost and difficulty of transportation and communication have immediate implications for Nepal's development prospects and for appropriate development strategy. Development activities (whether financed by HMG or by foreign donors) directed towards the welfare of the poor majority (who live in the hills and mountains) are likely to be costly and complex when compared with similar efforts in other RLDCs. It also complicates the problem of framing a general development strategy for the country as a whole. For example, Nepal is a net food exporter overall but due to its geographic

fragmentation continues to have significant pockets of food scarcity and malnutrition in the hills and mountains, while the surplus, produced in the plains, is largely exported.

In Nepal two major religious/social systems have combined with approximately thirty ethnic and language groups to form a culture that is exceptionally diverse. This cultural diversity, coupled with geographic fragmentation and isolation, has led to the development of a large number of micro social systems which are likely to have unique elements in their response to development initiatives. As a result, a successful development effort in one area of Nepal may not be replicable without significant modification in other parts of the country.

A large and growing population in search of arable land and firewood has combined with an inherently unstable geology to produce severe environmental problems in the hills. Erosion is now a serious and growing problem and its amelioration will call for unique approaches in the form of off-farm employment and new energy sources.

Nepal is also unique in that it possesses a much wider range of climate than most typical RLDCs. This results from the wide variation in altitude combined with Nepal's location in relation to the south to north axis of the monsoon. This leads to wide variation in temperature and rainfall which complicates the problem of developing new and appropriate agricultural inputs, systems and technology.

Nepal is not unique among RLDCs in that it was never a colony but it is virtually unique in terms of the short duration of its development experience. Nepal was closed to the West from its establishment as a national entity in 1775 until the overthrow of the Rana Government in 1951. Although the Rana rulers imported selected items of western technology and culture (automobiles and European-style palaces being the most conspicuous examples), there was little commitment to development and the country remained largely as it had been in the Middle Ages. At the same time, there co-existed with the Rana Government a substantial number of semi-autonomous kingdoms and principalities in Nepal outside of the Kathmandu valley over which the Crown and central government had only nominal suzerainty. The last of these entities was not

absorbed until the '60's. To some extent, then, the political fragmentation reflected the cultural and geographic fragmentation of the country, and still today some people will consider the geographic concept "Nepal" to be limited to the Kathmandu valley exclusively. The institution of the Panchayat system under King Mahendra in 1960 with its system of local, district and national links was an attempt at nation building and a means of encouraging (limited) participation at the local level in the monarchical system.

Nepal's history as a developing nation thus begins in 1951. While Nepal's accomplishments since that time have been extremely impressive it remains important to remember that much of this effort was devoted to providing the physical, social and human capability necessary to begin improving the standard of living of the broad mass of the population. While much of this base is now largely in place, certain key deficiencies remain particularly in the area of economic integration, infrastructure and human resources. This will call for certain elements in U.S. assistance strategy that are largely unique to Nepal.

Finally, Nepal is also unique in that it has attracted an extremely large number of donors (bilateral, multilateral and Volag), representing a wide spectrum of political and economic systems who in total contribute a substantial amount of assistance on highly concessional terms. While not inappropriate in the light of Nepal's needs and capacities, the number of donors and the level of assistance does call for careful coordination among recipient and donors and among the donors themselves. Careful assessment is also required of the forms of technical and financial assistance most appropriate for Nepal's needs, including levels and types of foreign advisors and participant training, the needs for local and recurrent cost financing, and the impact of substantial numbers of foreigners within the country.

II. Nepal's Economy and Development

A. Changing Development Performance, Priorities and Policies

Development priorities and policies of HMG have been changing significantly in recent years, partly in response to post-1951 development experience and performance. Gross domestic product barely kept up with population growth during the 1965-75 decade -- both at a little

over 2% a year. Agriculture grew more slowly than other sectors, so agricultural production per capita apparently declined. The above-trend performance of a 3% GDP growth rate from mid-1975 to mid-76 resulted mainly from improved rice yields which came in turn primarily from good weather conditions. This record will apparently not be sustained in 1976/77, owing to bad weather.

Agriculture remains the major source of GDP at about 65% and an even more dominant source of employment (for over 90% of the labor force). Partly in recognition of these continuing structural features and the consequent need to accelerate growth by concentrating on agriculture, and partly in consequence of its desire to promote equity by improving the welfare of the bulk of Nepal's population, HMG has in its Fifth Development Plan (1975/76 - 1979/80) shifted investment priorities from transportation and communication infrastructure to agriculture and social services (including education and health). The share of public sector investment in transport and communications infrastructure declines from over 40% in the Fourth Plan (1970/71 - 1974/75) to about 25% in the Fifth Plan, while the shares for agriculture (including irrigation) and social services increase from about 25 and 15% to about 30 and over 20%, respectively.

Overall public sector investment ("development expenditures") are expected to grow at about 7% (in real terms) a year during the Fifth Plan as opposed to about 7½% a year during the Fourth Plan. Yet this slight deacceleration in public sector investment growth is supposed to yield an acceleration in the rate of growth of GDP, from 2.2% a year during the Fourth Plan to 3.5% a year during the Fifth Plan.

The logic behind this projection is that the shift from essentially transportation infrastructure to more directly productive activities in agriculture should result in a lower overall incremental capital-output ratio, or a greater increment to output per rupee invested. The Plan also reasons that major transportation links now in place, or nearing completion, will begin to yield their delayed production pay-off. There are several considerations (addressed in greater detail elsewhere in this report) which may delay these happy results or reduce their potential magnitude. First, continuing transportation investment in trail and bridge improvement and feeder

roads must occur in areas where there already are relative concentrations of economic activity or where simultaneous complementary investment in other rural infrastructure and services (e.g., irrigation, input supply, storage and credit facilities, etc.) promises to stimulate production. Second, the mix of investment in agriculture must be carefully chosen to boost output and employment per rupee invested as much as possible in the relatively short run of a year or two (this would imply, for example, improvement and expansion of existing irrigation systems and construction of minor rather than major irrigation facilities). Even then, it will take time to effect major shifts in the government's investment portfolio, especially in directions different from previous experience and performance (the planned share for agriculture in previous plans has tended not to be met in fact, while the planned share for transport infrastructure has typically been exceeded). It must also be recognized that the pay-off to investment in agricultural production in the Hills, which will necessarily include further investment in research on Hill agriculture, may well be longer in coming than if investment were to be concentrated in lowland agriculture. Finally while increased investment in health and education may well increase the felt level of well-being of the rural population, there may be some lag before this is translated into a significant boost in GDP.

Several of the documents made available to the team, as well as several of the interviews, raised the issue of resource mobilization required to meet the above-mentioned Fifth Plan objectives. Resource mobilization performance during the last fifteen years has been impressive in some respects. Before 1961/62 foreign aid financed part of government current as well as all development expenditures. Domestic revenues have grown sufficiently rapidly to permit financing all current expenditures and over 40% of development expenditures during the 1965/66 - 1974/75 decade. Although the rate of growth of government revenue is expected to increase from the Fourth Plan to the Fifth Plan (from about 7½ to 8½% a year), the rate of growth of current expenditure, reflecting increased salaries and maintenance expenditures, is also expected to accelerate and to continue to exceed the rate of growth of revenue (from about 10% a year during the Fourth Plan to 12% a year during the Fifth Plan). Thus, the proportion of development expenditures financed by the current budget surplus would decline from about 40 to 30% and the share to be financed by a combination of domestic borrowing and foreign aid correspondingly increase. Sources available to the team suggested taxes on rural and urban

property, user charges on irrigation water, and increased prices for government enterprises as sources of additional revenue. It should be noted that government revenues averaged during the Fourth Plan only about 6% of GDP, a relatively small proportion -- even for countries with similar or lower per capita incomes. It has also been observed that government revenues provided by the agricultural sector are equivalent only to 1% of the sector's contribution to GDP. The Panchayat Land and Development Tax, which has been tried out on a pilot basis in some districts, is believed by some observers to offer potential for improved resource mobilization as well as greater local participation in the resource mobilization and allocation process. The renewed Compulsory Savings Scheme, now integrated with the Sahja Cooperatives Program, may also have potential (issues with respect to the earlier scheme have included (1) a low interest rate on deposits and (2) delays in investment of the funds and lack of participation in investment decisions). More systematic tax administration and collection practices may also help increase revenues (the team heard of instances of arbitrariness in tax collection having a dampening effect on investment or leading to further evasion). Tax advisors from the IMF will be addressing these issues.

With respect to private savings mobilization, the Government's high interest rate policy, introduced in 1975, remains in force. High deposit rates apparently stimulated a sharp increase (about 50%) in time and savings deposits during the first year of the policy. Small reductions in deposit and loan rates were announced in February, 1977, in response to slackening demand (and slower inflation).

Until the end of 1974, persistent and substantial merchandise account deficits (exports minus imports) in Nepal's balance of payments have been more than offset by a combination of tourism earnings, Gurkha remittances, interest income (from the growing foreign currency holdings) and foreign aid, so that foreign exchange holdings continued to increase. After a sharp foreign exchange reserve decline during the first half of 1975, the following 18 months witnessed a further increase owing to reduced import growth, a recovery in export earnings and a reduction in capital outflows to India.

This situation is not expected to continue, however. Imports are expected to increase substantially with further implementation of the Fifth Plan. If production

accelerates as planned, increased indirect demand for imports will add to the import bill. The main export items, rice to India and jute and jute products to third countries (they account for half to two-thirds of total export earnings) are not expected to grow in the same proportion, however. Increasing internal demand from a growing population in Nepal is expected to cut into the exportable rice surplus. While there is scope for Nepal to increase its jute product manufacturing capacity, competition from neighboring India and Bangladesh is keen and the world market for jute is problematical. Gurkha remittances will not provide the growing source of foreign income they have in the past. While tourism earnings in 1975/76 equaled over 20% of earnings from merchandise exports, and will undoubtedly continue to grow, tourism, other sources of foreign exchange earnings and projected aid levels are not expected to cover the import needs of a faster growing economy. Nepal's relatively large foreign exchange reserves provide some cushion but only a temporary one (equal to a little less than one year's imports at current levels). While there may be some potential for saving foreign exchange through import substitution by domestic production of imported manufactured goods, this potential is limited owing to the relatively open trade relationships with India, the small effective market in Nepal, limited local material resources, and scarce managerial and technical talent. The team observed a tendency on the part of some to be overly optimistic about the possibilities for large scale import substitution, notwithstanding these limitations as well as poor performance of some import substitution ventures in Nepal, resulting in poor quality, high cost, idle capacity or failure.

B. The Relationship with India

Any discussion of Nepal's economic situation and development prospects, must focus on Nepal's relationship with India. Just the fact that Nepal's eastern, southern and western borders are shared with India would make this relationship important; the sheer size of India (with fifty times the population of Nepal) and a series of other geopolitical considerations make India a dominant consideration not only in Nepal's external economic relations but in its internal economic situation as well. Although flows of commodities and people in both directions across the mountainous northern border with China (Tibet) have been significant historically, they have not approached the volume of interchange with India. The northern border controls of the last two decades have not eliminated this trade but have reduced it to minor proportions involving

mainly local populations living in close proximity to the border.

This is in sharp contrast to the situation to the south. Nepal's long southern border with India is extremely accessible for a combination of geographical, economic, cultural, and political reasons. These include the following: (1) the Terai lowlands of southern Nepal merge imperceptibly into the plains of northern India; (2) periodic massive rice shortages in India exert a powerful influence on the Terai, the main rice growing region of Nepal, (3) current and former Indian citizens are prominent in the Terai and Kathmandu Valley as entrepreneurs and as skilled and even unskilled laborers; (4) capital as well as people and goods flow relatively freely back and forth across the border into enterprise and bank accounts in response to changing economic conditions; (5) free convertibility is maintained between the Nepali and Indian rupee; (6) tariff and other barriers on Indian and Nepali goods officially traded are low or non-existent and (7) control of an admittedly difficult-to-control border is spotty.

A final, critical aspect of Nepal's economic relationship with India is the fact that India provides Nepal's only access to the sea and thus to merchandise trade with third countries (other than the local trade across the Chinese border), and this access is limited by agreement to the port of Calcutta.

India dominates Nepal's trade statistics and accounts for about 75% of Nepal's recent recorded merchandise exports and imports. Taking unrecorded trade into account would undoubtedly increase India's share even further.

Nepal benefits from its close economic ties to India:

- (1) India offers a vast market for Nepali exports of primary products (e.g., rice and timber) and manufactured commodities (electric power has the greatest potential significance);
- (2) India gives special policy advantages to imports from Nepal, such as low nominal tariffs and remission of Indian excise taxes (provided value added in Nepal exceeds a certain proportion);

- (3) Technology embodied in imported Indian consumer and capital goods can be more appropriate to Nepalese conditions and less costly than many third country (especially western) sources;
- (4) The same can be said for technical and professional training provided to Nepalese in Indian institutions.

These benefits tend to be limited; however, by the very closeness of the economic and political relationship with India which make the benefits possible in the first place. Nepal's traditional rice exports are, for example, highly sensitive to Indian economic conditions and policies. Notwithstanding the immense potential economic gains to both countries from tapping Nepal's hydro-electric potential through major projects, such as the proposed Karnali project, the timetable for progress in this direction remains in doubt, in part owing to concerns in both countries over the increased interdependence such projects would imply. Nor is Nepal's access to Indian manufactured goods always to its advantage. The ex-factory cost of these goods is often above world prices. This reflects India's own protectionist industrial policies. Moreover, even when Indian goods might offer an ex-factory cost advantage, quality problems and undependable delivery (reflecting shortages within India itself as well as management and transport deficiencies) can reduce the effective advantage of Indian goods.

But attempts to shift trade toward third countries can be costly also. Transit of third country trade through the port of Calcutta is subject to the labor problems and other deficiencies and costs which bedevil the port itself, as well as bureaucratic delays and pilferage not only in Calcutta but between Calcutta and Nepal. The possibility of an additional duty free port of entry for Nepal has long been discussed but has not yet materialized. There have also been recommendations that Nepal purchase its own railway wagons for transit trade through India, and that sealing and unsealing of these wagons be done by Nepali officials on tracks slightly extended over the border into Nepal. Beyond these measures, there is little Nepal can do about the transit situation. It must await improvements in the efficiency of Indian harbors, longshoring, customs operations and the transportation system.

Nepal has sought in other ways to reduce its economic dependence on India, but with limited success. The ability to raise tariffs on imports to stimulate domestic industry is constrained by the sparse control of the border and the threat of Indian elimination of privileges granted to Nepali exports. The main policy instrument used to encourage third country trade has been an export bonus scheme (Exporter's Exchange Entitlement Scheme) whereby an exporter who earns convertible third country currency is entitled to retain a certain percentage of such earnings for import of broad categories of goods (according to maximum proportions per category) or to sell this entitlement for a premium. While the scheme has reportedly boosted exports of jute and some other commodities, it has at the same time allegedly encouraged Indian imports as well as import and capital-intensive investment, under-utilization of capacity and such fraudulent practices as over and under-invoicing.

Nepal's economic ties with India are such that virtually all proposed economic policy changes, even those affecting variables which in many countries would be considered relatively immune from external repercussions, such as input prices and interest rates, must be analyzed carefully for their feedback effects via India. For example, the introduction of a fertilizer subsidy may induce smuggling into India rather than increased application in Nepal; similarly, a change in interest rates is likely to influence capital flows across the border.

C. Development Research

Nepal's capacity for development-related research has grown rapidly during the last two decades. This includes technological research at two institutes, agricultural research at various stations and institutes, and project and policy-related research at Tribhuvan University, including the Center for Economic Development and Administration (CEDA), the National Planning Commission, the Agricultural Projects Service Center (APROSC), the Nepal Rastra Bank, the Industrial Services Center, and several private consulting firms.

Two kinds of research were frequently mentioned in interviews with the Team as being especially relevant to the Fifth Plan emphasis on participatory rural development. They would

accordingly appear to merit further attention. One area is social science research linked to development programs and projects. This would range from the economics of farming systems to the social dynamics of participation at the local level. Strengthened capacity to incorporate this kind of research into on-going work would be highly desirable at Ministry of Agriculture research stations, at APROSC, and other institutions. While agronomic and biological research capacity needs strengthening especially at the Hills agricultural research stations, capacity to perform social science research such as analysis of farming systems, is particularly lacking at both Terai and Hill locations. (The team was struck by the fact that research was invariably crop-oriented, rather than farming systems oriented.) AID is currently providing some advice on farming systems research to the Ministry of Agriculture and APROSC by financing an agricultural economist advisor and related assistance through the Agricultural Development Council and to the Institute of Agricultural and Animal Sciences by supporting an agricultural economist-human ecologist team from Michigan State University (through MUCIA). As decentralized rural development programs expand in scope and number, the need for this kind of research will expand accordingly and existing research capacity will be quickly strained beyond its limits. Augmented skills in such disciplines as anthropology and rural sociology as well as agricultural economics will be required.

A second kind of research which would appear of high priority is policy research into the allocational, distributive and incentive effects of government economic policies. While policy research has been an explicit focus of the Nepal Rastra Bank, it would appear that further attention to the multiple effects of economic policies would be desirable. For example, the excise levy on exported rice may negatively affect production but has positive revenue and distributional effects. Policy research may suggest alternative policy packages which would reduce or eliminate disincentive effects while preserving or even furthering achievement of other objectives. Another example, already cited, and one of which Nepali authorities seem well aware, is the need to analyze carefully the interactions with India of alternative economic policies.

III. Significant Development Sectors and Issues in Nepal

A. Agriculture

Agriculture is the mainstay of the economy of Nepal and forms the single most important sector. It provides employment for more than 90 percent of the labor force, contributes to two-thirds of the Gross Domestic product (\$1.3 billion in 1974) and accounts for over 80 percent of exports.

Agricultural development is heavily influenced by the topography of the country. The mountain region (including the high Himalayas) is not suitable for farming because of high altitudes, low temperatures, short growing seasons, insufficient rainfall and limited cultivable land. Livestock is the main source of livelihood. Crop production is limited to a few crops such as potatoes, barley, and some vegetables. Ghee is the principal export product. The mountain areas are deficient in food grain production with little potential for increases. The hills that stretch throughout the central part of the country consist of mountain ranges, canyons, inter-mountain valleys and terraces mountain slopes. The valleys are fertile and, like the mountain slopes, are intensively farmed. Maize and paddy are the main crops but wheat, barley, millet, and rape also are grown. Livestock is also important in the economy of the hills. Cattle, buffalo, and goats provide milk, meat and manure. The size of landholding is small, averaging less than 0.6 hectare per family. Most farms are isolated from markets and roads. Frequently, it takes several days of trekking time for a farmer to get to a market. The hills are characterized by food deficits, seasonal labor surpluses and subsistence income. For purposes of this Assessment Report, the Team refers to all of the above as "the Hills."

Along the southern border of the country is a narrow strip of lowland called the Terai (part of the Indo-Gangetic plain) which extends up into the foothills. Paddy is the major Terai crop, but other crops including maize, wheat, and some barley and millet, are also grown. Major cash crops are jute, tobacco, sugarcane and oilseeds. The Terai is a surplus food producing area. According to the 1974 ILO Employment Mission's report, the average size of landholding in the Terai is 1.6 hectares. The Terai agricultural production provides the surplus for Nepal overall, and earns foreign exchange through being exported (much of it clandestinely however).

Nepalese agriculture has been relatively stagnant for over a decade now in the face of a growing population. The average annual rates of growth in agricultural production and population are both 2.2 percent. Food grain production, however, has not kept pace with population growth, resulting in occasional food shortages, especially in the Hills, and in reduction in the export of rice. The poor performance of agriculture is due mainly to the lowland productivity and declining land/labor ratios. Apart from the Kathmandu Valley, there have been virtually no improvements in productivity per surface unit for any crop; increases in agricultural production have come almost entirely from opening up new lands that are now almost exhausted.

The low yields in practically all major crops can be attributed to low investments in land a limited use of modern inputs, most of which fell short of their targets during the Fourth Five-Year Plan. The decline in the land/labor ratio is the result of continued population increase and a declining rate of growth in the cultivated land area. About two-thirds of the 13 million people live in the Hills areas on one-third of the total arable land in Nepal. Population pressure has forced farmers to move into marginal and steep land, resulting in increased timber losses and increased soil erosion. Many Hill farmers have migrated to Hill valleys and to the Terai following malaria eradication in the 1950's.

Nepal has come a long way in creating an institutional framework to support and sustain agricultural development, but much remains to be done.

- (1) While major legislation for land reform has been enacted since 1964 and substantial improvements have been made, current rental arrangements seem to favor absentee landowners and provide little incentives for tenants to increase production through investment in improved technologies. A 1971 land reform study confirms the persistence of inequalities in landholdings. The land ownership pattern of 20 Terai districts shown a very highly skewed distribution. About 3.5 percent of the owners have 30 percent of the land and 54 percent of the owners have only 13 percent. Tenants usually receive 50 percent of the output of the major crop and usually pay for all input cost. Hired labor is employed on 70 percent of the

lands held by absentee landlords. A large proportion of the hired workers in Eastern Terai are migratory labor from India.

- (2) Most of the field workers of the agricultural extension system -- Junior Technicians (JT's) and Junior Technical Assistants (JTA's) -- who are assigned to village panchayats to work directly with farmers, lack farming background experience, education, and training to work effectively and are very thinly spread. The small number of extension staff (one technician to 7,000 farmers) and inadequate salaries make it difficult to reach large numbers of farmers. The extension workers lack readily available technological packages that are tested and proven in the localities where they work. Except for those working near Kathmandu and in some agricultural projects and government research stations, the number of extension workers serving the Hill farmers is negligible.
- (3) Nepal has benefited from research developments in Uttar Pradesh, India, that are generally applicable to the lowlands and that complement the relatively well-developed agricultural research network in the Terai. But there is still a gap in Hill agricultural research. Local variations, particularly in the Hills, necessitate increased research adapted to local conditions. Some progress has been made in establishing experiment stations in the Hills, but they are sorely in need of more staff at various levels, equipment and materials. There should be more emphasis on local priorities by expanding and improving the output of local research data and adapting research to the needs of different Hill locations. Each Hill area has a micro-environment with varying conditions for plant growth, depending on elevation, cloud cover, soils and direction of slopes. Little emphasis has been given to incorporating fodder crops as part of an integrated livestock-food crop farming system.

Fertilizer trials have been virtually restricted to costly chemical fertilizers and improved rice varieties have been limited to those which require irrigation or areas with a high water table and good possibilities for water retention.

- (4) Much progress has been achieved in establishing institutes for technical training and higher education to provide part of the middle and higher level manpower necessary for Nepal's agricultural development. Nevertheless, technical skills, including management and planning capacity and middle level technicians, are in very short supply at all levels. Once again, this problem is particularly widespread in the Hills where the Government has difficulty in attracting and retraining qualified personnel to work there. Even when qualified personnel are active in the outlying areas, the Government has serious difficulties supporting them with necessary facilities, materials, and to provide sufficient incentives such as salary differentials or allowances. The need is growing for skilled and semi-skilled technicians to assume responsibilities in such fields as agri-business, cooperatives, irrigation facilities, construction and repair of milling equipment, and village water systems. Suitably trained individuals are needed urgently to work in research, extension, and teaching in agricultural subjects. One critical problem facing the Ministry of Agriculture is to provide temporary staffing for important positions while the holders of such positions are sent abroad for further training.
- (5) One major effort on the part of the Government in recent years has been concentrated on strengthening the capacity for procurement and export of agricultural commodities and for the domestic distribution of agricultural inputs. Many institutions have been built such as the Agricultural Development Bank, the Agricultural Project Services Center, and the Agricultural Inputs Corporation. But poor access and the limited transport system in the Hills not only make the distribution of inputs difficult, but also serve to seriously hamper crop marketing.

The lack of market centers at certain strategic locations, poor market information and the small size of domestic markets compound the problems of selling surplus farm produce. Proceeds decline further due to losses to rodents, insects, birds, and molds while food crops are in storage which may range upward from 20 percent. With the exception of inaccessible Hills areas, the prices of most agricultural products are influenced by prices prevailing in India. Price differentials lead to illegal marketing, loss of government revenue, and disincentives for increased production efforts by farmers in Nepal.

- (6) Most small farmers especially in the Hills do not have access to institutional credit from Agricultural Development Bank, cooperatives, village ward committees and commercial banks. These institutions together are estimated to provide only some 21 percent of agricultural credit in Nepal, reaching about 18 percent of all farmers. The rest is provided by moneylenders, friends, and relatives. Institutional lending agencies finance 90 percent of fertilizers, improved seeds, and agricultural chemicals purchased. Institutional sources account for only 10 percent of the Hill farmers' loans and 51 percent for Terai farmers. Commercial banks do not offer funds for crop loans and agricultural infrastructure. At present the Agricultural Development Bank and the village committees comprise the main sources of institutional credit.

In the face of these problems, the Government has accepted the fact that agriculture is by far the most important economic activity and has developed a strategy to improve conditions in that sector. HMG's current Five-Year Development Plan with emphasis on agriculture and water resources, attempts to shift resources from infrastructure in favor of quick yielding agricultural development programs. As a part of this strategy, resources allocated to agriculture, irrigation facilities and water management now exceed those allocated to transport and communication. The principal objectives of the plan include the promotion of increased agricultural production in accordance with the comparative advantage of

crops according to region, such as developing horticulture, animal husbandry, and vegetable production in the Hills, and expanding production of food grains and cash crops in the Terai through extension of multiple cropping, crop diversification, use of new techniques and improved producer inputs. Efforts are also being made to improve services, particularly extension in the remote areas of the country.

The Team fully supports HMG's conclusions. Agricultural development necessarily entails a wide range of issues, many of which are political and social in character. The Team has tried to limit its analysis primarily to economic and social issues involving the production and distribution of agricultural commodities with emphasis on equality and regional considerations. The Team feels that the Government and donors have made significant progress and contributions to agriculture in the Terai. However, this progress does not appear to have benefitted the Hills and mountains to any significant extent. This leads to the conclusion that meaningful improvement in the welfare of the majority of the population who live in the Hills will require specifically directed, and very substantial efforts on the part of the Government and foreign donors, rather than a shift of resources from the lowlands. With respect to the Terai, the Team also believes that more attention should be given to redistribution of landholding, where more effective enforcement of tenancy laws could lead to a further favorable impact on agricultural production and broaden the base of participation. The Team wishes to stress that land reform as such is not a panacea for Nepal's agricultural problem, but one of many important elements to be considered in national development programs with emphasis on maximizing overall agricultural production.

The Team believes that the most important question now facing the Government of Nepal and A.I.D. in proposing projects to carry out the agricultural development plans, is how to strike a balance between the Hills and the lowlands so as to provide the benefits of development to the poor majority and also enhance the national cohesion of Nepal.

All sources indicate that the Terai is a food grain surplus area and exports go to India and to a limited extent, to the Hills. Because of high transportation costs, exports

to India, and low purchasing power in the Hills, the flow of food from the lowlands to the Hills is far from sufficient to overcome the deficit there. Thus, the majority of the people of Nepal live in the Hills but seem to derive little benefit from development in the lowlands. In the Team's opinion, this circumstance is the key strategic consideration in the future development of Nepal.

B. Off-farm Employment

Off-farm employment is defined here as rural-based employment not engaged in direct agricultural or livestock production activities, whether or not it takes place in the farm household or in a separate location. There are two major sources of such employment for the rural population of Nepal: (1) cottage and small scale industry and services, and (2) rural public works. While very few rural dwellers are engaged solely in non-agricultural activities, a significant portion of rural household incomes derives from non-agricultural sources.

This off-farm employment is naturally highly seasonal since the peak planting and harvesting seasons typically require full time employment from rural households. While employment in cottage industry and in locally or centrally initiated public works have been traditional sources of seasonal economic activity among rural Nepali households for many years, their income and employment generating potential have only recently received explicit attention by development planners and administrators. This reflects in part the increased attention being given by HMG in the Fifth Development Plan and elsewhere to regional equity, including the Hills, as well as to increase agricultural production. Increased income from off-farm employment is seen as an important complement to increased agricultural production. This is especially true in the Hills where difficult agronomic conditions, population pressures (which can be only partially and temporarily relieved by migration to the lowlands) and worsening natural resource degradation set limits to the expansion of employment and incomes which can be generated from agricultural and livestock production.

There are also limits, however, to the extent to which off-farm employment can be expanded in the short run. To begin with, virtually all members of many rural households in Nepal work long days during the peak agricultural seasons. Many households must do so in order to survive. Even during "off" seasons, women continue to work long hours caring for livestock and performing other household duties, including obtaining fuel, fodder and drinking water.

During at least part of the off-season many men are engaged in portering ghee and other produce to lowland towns near the Indian border to barter for cloth, salt and other non-agricultural necessities (20 to 25% of Nepal's population may be involved in this activity according to one estimate!). Thus, the pattern of seasonal availability of labor must be considered very carefully in planning expansion of off-farm employment (the pattern may well differ from one part of the country to another). Development activities which introduce new technologies also need to be considered. These include improved farm implements, community potable water supplies, new sources of fuel and fodder, improved trails for mule or vehicle use, etc. These innovations can obviously have a substantial impact on increased availability of rural household labor (male and female) for off-farm employment. Other considerations, including markets, effective demand, skills, technical advice, supervision, quality control and methods of payment will be discussed in the following sections on cottage industry and public works.

1. Cottage and Small Scale Industry

Some 400,000 enterprises classified as "cottage and small scale industry" (any enterprise with capital assets of Rs. 200,000* or less) are estimated to provide full or part-time employment to about one million people (about 20% of the 1971 economically active population) and to account for about 7% of GDP. Local services (merchants, repair shops, tailors, etc.) are probably included in these figures; if not their inclusion would increase them further. Household or cottage industry proper includes manufacture of utilitarian items (spinning and weaving of wool and cotton, etc.) and artistic woodcarving and other handicrafts, largely for the tourist trade. Non-household small manufacturing activities include small grain and other mills, brick kilns, etc.

Industry as a whole is scheduled to receive about Rs. 600 million or about 8% of Fifth Plan public sector outlays, but the cottage and small industry sector is to receive only about Rs. 60 million of this or less than 1% of the overall total. The Government's "New Industrial Policy Plan" calls for assistance to expand the production and productivity of existing cottage and small industry

* - U.S. \$1 = Nepalese Rupees 12.50

along the "growth axes" of new roads leading north from market towns in the lowlands to higher market towns. It also calls for "Reserved Areas" along these growth axes for new enterprises where they would be protected (presumably by subsidized inputs, credits, technical assistance, etc.) against competition from imports and domestic modern industry. The plan also calls for a "self reliant approach" to inaccessible areas not served by roads. Training is to be the principal means of assistance in this case.

There are several Government agencies involved in provision of assistance to cottage industry; the most prominent is the Cottage Industries Department (CID) of the Ministry of Commerce and Industry. CID provides training, technical assistance and credit and plans to expand the number of its Cottage Industry Centers from their present locations in regional and selected district capitals to all 75 districts. Other government institutions involved in the sector are the Handicraft Design Center, Handicraft Emporium, Industrial Services Center, the Agricultural Development Bank and the various commercial banks.

While expansion of cottage industry continues to attract considerable interest as a means of increasing rural employment and incomes, previous experience with attempts to stimulate this sector in Nepal and in other developing countries do not give basis for much optimism. Assistance is difficult to program and there are no easy prescriptions. A variety of constraints to more dynamic growth of cottage and small industry have been cited: lack of sufficient design assistance for export-oriented production, insufficient raw material supplies and credit, and absence of output storage facilities and related poor (and high cost) access to markets. There are various proposals for expanding regional and district centers which would provide raw materials to cottage industry on credit and then buy back the product, less a discount for credit and service charges.

A shortage of relevant skills is sometimes cited as a constraint to the expansion of cottage industry. But this "constraint" is at most partial and will vary from setting to setting. For the most part, skills for producing utilitarian and artistic goods have been well-developed over many generations among Nepal's rural population. Skill-related problems have arisen when attempts have been made to introduce the manufacture of new items for export

or domestic consumption into a given area. Solution of the problem in these instances has tended to require something either very specific, such as design assistance, or require a package approach, of which only one element is training. CID seems to be moving from an exclusive emphasis on training to a broader approach, as represented in its Integrated Development Programs in Pokhara, Dhankuta, and Surkhet. The Team saw an interesting example of CID activity in Jajarkot where two CID instructors from Nepalganj were training 16 weavers on locally produced cotton looms. Five local carpenters had been trained to construct the looms. The instructors estimated the locally produced cloth could compete at 20% less cost with imported cloth from India.

Another commonly expressed constraint to the expansion of small industry is a supposed lack of entrepreneurship. This, like the absence of skills, may be more a matter of perception than reality. The kind of integrated approach suggested above, accompanied by appropriate economic policies, is likely to generate an ample supply of entrepreneurs. Appropriate economic policies include charging a realistic rate of interest on credit. This may sound paradoxical at first, but heavily subsidized credit provides no favor to building entrepreneurs. In the first place, wealthier entrepreneurs are attracted to it for speculative purposes. Those new entrepreneurs lucky enough to obtain it can be lulled into unwise business decisions and dependence upon government.

Another problem often cited in connection with rural industry is that rural trades are traditionally plied by low caste groups. When the potential for new products or technologies emerges, these groups, with high manual skill, may be excluded from technical or capital assistance in favor of high status groups. The Government appears to be aware of this problem and attempts to pursue an anti-discriminatory policy in its selection of candidates for training programs. The problem is also mitigated to the extent that traditional inter-caste relationships facilitate involvement of traditional occupations.

Perhaps the most commonly mentioned constraint to expansion of cottage industry is the lack of effective demand. Potential demand exists in urban areas and foreign markets (including the substantial tourist trade) but is limited by the high transportation costs and other marketing

and quality problems already mentioned. To the extent that new local production substitutes at lower cost for items formerly imported for local consumption (e.g., the cloth example cited above), a market should exist by virtue of the increase in real incomes which would result from switching to the locally produced commodity, but the production of commodities for local consumption which do not replace imports will be constrained by effective demand unless incomes from other sources are increasing. Expansion of paid employment in rural public works, discussed in the next section, is one potential source of increased incomes.

2. Rural Public Works

Public works or infrastructure construction has in total constituted a significant portion of public investment in Nepal. A high proportion of this expenditure has and will take place in rural areas. Historically, rural infrastructure construction in Nepal has been organized through community labor projects at the local level or through central government financed projects organized by the Departments of Irrigation, Roads, etc. Most of the latter have occurred in the lowlands and in the Kathmandu Valley. Community projects have been the main mode of infrastructure construction in the Hills.

There has been increasing interest in the role of rural infrastructure construction and maintenance as a source of supplemental employment and income for farm families. The publicity given the Chinese-financed Kathmandu-Pokhara road construction project, with its use of labor-intensive methods and large gangs of labor, has heightened this interest. The recently initiated and still expanding Local Development Programme, administered through the Local Development Department (LDD) of the Home and Panchayat Ministry, represents a new approach for the central government in support of infrastructure construction at the local level. The essence of the program is to promote the decentralization of development activity and the involvement of local communities in their own development. Village and district panchayats submit projects which are reviewed by district and regional officers. Technical assistance is to be provided by officials representing relevant line HMG departments. About 50% of the total cost (essentially for materials) is provided through the LDD, with the balance to come from local contributions of cash and labor. Works supported under the program have included transport projects,

such as improvement of trails, tracks, and construction of wooden bridges and culverts; health and education projects, such as construction of schools and health posts; small scale irrigation projects; and drinking water systems. While the central government contribution to the program has been expanding, it still remains a relatively small share of HMG's total development program.

There are a number of limitations and constraints which have been raised in connection with the use of public works as a source of rural income and employment in Nepal. To begin with, even on liberal assumptions, the share (and therefore the absolute level) of construction in the economically active population is small (about 3%). Yet as a source of part-time, seasonal employment, construction could provide a significant supplement to income. A second commonly cited problem is the presumed difficulty of hiring and retaining Nepalese labor for large rural infrastructure projects. Indian workers are often recruited for such projects, especially for the Terai and Kathmandu Valley, and particularly in the case of skilled workers, but sometimes unskilled workers as well. The argument that Nepalese workers have neither the skill nor inclination for such work is only partially valid, at best. Road and canal alignments are similar, for example, to the terracing work practiced by Nepalese peasants for centuries. Furthermore, every Hill village has its experienced mistries or masons. Part of the problem has simply been poor information and lack of previous labor force experience with large construction projects. Recent large projects, such as the Chinese-financed roads, have purportedly made labor recruitment easier for subsequent projects in adjoining areas.

Other problems associated with labor-intensive rural public works construction include the choice of techniques and the level of supervision. These problems are closely related. The success of Chinese-assisted labor-intensive projects is ascribed to the intensive degree of supervision by Chinese supervisors. This high degree of foreign supervision cannot, of course, be easily replicated. One alternative would be to encourage and assist small Nepalese sub- or petty contractors. Small contractors would not be expected as likely to choose equipment-intensive methods as large contractors (providing economic policies did not make capital artificially attractive) and, conversely, would be expected to maintain closer control and supervision over their work forces. The use of smaller contractors is also likely to result in a higher proportion of profits as well as wages staying in local areas.

Various problems have also arisen in connection with the smaller, community-initiated rural infrastructure construction projects, such as those supported through the LDD. The Team heard some views to the effect that traditional caste and occupational lines and customs inhibited the potential for community projects. On the other hand, the Team observed an impressive example of voluntary community labor in Rukum District (Chaur Jehari) where 51 farmers were constructing a secondary irrigation canal, and heard other views to the effect that community cooperation was viable and crossed caste-like distinctions.

Another problem frequently experienced by community-initiated projects is the need for specific technical expertise. For example, the Team observed farmer-constructed secondary and tertiary irrigation canals (also in Chaur Jehari) which obviously needed some technical advice concerning depth, alignment and maintenance. Resolution of this problem will largely depend upon expansion of technical staff at various levels in rural areas, a subject discussed in some detail in another section of this report. A related problem concerns maintenance. The need for adequate maintenance often assumes major proportions, given the relatively unstable geological conditions in many Hill and Mountain areas of Nepal. This applies both to larger projects initiated and operated by the central government and to community projects. For the former, proper maintenance would appear to be largely a question of adequate planning and budgeting. One advantage of maintenance is that it lends itself to labor-intensiveness and can thus be a continuing source of off-season employment. For community-initiated projects, maintenance should theoretically be less problematical as the motivation for maintenance should be stronger when the community itself has participated in the selection, construction and operation of the project. But enthusiasm for community participation in such projects is likely to depend on perceptions of immediacy of benefits. The Team heard, for example, that afforestation efforts in Rukum District had resulted largely in failure owing in inadequate care of seedlings, and that it was not always easy to mobilize sustained community labor even for drinking water projects. It has apparently been much easier to mobilize community labor for minor irrigation projects, however, providing the gestation period is not too long.

These problems of motivation and maintenance are related to a further problem: the method of payment. Again, unless the benefit is clear and immediate, it is likely to be difficult to mobilize labor unless it is conscripted -- which, apart from ethical considerations, may well negatively affect productivity and adequacy of utilization and maintenance -- or unless the labor is remunerated. Rural infrastructure construction, apart from its indirect contribution to rural incomes through the creation of productive assets, can be viewed as a direct supplement to rural incomes only to the extent labor is remunerated. Indeed, unless labor is remunerated, substantial amounts of labor cannot be mobilized in the subsistence economy of the Hills. An appeal to community or political considerations is not likely to be effective except for very small, single village or ward-focussed projects. Also, without payment to workers, rural public works will not provide an increased source of demand for cottage industry. The Team believes that some officials with whom it had interviews were not sufficiently aware of these issues.

C. Human Resources Constraints as a Factor Affecting Development

The human resource constraint is mentioned frequently as the all-pervasive factor limiting the absorptive capacity of Nepal for development activities. This constraint also has a decisive influence on the effectiveness of the Government's outreach to the rural areas. Serious problems occur at all levels (some discussion has already taken place above with respect to the manpower constraint in agriculture), and given the large number of central government and local agencies and entities as well as foreign donors involved in the development process, the effects are severe and far-reaching.

1. Extensive staff shortages exist in the central offices of His Majesty's Government of Nepal (HMG) but particularly in positions out in the countryside. Planning and technical positions are sprinkled too lightly throughout the country to make a meaningful impact on development; it is difficult to provide adequate coverage for a district due to the time it takes to travel around, and more inaccessible parts of a district may never see a government technician.

In the team's travels outside of Kathmandu, we ran into a patterns of too few positions being established for the multitude of responsibilities, frequently coupled with

established positions being left unfilled. Doctors are in particularly short supply (which severely handicaps family planning and integrated health activities) but there were constant references also to unfilled positions such as agricultural workers (JTA's and JT's), overseers (with some engineering background for public works projects), health workers and teachers.

2. There is a lack of continuity in given positions since personnel are subject to frequent reassignment. (This is an all-pervasive problem throughout HMG where even departmental Secretaries, the top career people in government ministries, are shifted on an average of once every 18-24 months). Personnel assigned to a given area generally come from Kathmandu and other parts of Nepal and do not stay in one location long enough to become more than casually involved in the problems of that area. The team was struck time and time again by the fact that JTA's or other central government employees in the rural areas had either just arrived on the job or had just been transferred out. Admittedly, the team only visited a few areas in rural Nepal but the general impression gained by our observations as well as from many of our interviews was that this condition was general throughout rural Nepal.

3. Even where positions are filled, there is a critical shortage of trained personnel to occupy them. This problem appears to be particularly acute among teachers and agricultural workers. Reliance on unqualified teachers was cited frequently as one of the most common problems of rural education, and some confirmation was obtained by team members through personal observation of rural schools where children chanted lessons during the day without visible inputs by the teachers. The problem of agricultural workers in establishing credibility has already been mentioned.

4. Qualifications established for positions may be unrealistic or inappropriate. Nepalese officials themselves admitted that too much emphasis was placed on academic credentials rather than on technical qualifications or performance. Depending on the level of a position, bachelor's or master's degrees or school leaving certificates appear to be rigid requirements even for jobs, such as in agricultural extension or as health workers, where practical training and on-the-job performance are far more relevant than general educational experience. A

practical but probably unintended result of emphasis on diplomas is largely to preclude the hiring of women due to the small percentage of girls in school.

5. Lack of in-depth staffing in offices and ministries concerned with key development areas, for example land and water resources use and conservation.

6. A critical absence of middle level and managerial manpower with the result that management is concentrated far away from the place of action. In turn, this results in the tendency to keep decision making in the hands of relatively few, sometimes only one or two, senior officials in a ministry or agency so that decisions take a long time to make and may be made by someone not immediately and fully familiar with the range of problems.

7. The problem of the attractiveness of training outside Nepal. Time and time again, the team was told of the great demand for training, in particular, academic training outside of Nepal. It was alleged in some instances that young people were so eager for the chance to receive out-of-country training that they would seek any grant available even though they had no intention of ever applying what they had learned. The plethora of training opportunities offered by the large numbers of aid donors and their wish to locate candidates to take the training, has undoubtedly led on occasion to a certain lack of vigilance in selecting bona fide serious candidates for training. From our discussions it appeared that while HMG has a provision for requiring work by an individual having received training in his area of expertise, enforcement of this requirement was relatively spotty. Conversely, the many training opportunities afforded by the donors puts an additional stress on the already over-burdened staff of operating offices, both within and outside of the government, and may further aggravate staffing shortages in the short to medium term. Moreover, foreign training -- desirable as it is in the eyes of the aspirants -- can cause conflicts with regard to building up Nepalese institutions; for instance the Institute of Agricultural and Animal Sciences (IAAS) competing for students with Indian agricultural schools.

8. Yet a further problem is the paradox that as individuals receive training, in Kathmandu and even more so abroad, their interest in and link to the countryside where they are supposed to be working becomes weaker and they are likely to resist a posting there. For a person raised in a city, in particular Kathmandu, a posting to a remote,

or even not so remote, part of Nepal is frequently if not usually considered unwelcome. Living conditions are considerably more primitive with little or no opportunity for contacts with peers, recreation, cultural and social events, intellectual pursuits and further professional development. We were told the story of a young couple, both doctors, in a town in Western Nepal who were living in a one-room house without basic facilities and who could not even go on leave together because one of them had to be on duty at all times.

U.S. aid has addressed some aspects of the manpower dilemma in the past through provision of training opportunities and through projects in teacher training and development of curricula and teaching materials. U.S. AID was given credit for its training programs by several key Nepalese both inside and outside HMG as being one of the great successes of the American aid program and undoubtedly the accolade is well-deserved. The real problem is to ensure that the dimension of meeting the needs of the rural areas in a sustained way is properly provided for and the risks of over qualifying people for positions is avoided. The Team was told by some representatives of other donors that, in Nepalese eyes, the U.S.A. was regarded as "the" donor in the field of education.

Some measures are being taken by HMG to help overcome these problems but there is widespread agreement that redoubled efforts are needed. A very promising measure is the reliance on non-professional auxiliaries selected from local communities -- agricultural assistants, Leader Farmers, and health workers -- who in return for a small monthly stipend work as adjuncts to the regular government technician. In Nepal, moreover, there appears to be relative openness in considering use of these paraprofessionals instead of fully trained personnel. However, the tendency to reserve decisions to the Center or to only one person, such as the Chief District Officer in the District, tends to vitiate the positive effect of this flexible approach and this issue will need to be addressed if the system is ever extended.

Even when a supply of appropriately trained people is available there remains the vexing problem of providing adequate compensation and incentives to make service in the countryside more attractive. It is a fact of life of government service that many officials augment their salaries in Kathmandu through additional jobs producing a second income. Offering a 20% in some cases even a 50% supplement to their basic government salaries may not

sufficiently overcome the loss of this second income when they leave Kathmandu and move to the local areas. A system of expanded incentives, coupled with a reinforced system for obtaining promotions and further allowances seems to be appropriate under the circumstances.

This problem puts a premium on maximizing use of paraprofessionals who are selected from the countryside and trained in outlying centers for assignment in their own communities.

An important point to consider in discussion of the all-pervasive manpower constraint to development in Nepal is the actual and perceived role of women in the rural areas. In its round of interviews, the team was impressed by the very traditional and limited way in which women were viewed, although persistent questioning did bring out some interesting additional points. As in many other countries, women work very hard in rural Nepal. Except for ploughing, which is the exclusive domain of the men, they do a wide range of agricultural work, including the heaviest; they take care of the home and the children; they carry water, they may be part of road construction and repair gangs.

Girls represent perhaps 10% of school enrollments, hence very few ever complete school and earn a School Leaving Certificate. Accordingly, they are effectively frozen out of consideration for government jobs and from virtually all other job opportunities as well. From a number of our interviews, we gained the impression that women rarely were seriously considered as wage earners or participants in a development effort, because "they want to take care of their homes." One limited exception to this pattern is in the fields of health and population where there are women field workers, apparently frequently functioning very effectively.

The severe manpower constraint is acutely felt throughout Nepal and clearly perceived among HMG and by foreign donors. One way this is manifested is that great value placed on education by Nepalese (at least for boys), and schools at all levels were frequently cited out in the countryside as one of the priority requirements by people in all walks of life, along with health stations and safe water supplies. School construction was one area identified by various HMG officials as a high priority item for foreign assistance, although there are provisions for encouraging local construction at the village or district level using locally-raised resources including voluntary labor.

A further consideration with respect to human resources constraints involves the significance of caste and the traditional occupations. Social, political and economic discrimination on the basis of caste is illegal in Nepal. HMG is fully committed to the enforcement of this law and has taken steps to ensure that (as the team observed) all castes have access to programs designed to increase the welfare of the rural poor. Yet it is difficult to change the practices of centuries by legislative fiat and this has proven to be the case in Nepal. It should be noted that the impact of the traditional system is not uniform over the nation as a whole. Because of Nepal's geographic fragmentation, the pattern of its social and economic evolution has varied from area to area with the result that the role of (and opportunities accorded to) the traditional occupations tends to vary from place to place. Moreover, as technical and economic change take place, traditional attitudes and delineations with respect to occupations tend to become less clear and new opportunities arise. Inevitably, taking advantage of these opportunities will depend on knowledge (through training) and access to income and time.

In sum, the system of traditional occupations does not constitute an insuperable barrier to Nepalese development. It remains, however, a constraint that must be adequately considered by both HMG and external donors as they seek to design projects that will increase the welfare of the rural poor, thus minimizing the impact of that constraint.

D. Health and Nutrition

The general health of the population in Nepal is at a relatively low level, coupled with inadequate and unevenly distributed services. The majority of the people have no access to modern medical services. Infant mortality is high (200 per 1000 live births), and communicable diseases such as tuberculosis, typhoid fever and cholera are widespread. The crude death rate is relatively high, about 20 per 1000 inhabitants and life expectancy is only 42.5 years.

The traditional health sector is still dominant. It includes religious rituals, household practices, ayurvedic medicine, and indigenous midwives. At the present time, the country has 60 hospitals, with a total of 2,130 beds, and 350 health posts. There is one physician for every 36,000 people in Nepal as compared to one to 10,000 in India

and one to 6,000 in Sri Lanka. The Kathmandu Valley has one physician per 6,500 people and over half of the country's hospital beds.

HMG has started various programs to meet the increasing demand for health care through building a health infrastructure and the training of paramedicals for work in rural Nepal. Beginning with hospital improvement and malaria control work in the lowlands in the 1950's, HMG moved during the middle 60's to coordinated health programs on the zonal, district and village levels. Efforts were concentrated on the establishment of training facilities for nurses and auxiliary health workers, the further development of a malaria control program, and programs to eradicate smallpox, tuberculosis, and leprosy. There have also been efforts to improve health surveillance.

In spite of the considerable progress made in the last 25 years in expanding health facilities, they are still inadequate. The difficult terrain, inadequate transport and communication system, insufficient supplies of drugs and equipment, have all contributed to inadequate delivery of health services. Furthermore, lack of data and poor access of people to health services makes it difficult to precisely assess the extent and magnitude of health problems in Nepal. Malaria was on the verge of control, until two years ago when there was a serious resurgence in the lowlands. Poor sanitation and unprotected water supplies make gastrointestinal disorders such as cholera, hepatitis and amoebiasis serious health problems. Tuberculosis and leprosy remain highly endemic diseases. Regional problems such as endemic iodine deficiency with goiter and deaf mutism persist.

The main difficulties of the health programs in Nepal are the acute shortage of trained personnel and inadequate supplies and programs such as Maternal Child Health and control of specific diseases (e.g., malaria and smallpox) have generally been effective when properly funded, staffed and directed but momentum and an adequate level of resources may be difficult to maintain once foreign assistance is no longer available to that effort. A great deal of effort in malaria control was made from 1958 to 1972 which opened up significant areas to settlement and development. After 1972, the program faltered because HMG was unable to commit resources and manpower at the level needed to maintain the effective control achieved by 1972. Consequently, there has been some resurgence of malaria. The general health services lack adequate facilities and equipment and are concentrated in urban areas (Kathmandu Valley), and thus are inaccessible to the vast majority of the people.

Hence, the scarcity of facilities and equipment in rural areas implies substantial initial capital costs in all health activities if HMG is to establish even a minimal presence.

The current emphasis is on preventive medicine, and efforts are being made to expand and decentralize curative health facilities. Rural health posts are the main devices for delivering health services. Ultimately, these posts will be upgraded into integrated health posts which will include all public health services as well as family planning services. Other health policy measures include strengthening of institutions and research in traditional medicine, change in the program of the Institute of Medicine to training low and middle level health manpower, and allowing non-government organizations to establish health units and facilities.

HMG obviously feels under considerable pressure since the provision of health posts and safe water systems is one of the top priorities identified by local people throughout the country during visits of the King or in the course of village and district efforts at "planning from the bottom up."

A program has begun in Nepal for an integrated service providing preventive health, population planning and limited nutrition information. Development of an expanded, fully-integrated health service is designed to follow completion of the major part of the malaria eradication program. The latter program has a complex of field facilities and staff necessary to provide a link between health posts and hospitals. The health posts would be the chief vehicle for delivering health services at the grass-roots level. Ultimately these posts will be upgraded into integrated health posts which will incorporate all public health services including health education, family planning and campaigns against communicable diseases.

The program appears most promising in the limited areas where it has begun, but it does pose some problems and controversy. First of all, there is a perceived danger that the corps of workers in the integrated service will not be able to pay the requisite amount of attention to the various components comprising the program package, and that family planning efforts in particular will be diluted. Moreover, there is the problem of target groups being most sensitive to curative medicine problems which puts a certain practical and moral pressure on the workers

to concentrate primarily on curative rather than preventive measures. Officials in the service tend to discount this but it remains a problem. Then there is the basic bureaucratic problem of a new organization assuming the function of several existing organizations which in turn feel threatened.

Most farmers are engaged in mixed cropping and keep some livestock, which helps in providing a balanced diet. However, surveys indicate malnutrition and protein deficiencies are prevalent, particularly in the Hills and among children. A recent survey finds that nearly two-thirds of the children in the Hills and half in the lowlands are below normal height or weight, or both, as a result of undernourishment and malnutrition. Many of these children risk never attaining full development. Goiter, which is caused by iodine deficiency, is found all over the country. It is a serious problem in the Hills, with the incidence of cretinism and deaf mutism particularly great in the higher areas of the North.

Until recently, the level of awareness of the magnitude of nutritional problems has been low. Under the Fifth Plan, a nutrition section is proposed to be instituted in the Health Services Department of the Ministry of Health. Also, nutritional education, demonstration and surveillance programs are underway at health posts and clinics under the basic health services development and Maternal/Child Welfare Project. This nutrition program will be extended gradually to all health posts of the country.

Nepal is still in the embryonic stage of developing viable nutritional programs, and it is doubtful that the Health Services Department alone would be suitable to make any dent in the problem of nutrition. Hence, nutrition deserves major attention for intersectoral programming involving the Ministry of Agriculture, Education and other government bodies and organizations. An inter-departmental nutrition council has been established to coordinate the programs of the different ministries. Improvement of the nutritional situation in Nepal involves not only food production, distribution and utilization, but also establishment of appropriate policies and priorities taking account of nutritional considerations. Interestingly enough, UNICEF is carrying out a modest demonstration project on better diets using

only locally-available foodstuffs. Neither UNICEF or any other donor is distributing food as part of an improved nutrition program; neither do health posts have any programs for providing supplementary foods for some of their maternal or child health clients. The food distribution financed by the World Food Program obviously assists in improving the diets of target groups but is not per se oriented to nutrition objectives.

Otherwise, the only specific programs in nutrition in Nepal have involved nutrition data processing and a nutrition status survey financed by UNDP and AID respectively.

E. Population

One of the country's major pressing problems is the rapid increase of the population of 2.3 percent a year, which exceeds the current 1.9 percent annual growth rate in food production. Over 60 percent of the population of the country is in the Hills and mountains where the density is now about 2,740 per square mile of cultivated land vs. about 858 per square mile of cultivated land in the Terai. About 43 percent of the current population of 13 million is under 15 years of age. Population is projected to increase to 20-22 million by the turn of the century.

The pressure of population has resulted in fragmentation of landholdings, economic and physical deterioration of the land, destruction of forest/land resources, widespread erosion and continuous migration to the lowlands and India.

With the view of slowing down the rate of population growth, the Government of Nepal has launched various population control programs over the past decade. Since receiving official acceptance in the mid-1960's, family planning programs have been limited to maternal and child health (FP/MCH) programs. The target of the present plan is to reduce the crude birth rate from an estimated 40 to 38 per thousand and to reduce the annual population growth rate to about 2.0 percent by 1981, down from the current rate of 2.3 percent. About 170 MCH centers and 14 district offices will be established to provide family planning services to 700,000 couples between the age of 15 to 45 years. In 1976, the Government opened 60 new FP/MCH clinics and trained 200 village-level workers for outreach programs operating through these clinics.

Data collection on vital rates and other important dynamics of population, as well as the provision of family planning advice and commodities are hampered by lack of good communication and transportation facilities. Workers for the most part must travel by foot or by bicycle over paths and unimproved tracks. Distances are long, measured both horizontally and, in the Hills, vertically. A large proportion of the people in the Hills reside in individual houses located on mountainsides or hilltops quite apart from neighbors. In such situations workers must often travel more than one or two hours just to reach one house. On the other hand, most people who live in the lowlands tend to be clustered in villages and it is somewhat easier for workers to reach target groups. It is a fact of life in Nepal that it is difficult to reach most childbearing couples and to supply them regularly with temporary birth control devices. There is apparently growing demand for surgical methods of birth control (vasectomy, laproscopy, etc.) and authorities in Nepal seem to agree that this approach could be expanded significantly if more doctors were available. Permanent methods of birth control have the advantage of requiring no follow up, which is especially significant in Nepal in view of geographic isolation and lack of transport.

Despite significant efforts by HMG and AID, there is a lot of feeling that the allocation of resources for family planning by the Ministry of Health is far below what is needed to achieve country wide coverage or maximum potential from existing facilities and manpower. Resources committed to Family Planning should be increased to obtain a higher degree of efficiency from existing facilities while allowing a moderate expansion, and to develop low-cost delivery systems which can bring basic contraceptive services to more people. A key element besides financial resources is expansion of manpower resources. Manpower constraints are severe and extend to all levels of technical, administrative and field operations. Besides the shortage of doctors scarcity of personnel for planning, coordination, implementation and evaluation is acute. The problem is similar but somewhat less severe among paramedical personnel. Some evidence exists that in some parts of Nepal at least, women could be more effective workers in rural family planning programs. Women who have borne three or more children are generally favorably disposed toward limiting further births when the possibility has been explained to them by women workers. However, we should not underestimate the fact that customs and living conditions prevent a rapid acceptance and spread of family planning practices unless an effective program

is undertaken to change attitudes and outlooks.

There are two new elements in the population picture which will hopefully have significant implications for future programs and progress. The first is the recently established Population Policy Council (the so-called "POPCOB") composed of high level members of relevant ministries, the National Planning Commission, etc. POPCOB's mandate is to examine the implications of government policies and programs across the board for population growth. It is also to encourage research, including social science research on the determinants of population growth. AID is currently providing technical assistance to POPCOB through the University of California at Berkeley. The objectives of POPCOB are very consistent with current thinking in AID as reflected by the proposed Section 117 of the Foreign Assistance Act. There should thus be scope for further AID support in this area. The second new element, not to be underestimated in its potential impact, is King Birendra's recent New Year's Day speech emphasizing the importance of population growth and environmental degradation as serious development problems.

F. Environmental Degradation

In addition to being a geologically unstable area, Nepal is confronted with a growing population in search of land and firewood. These factors have combined to produce a large and growing erosion problem.

This problem is widely recognized by both the Nepalese and the donors (though there is some variation of opinion as to how much of the problem is purely geological and how much the result of man). So far, this recognition has not been accompanied by an equivalent effort to develop the expertise necessary to deal with the problem. An effort to create such an expertise, which can be incorporated in the design of development projects, is clearly required if erosion is not to vitiate the best efforts of the Nepalese and the donors.

The immediate need is for the applied research to develop means for dealing with the problem. Such research would investigate topics such as the following:

1. The applicability of minimum tillage approaches and other alternative terracing practices within the context of the Nepalese farming system.

2. The development and introduction of alternative crops which would raise income per unit of land (thus reducing pressures to farm the steeper slopes) or allow the steeper slopes to be made productive in a manner less susceptible to erosion. Horticulture may be such a possibility.
3. The development of crops and cropping patterns which would minimize losses from hail, diseases and pests (increasing income and thus reducing pressures to expand production over ever larger areas).
4. The development of alternative sources of energy (such as minihydro) as a replacement for firewood. Such an investigation would examine not only technical feasibility but also economic viability and social acceptability.
5. Reforestation with fast growing trees and grasses (and improved planting practices) which would stabilize the hillsides while providing a source of firewood and fodder.
6. Introduction of controlled grazing practices (e.g., rotating, fenced pastures).
7. Reduction in pressures on land through the provision of off-farm employment.

Moreover, given the widespread seriousness of the problem, it seems imperative that sound action programs in soil and water resource conservation, reforestation and firewood/animal fodder offtake limitation be planned, beginning on a local basis and certainly in connection with more large scale assistance programs, that would slow up the inexorable process of degeneration.

HMG in fact has a three year old natural resource conservation program located in the Department of Soils and Water Conservation of the Ministry of Forestry. While the program is still small, it has been growing rapidly -- from an initial annual budget of one million rupees to a current one of Rs. 10 million (which will likely be exceeded). It is believed that the 30 million rupees allocated to this program in the Fifth Plan will be exceeded. With the emphasis given by King Birendra to reversing natural resource degradation in his recent New Year's Day Speech, this may well be the case.

The activities of the Soils and Water Conservation Department have thus far consisted of six demonstration projects in various parts of the country plus publicity about the natural resource degradation problem in the form of movies, pamphlets, (campaign-type) buttons, etc. The demonstration projects include terracing, fruit trees, alternative cropping and fodder patterns and practices, rotational grazing, and, in the Trisuli Integrated Rural Development Project, nursery construction. According to one official of the Department, simply more careful selection of species and improved planting practices will reduce the seedling mortality rate.

Several donors have indicated an interest in assisting in the conservation area (the British, Canadians, Germans and the U.S.). An American UNDP associate expert is currently providing advice. Discussions are in progress with the British to support the construction of a conservation center in Kathmandu intended to train middle level civil servants, especially in agriculture, forestry and civil engineering.

The foregoing constitutes just a beginning, however, on a task which will require substantial additional commitment of manpower and financial resources. It is critical to the future of Nepal that an effort to contain the environmental problem be made. In the absence of such efforts there is an acute danger that the situation in the Hills will degenerate to the point that only massive migration to Nepal's urban areas and to the lowlands (and possibly beyond, to India) will solve the problem. Without conservation, efforts to expand agricultural production in the Hills will not yield their intended returns.

G. Transportation as a Dimension of Development in Nepal

For the two-thirds of Nepal covered by hills and mountains, motor roads can be expected to be of limited relevance into the immediate future. Given the topography of this area, motor roads are extremely expensive to construct and maintain. Given Nepal's unstable geology, they also contribute to an already serious erosion problem. Even more importantly, there is evidence that incomes and opportunity costs among the great majority of hill and mountain population are such that use of motorized transport is an unattractive proposition.^{1/}

^{1/} This is not to say that hill and mountain people have no use for asphalt highways. Much to the distress of Nepalese officials (and certain external donors) peasants in certain parts of the country have discovered that asphalt burns; thus reducing the need to gather firewood.

At the same time, however, there is a pressing need to increase incomes in the hills and mountains and this clearly requires improved and strengthened linkages between these areas and the rest of Nepal. Only with such linkages can markets be ensured for hill and mountain production and the requisite inputs provided at a reasonable cost.

Based on its investigations and interviews, the Team suggests that given the economics of transportation in Nepal, the best means of providing such improved linkages would be via the improvement and upgrading of trails (foot, animal and jeep) so that human portage might be supplemented and eventually largely replaced; construction of suspension bridges and, on a relatively limited basis, the installation of ropeways. Such a program would clearly be in line with the preferences of the peasants themselves and contribute a considerable amount to their welfare.

Such an investment program, even though directed toward intermediate transport technology, will still be extremely expensive when measured against Nepal's limited resources. Accordingly, such investments need to be carefully planned to ensure that the benefits derived therefrom are maximized. Porter trails, for example, should be planned to link with such jeepable or motorable roads as may be economically justified or required by administrative considerations. Further, trails bridges and roads to some extent, should be planned to maximize farmer access to such things as markets, supply centers, credit and health services (with the location of these services in turn influenced by the transport network). Only with such planning can the hierarchy of places and transport links requisite to rural development begin to take shape.

H. Effectiveness of Outreach to the Rural Areas

The traditional governmental structure dealing with the rural areas of Nepal include the Ministry of Home and Panchayats (Interior Ministry) which includes traditional functions of the police and civil administration plus the recent addition of a local Development Department to coordinate and partially fund development projects initiated at the District level, and the technical ministries, such as Agriculture, Health and Education, that supply technical personnel to regional and district authorities and work with local people. (These ministries also initiate larger projects in different parts of the country, e.g. major irrigation projects, and, of course, conduct national programs in their respective fields).

Working together, these ministries represent the principal means of development efforts in rural Nepal. The full spectrum of manpower problems is reflected throughout the entire structure.

The institution of the Monarchy has been concerned to improve the cohesiveness of the country and its links with the people. Under the present Constitution there are no political parties per se, but the Back-to-the-Village movement is active in all districts and villages and plays a key role in selecting candidates for office in the Nepalese process of selection of representatives of the people by consensus. The role of the Back-to-the-Village movement in economic development is generally slight or non-existent unless a particular village operative takes a personal interest in local project planning.

A key ingredient to improving links between the King and the countryside is the King's practice of frequent, generally unannounced visits to a rural village and directing that a particular activity be undertaken. This personal interest by the King is highly valued but it does have serious limitation as far as comprehensive development is concerned because obviously the King's time is valuable and limited and therefore he can be concerned with only a small part of the overall development task at a time. Moreover, insufficient follow-up or feedback mechanisms exist to ensure planning and implementation of activities in expeditious time. The need for more rapid and comprehensive follow up and feedback was voiced more than once and Team representatives were given to understand that this concern is keenly felt in the Palace also.

The problem is attracting sufficient numbers of qualified persons to work on development activities requires urgent and constant attention. Sufficient training facilities are required but they are needed in the countryside and they must provide training that is relevant to the areas that require attention. Given current Nepalese sensitivities with respect to large numbers of foreign technicians operating in the countryside, a viable assistance strategy must build primarily around the creation of Nepalese capabilities -- that will be relevant and will actually be used -- and not on the provision of large numbers of expatriates, even of the volunteer variety. This points in the direction of a pyramid of talent with heavy reliance on paraprofessionals and auxiliaries, exclusively

(or at least largely) recruited locally, backed up selectively with Nepalese technical expertise at the district, zone or regional level, reinforced in turn with more sophisticated expertise and policy response capability at the national level. As this strategy is perfected and requisite manpower resources are created, foreign technicians and volunteers should be used (even extensively, as long as deemed imperative by HMG), but always with a view of creating in the end of corps of trained Nepalese.

This technique also would do much to bypass disputes concerning the presence, role and even life styles of foreign technicians working in Nepal. Criticism of such technicians has ranged all the way from their living too luxuriously and not relating to the Nepalese people and HMG officials they work with, to allegations of their being a threat to appointed officials and government workers in the countryside by being on the job at all times and trying to get things accomplished and relating too well to the rural target groups, thereby inviting invidious comparisons with Nepalese officials. To the Team, the relevant truth concerning foreign technicians is whether or not they are perceived by the Nepalese to play a key role in accomplishing Nepalese development objectives; if they are perceived as such in a specific development activity, they will be supported and will be able to operate effectively. It seems to the Team that foreign technicians will be perceived in this way if the Nepalese themselves play a key role in the design of projects and programs and identify specific instances where foreigners can provide a key service not available among Nepalese, and then use them to staff projects over the near or medium term until Nepalese technicians with appropriate training become available.

Two key aspects that must not be overlooked in considering the effectiveness of HMG outreach to the rural areas are (1) the practical extent that "planning from the bottom-up" be genuinely an expression of the priorities of the rural people as a whole (including, for example, local farmers and not just District officials) and mirrored by effective programs to mobilize them for efforts primarily on their behalf; and (2) the ability of the central and local Governments to have a sufficient capacity of technical and scientific knowledge that is relevant to the rural areas and can work effectively to promote successful projects on the one hand and to preserve and extend their impact on the other.

This latter point raises the question of AID/W and Congressional perceptions of the New Directions in U.S. development assistance because some of the activities needed to preserve and extend impact of development activities may not at first glance relate directly to the poor majority itself. Few if any efforts at planning from the bottom up will ever identify population pressure, the need to control and reverse erosion, and more carefully targeted agricultural research as top priorities in the development process. Yet addressing these problems is of key importance to successful rural development in Nepal. For instance, the creation of requisite long term capacity in the Ministry of Forestry, both centrally and in field locations, to plan and carry out land and water conservation projects, without which many development projects will ultimately fail may seem far removed at first blush from projects of immediate benefit to the poor majority but they are, in the Team's opinion, a development imperative in Nepal.

However, the Team wishes to stress that such creation of "overhead" to recognize problems, design programs and, very importantly, interact effectively with rural people cannot precede projects with palpable and relatively early benefits for project target groups if credibility is to be preserved. There has been too much aura of donors endlessly studying problem areas or providing people of little or no operational relevance under projects to overlook this factor.

Given the urgent problems of the Hills, the problem of overcoming the lack of critical mass of knowledge and capacity with respect to Hill problems -- agricultural production, land and water use and conservation, lack of communications and transport -- cannot avoid becoming a top priority. This must sooner rather than later be coupled with a more extensive (and hopefully an increasingly effective and responsive) central government presence in the rural areas, as well as an increased involvement of the Hill people themselves in the planning and execution of development activities.

IV. Rural Development in Nepal: A Strategy for AID

In making its review, the Team concluded that the A.I.D. assistance strategy in Nepal has in an effective way addressed some of the most fundamental constraints to development in Nepal. Emphasis on improvement of agriculture, education, health and family planning has

resulted in projects that have had in the main a significant impact on a broad scale in Nepal, and, it is fair to say that HMG appreciates and values this impact. However, in the light of the New Directions in U.S. Foreign Assistance legislation, the question facing the Team and the challenge facing the United States in Nepal is whether the focus of U.S. assistance efforts should be sharpened so as to ensure maximum impact on the fundamental problems of Nepal as an RLDC and the great mass of its people in consonance with the enunciated development plan of the Nepalese themselves.

The Hills vs. the Lowlands: A Question of Emphasis

A contrast which repeatedly emerges in the discussion of development sectors in the previous section is that drawn between the "Hills" and the "Lowlands." We define the "Lowlands" here as (1) the so-called "Outer Terai" which merges imperceptibly with the plains of Northern India and (2) several broad valleys, sometimes known as the "Inner Terai," between the first low-lying hills (Siwalik Hills) north of the Outer Terai and the higher ranges (Mahabharat Range) which mark the beginning of the hilly midlands which extend to the high Himalayas. Together the "Lowlands" comprise a small proportion of the total area of Nepal (about 23%).

For purposes of this Strategy Assessment, the Team refers to the "Hills" as comprising the balance of Nepal, including broad midland hills and valleys as well as the High Himalayas and the "Inner" Himalayan valleys located between and north of the high peaks.

It will be recalled that the Hills also contain the bulk of Nepal's population (about 62% compared to 38% in the Lowlands). At present population growth rates, increases in the absolute population of the Hills are likely to continue for some time, even as the relative share declines as a result of out-migration. But the limited geographical area and the high rate of natural population growth of the Lowlands impose limits on the potential for in-migration.

It will also be recalled that the Hills are relatively more disadvantaged in every dimension. Per capita income in the Hills is substantially lower than in the Lowlands. Hill districts tend to have food deficits, and the Hills as a whole are net importers of food. Specific nutritional deficiencies are worse in the Hills. With the control of malaria in the Lowlands, health problems are probably worse in the Hills. The Hills are certainly most

deprived of adequate infrastructure -- transportation, irrigation, power, potable water -- and such institutional services as agricultural research and extension, credit, marketing, health, family planning, and education.

It is this combination of (1) majority of population and of geographic area, (2) relative deprivation in terms of levels of living and access to development infrastructure, services, and inputs; and (3) the HMG's own announced objective of regional balance and addressing the needs of the rural majority of the population, which lead the Team to recommend that the emphasis of future A.I.D. development assistance programs in Nepal be directed to the poor majority in the Hills. The genesis and ill effects of much of Nepal's natural resources degradation problem are also to be found in the Hills. Creative and productive solutions can also be found there.

This is not to say that some major development potentials and problems do not remain in the Lowlands. But with respect to potential, the Team believes that past and current activities, a significant share undertaken with A.I.D. assistance, are and will continue to realize this potential. With respect to problems, land settlement and land tenure practices appeared to the Team to be major Lowland socio-economic issues which HMG will have to carefully but actively address over the next few years.

The cornerstone of future A.I.D. programs, however -- for at least the next decade and probably longer -- should be to direct additional capital and technical resources to the Hills.

The Team encountered the view that the Hills could best be helped by concentrating additional resources on the Lowlands. There are severe limitations to this approach, however. The limited capacity of the Lowlands to accept additional migration has already been mentioned. The high transportation costs between the Lowlands and the Hills and the fluctuating but powerful pull of the Indian market make the Lowlands a problematical source of food in the short run for the growing population of the Hills. Over the longer run, comparative advantage considerations suggest further specialization in agricultural production and trade between the Lowlands and the Hills, with tropical grain and fruit being grown in the Terai and temperate crops in the Hills. But efforts must begin now to widen

the economic base and market of the Hills through a development effort which focusses specifically on the Hills and their linkages with the rest of Nepal.

An Assistance Strategy Directed to the Hills

The approach the Team wishes to recommend consists of both short run and medium-to-long term measures. This pertains with respect to commencement of activities and with respect to expected benefits to be obtained. A key point needing stress is that the program strategy should consist of two complementary pieces: (1) projects providing almost immediate direct, palpable benefits to the poor majority of rural people in the Hills; and (2) initiation and strengthening of activities building up nationwide capacity in the form of adequate institutions, trained personnel and scientific and technical knowledge specifically directed toward solving the problems of Nepal's Hill areas in the medium and long run. The former category involves undertaking of activities resulting in increased employment and income from (1) increased and more diversified agricultural production, (2) cottage industries, particularly concentrating on commodities largely consumed within or reasonably nearby to the project area, e.g., cloth, pottery, simple farm implements, etc., or possibly, labor-extensive export products, and (3) public works, particularly expanded school and health post construction, secondary and tertiary irrigation systems construction, improvement and upgrading of trails for human, animal, and limited motorized transport, reforestation, land protection/preparation and other erosion control measures, and extension of safe water supplies. Importantly, it also includes a major effort to expand effective delivery of existing social services -- such as family planning, health, and education -- to a significantly greater proportion of the Hill people.

In the short run, it is proposed that emphasis be principally on achieving supplemental improvements in food production and consumption to improve family incomes and diets. This involves emphasis on food grain and vegetable production, much of it for augmentation of local diets and requires emphasis on increased propagation of research results now being turned out by the very limited facilities now addressing Hill agriculture in Nepal. At present only one percent of the paddy and maize in the Hills is under improved seeds. Integrating livestock with good grains and fodder will contribute to higher productivity of livestock and enable a larger number of animals to be well-fed on farms. The technology is available and needs

to be modified to fit Nepalese conditions. Very importantly, in the Team's opinion, is extension of an approach toward Hill agricultural research involving more widespread use of farmers' own lands for research with concentration on relatively few varieties in lieu of the more spectrum-like approach usually associated with donor-supported agricultural research.

But it is important to stress that an effort should be planned immediately to begin a vastly expanded research effort, both technical and socio-economic, for application in Hill agriculture over the medium and long term. Besides obviously needed emphasis on increasing food production further through new or better farming methods and practices, this longer term phase of research would involve emphasis on encouraging sharply increased production of fruits, spices, vegetables and natural silk. Many of these commodities are already grown on a limited scale but apparently most farmers at present prefer food grains to ensure feeding themselves and their dependents rather than new and possibly more risky crops which might be difficult to market. But if Hill agriculture is to be upgraded over the longer run, the cost of research in these fields must be assured. Moreover, economic studies should be conducted on how these technological packages might best be used. Often, achieving more rapid acceptance of new technologies and farming systems fails because of the lack of knowledge of the economic and social consequences of their adoption, including data about input cost and return relationships and the relative profitability of different farming systems.

In the short run, attention must also be given to tackling the all-pervasive manpower constraints. Particular emphasis should be given to accelerating and expanding training of agricultural, health, and family planning workers, and engineering overseers at lower and middle levels. Expanded recruitment of auxiliary agricultural and health workers, and extension of this concept particularly to relatively simple construction and maintenance activities is an imperative.

Key to these efforts is a sharpened emphasis on non-formal education, applicable both to adults and older children, specifically directed toward inclusion of working women. The experimental adult education system initiated by the Center for Educational Research and Innovation in the Pokhara area which has succeeded in attracting both men and women representing various social backgrounds seems like an

exceptionally promising and appealing device and deserves increased support. Some factors should be kept in mind:

1. Information and the media have entertainment value;
2. Schools are a center of community pride (and usually were constructed by community labor) and can easily be used as a focus for providing information and training that both teaches and entertains;
3. Such traditional Nepalese entertainment as the theatre can be most effective means of getting a development message across to a largely illiterate audience.

Some factors need also to be kept in mind in planning and carrying out types of public works activities listed above. One important concept is that the activities be undertaken both to provide much needed infrastructure to support agricultural and other income generating activities and to serve as a means of pumping additional resources and income into the Hills. Hence, the Team is talking about widespread paid employment and in some cases large scale activities that go considerably beyond the all-volunteer labor activities currently being carried out.

Emphasis should be on maximizing use of relatively small, but local contractors rather than contractors based in Kathmandu. Small contractors can be used to set up training facilities for local laborers and a larger part of their earnings would remain in the local area than is the case of Kathmandu contractors.

Cash wage payments from the central government for a large number of rural works projects could have major and difficult budgetary consequences; they could also be inflationary until agricultural production increases sufficiently. Given the facts of food deficiencies in the Hills, food aid provided for payment of wages in kind or for sale of concessional prices to workers on such projects has potential for mitigating these problems and could play a valuable role in development of rural Nepal. For example, the World Food Program provides food at concessional prices to workers on the Swiss-assisted Lamosangu-Jiri Road project. Such assistance may well have a major contribution to make to the massive, sustained

afforestation and related efforts required to make a dent on Nepal's natural resource degradation problem. Consultation between A.I.D., HMG, and WFP could possibly result in creation of an operating mechanism for distribution of PL 480 food to rural works projects in the Hills, without requiring an organization paralleling or overlapping with WFP.

A program of improved agricultural and off-farm incomes, complemented by rural works projects that also improve transportation access, also presents a means for improved outreach of health, family planning and nutrition services to a larger portion of people in the Hills. Once again, a special effort must be made to fill vacancies, or perhaps more importantly, augment central government personnel with locally recruited auxiliaries receiving a modest monthly stipend. The latter should be provided as part of a package right at the project location.

The undertaking of the above comprehensive package will require a keen knowledge of conditions in the project area -- economic, social, cultural, political, tribal, and climatic. It will directly involve a substantial percentage of the working population of an area and will make a determined effort to obtain widespread involvement by the whole target population. It is imperative that this multi-faceted approach not be planned from Kathmandu or even by a small group of government leaders and planners in a local area. It will require a significant degree of information gathering and consultation with rural householders on the spot if one is to avoid the experience referred to elsewhere in this report of a substantial over-commitment of resources for an ambitious irrigation project that has failed to provide in great measure its planned benefits. Success of this approach requires a certain quantum jump in intimate knowledge of a given area and in contact with its population in all walks of life.

While the foregoing topics have been addressed to short run measures, there is a wide range of activities that must be undertaken over the longer to middle run. As stated before, these efforts must be started fairly soon in order to have an effect on operating programs in the medium run. The key to success would appear to be a substantial improvement in food production and diversification resulting from strengthened Hill agriculture research, expanded irrigation coverage, and improved transportation and market links and supporting services. Similarly, activities to make significant improvements in off-farm

incomes through expanding cottage and beginning small industry should begin with initiation of market research, followed by judicious provision of credit and quality control advice and possibly also through procurement of necessary production inputs. At this stage, improved transportation links could also include some limited all weather road construction, but only as it is clearly indicated that a relatively large volume of goods -- e.g., horticultural products -- makes this worthwhile. Other relevant activities would include expanded reliance on micro (and mini-micro) hydroelectric facilities and an increase in scope and effective management of activities to slow or reverse environmental degradation. This would be based on the results of forestation research and projects, research on new tillage, fodder and grazing systems and further exploration of alternative energy sources. A key aspect of long term economic systems projects would also be to accelerate a sustained decline in fertility rates due to more widespread and effective family planning services and improved female health and nutrition and, especially for women, increased education and employment opportunities.

AID Instruments and Techniques

A combination of approaches and activities come to mind. The Team stresses that it is not intended that these be exclusively reserved for U.S. aid efforts. Indeed, in reviewing U.S., HMG and other donor performance and experience on development efforts in Nepal, the Team concludes that substantial benefits could be attained through a careful blending of strengths and resources of different parties and that a greater degree of multi-donor projects and co-financing among donors would result in better integration and utilization of human and financial resources being provided. Obviously, some of the following are particularly appropriate for the U.S. but the task of fostering development of the Hills is a very large one with room enough for a number of donors.

1. Amendment and expansion of the existing Integrated Cereals Production Project to provide specifically more facilities for research and training to Hills agriculture centered on conditions and problems of crop production in the Hills; in particular, research focussed on growing food grains as part of a farm system instead of on the crop itself (this may involve the need to obtain services of substitute or supplementary contractors and sub-contractors).

2. Provision of training and possibly limited operational expertise in key areas of research on effective land and water use and conservation and afforestation (terracing, tree varieties, tillage and fodder systems).

However, provision of specialized training outside of Nepal should be related only to positions building up the central government capacity in these fields and ought to be coupled with (a) a reasonable period of relevant field experience in the rural areas prior to the undertaking of the specialized training, and (b) work on specific development activities at some other point to foster a close relationship between the training being provided and conditions in the Hills. Training of Nepalese in India under the Indian Rupee Appropriation should be directed very specifically toward subjects relevant to development of the Hills.

3. Provision of technical assistance or even of technical experts filling of operational roles, either on a long or a short term basis is a sensitive issue requiring close collaboration between HMG and AID (or other donors). In the course of specific project design, undoubtedly many opportunities will arise but it should be the U.S. position that its own clear preference would be to encourage assignment of Nepalese technicians, possibly with the provision of short term expatriates to serve in Nepal until a Nepalese technician completes his training.

In the case of expanded or new programs of research, public works, social services and development of cottage and light industries, it should be a firm AID position to encourage and support the maximum development and utilization of Nepalese, and moreover Nepalese who have a significant tie to the area where they will be working. The U.S. for its part should be prepared to finance the means of bringing training specialists and facilities to local sites and should be prepared to finance in-country training of both local trainees and individuals who will eventually become trainers themselves.

4. The Team believes it essential that for an effort focussed on the Hills to be effective, AID (and other donors) should be prepared to be far more receptive to HMG's requests for assistance in payment of local costs than in the past, including a limited commitment to help pay recurrent costs in priority instances. The Team fully realizes the pitfall inherent in this recommendation; namely, the danger of a particular activity becoming dependent on continued foreign support and collapsing as donor support is phased out. Clearly, program negotiators will have to be vigilant on this point and the Team is confident that USAID/Kathmandu will indeed be very careful in its use of this resource. But it seems inescapable that the types of activities needed in Nepal will have a very heavy local currency content and their very priority coupled with the obvious resource limitations of Nepal as an RLDC will require the U.S. and other donors to be forthcoming. Otherwise, the very conditions of under-development will ensure that Nepal will never find a means for breaking out its situation. To some extent, the availability of Indian Rupees masked the basic inconsistency inherent in the past U.S. approach vis-a-vis Nepal. The Team feels, simply, that it is the priority nature of the problems faced and the fact that a proposed activity promises to result in widespread benefits to Nepal's poor majority that should determine that U.S. support is warranted.

5. Limited domestic and external resources plus the need for investments with rapid payoffs call for an area focus as an element in Nepal's rural development strategy.

This requirement for focus stems not only from limited resources but also from the fundamental character of the development process itself. Many development investments become productive only when accompanied by complementary investments. A suspension

bridge, for example, may only be justified if it opens access to a health post, makes possible the marketing of the extra output resulting from improved seed, etc. As outlined above, meaningful improvement in incomes and welfare in the Hills will involve a wide range of measures, requiring simultaneous action through package of investments with each component critical to the ultimate result. The nature and cost of these packages will vary significantly in different parts of the country, and may vary even in adjoining areas.

Selecting areas for development based on political (administrative) borders may prove highly inefficient. A marketing center located in a given political district may (to cite an example) provide services to one or more adjoining districts and the scale of the center should be planned accordingly. To plan the center to serve only the political district in which it is located would ultimately require similar investments in adjacent districts none of which would serve a sufficiently large area to attain optimum scale. While such planning would be considerably easier in a situation in which economic space and political borders coincided this is unlikely to obtain in the real world. Where the two do not coincide, planning and investment decisions should be made on the basis of economic space with appropriate mechanisms of coordination arranged between the political/administrative areas which compose it.^{1/}

While areas exist in the hills and mountains of Nepal in a political and geographic sense there are few significant areas that are

^{1/} Defining areas on the basis of political boundaries also runs the risk of focusing on the development of areas per se rather than on the development of opportunities for the people who reside there. For many of the people of the hills and mountains migration from the political area in which they reside into a developing economic space or growth pole may be the most appropriate means of improving their welfare.

linked together internally or externally by a field of economic forces such as to maximize the opportunities for the creation of income and economic welfare. Indeed, the hills and mountains are locked into a large number of isolated subsistence economies without access to the requisite inputs or markets that are required for increased production, specialization and trade. Thus, what is required for development in the hills and mountains is the creation of viable economic spaces containing the necessary physical infrastructure and human resources to make an increase in economic activity possible.

This will require investment in both physical and human resources. The space or area will have to be linked both internally or externally by a system of transport adequate to its basic needs. A system for the delivery of inputs and the marketing of outputs will have to be provided (both for agriculture and off-farm employment).

Training will have to be provided in certain key areas and certain social services established. Not all of these will have to be provided simultaneously however. A critical problem in the creation of such economic spaces will be that of determining an appropriate level and proper sequence of investments.

Little is known about how various development related investments might be most appropriately sequenced in time or what level of total investment is most appropriate in a given area. Accordingly, the Team suggests trying various experimental approaches in several areas during the initial phase of the rural development effort. However, the Team wishes to stress that simultaneous national efforts in support of expanded agricultural research, erosion control and health and family planning should not be neglected as they will provide critical components of the rural development effort.

An economic space focussed strategy is not without its problems. Such a strategy, if implemented in large number of areas, may drain scarce human and financial resources (both Nepalese and foreign) away from national programs critical to the success of rural development efforts. This is particularly true if the approach chosen to problems of coordination and implementation is that of establishing special area authorities. These may also offer prospects, albeit chimerical, of greater success at ensuring greater popular participation in the planning and implementation process, while in fact eclipsing local forms of government and consultation. Moreover, the physical and cultural diversity of Nepal will probably offer only limited opportunities for replication of efforts.

Implementation of an economic area strategy by a single donor can lead to problems as well. Identification of a specific donor with a specific area, while convenient from an administrative and financial point of view, could lead to wasteful competition, particularly for very scarce manpower and could lead to unfortunate association of an area with a donor. Even more importantly, such an approach precludes the opportunity for different donors to complement each other with resources they are able to provide more efficiently and economically.

6. Finally, the Team wishes to make the modest suggestion that Nepal and the United States (and other interested donors) keep in mind the possibility of approaching the critical problem of environmental protection on a regional or multilateral basis. Erosion in Nepal has widespread effects in India and Bangladesh, and the Team believes that the United States should be ready to encourage and facilitate discussion and early collaboration by Nepal with its near neighbors in this critical area. Technical capability with respect to erosion control exists in India and a way might be found to augment and complement this capability with other resources to mount a large scale program.

A possible precedent to keep in mind is the World Bank-led Indus River Basin Development Fund. The grave nature of the erosion problem and its effects would make collaboration highly desirable -- if not imperative -- on a regional basis among the countries concerned, supported on a substantial scale by a community of donors among which the United States would be prepared to play a major part.

V. U.S. Political Interests and Commitments

The Team appreciates the limited bilateral political interests the United States has in Nepal within the context of the overall U.S. posture in South Asia, and nothing contained in this report is intended to imply a change in these bilateral interests. However, the Team perceives some key U.S. interests with respect to Less Developed Countries worldwide that require some mention in the context of our examination of the U.S. assistance strategy in Nepal.

Nepal is one of the countries identified as a Relatively Least Developed Country. Most other countries so designated are in Africa and indeed by virtue of there being so many of them, RLDC's pose special problems and issues with respect to U.S. policies vis-a-vis African countries.

Congress has taken official notice of the dilemma of encouraging accelerated development in the RLDC's where by nature of the extreme deprivation development activities are likely to be harder to identify and design adequately and host country contributions are harder to obtain. Inevitably, projects are also more difficult to implement. Partly as a result of the concentration of RLDC's in Africa, partly as a result of the New Directions of U.S. Foreign Assistance Legislation, partly due to the North-South confrontation on use and allocation of the world's resources and payment therefor, and partly as a result of the energy and commodity price crisis which have had a particularly severe effect on nearly all RLDC's, it is very likely that U.S. foreign policy will pay greater attention to development issues in the future, including as one part, a sharper focus in the provision of development assistance. Presumably, this will be reflected in an appropriate way in budget allocations for aid to RLDC's. In this context, future assistance to Nepal, as part of an overall effort towards the developing world, transcends the dimension of traditional bilateral relations between Nepal and the U.S. or the traditional

U.S. posture and political interests in South Asia.

In advocating a modified U.S. assistance strategy vis-a-vis Nepal, the Team wishes to stress its rejection of the device of setting aid levels in favor of identification of specific key areas and targets for urgent attention. Thus, subject to the rule of reason, program and project identification and design capability, on the part of the Nepalese and the U.S. and other donors, and opportunities for collaboration in key areas, as well as the mobilization of human and financial resources, become the real parameters regarding the assistance effort rather than considerations of short term bilateral foreign policy or U.S. budget limitations. The assistance strategy envisioned by the Team for Nepal is one it believes is fully consistent with the long run foreign policy interests of the U.S.

Annex

Other Donor Assistance to Nepal

Levels, Directions and Concessionality^{1/}

The U.N.D.P. Resident Representatives "Annual Report on Development Assistance to Nepal, 1975-1976" lists some forty-five multilateral, bilateral, and voluntary institutions as providing assistance to Nepal. The largest donors among these forty-five (with the exception of China and India) are members of the Nepal Aid Group formed under IBRD auspices in December 1976. As of June 30, 1976, outstanding assistance commitments of this group amounted to \$210 million in technical and capital assistance. The bulk of this assistance was directed toward agriculture (31.3%) and transport (30.8%). Projections for June 30, 1978 show an increasing amount of assistance with a larger proportion being directed toward investments in agriculture (57.4%). This is in line with GON policy to increase the proportion of development expenditure devoted to productive investments with more immediate returns as opposed to investments in infrastructure with little immediate impact upon GNP.

Not only are these commitments substantial in absolute and per capita terms but they are also highly concessional. Virtually all the technical assistance is in the form of grants and the capital assistance has a grant element of 83%.

Areas of Emphasis

A rough natural division of labor has evolved with respect to the assistance provided by the (non-U.S.) members of the Nepal Aid Group. The U.N.D.P. and the U.N. specialized agencies provided substantial amounts of technical assistance to education and health. Switzerland has had a long standing interest in hill agriculture, dairying, trail and suspension bridge development and more recently, in mini-hydroelectric schemes. Canada is expected to make significant contributions in power systems planning, water resources management and agriculture/rural development (particularly in the far west).

^{1/} Because of the lack of data which separates the U.S. and other donors, the information provided in this section includes U.S. assistance.

The United Kingdom has long provided a variety of training opportunities and specialized technical assistance. It is now gearing its effort to feeder road construction, hill area development and agricultural infrastructure. Japan and the Federal Republic of Germany have concentrated upon agriculture, agricultural extension and infrastructure.

The IBRD, IDA and the Asian Development Bank have focused on major infrastructure (roads, irrigation facilities) and Integrated Rural Development. This focus is likely to continue into the immediate future.

India and China are not members of the Nepal Aid Group. Nonetheless, both provide significant assistance to Nepal. India has concentrated primarily on roads and hydroelectric facilities while China has built several important road links.

Activities of Particular Interest

Other donor activities in Nepal cover a wide range from the traditional technical assistance activities of the United Kingdom and the U.N.D.P. to the innovative approaches to health of the Thomas Dooley Foundation. Of particular interest, given the Strategy Team's scope of work and the constraints to Nepal's development, are those activities dealing with Rural Development, Transportation, Food for Work, Gurkha Reintegration and Manpower Development.

Rural Development

The Government of Nepal has a strong interest in donor support for integrated rural development. This interest stems mainly from two related considerations: A recognition that sufficient resources will not be available to support an equal degree of development over the entire country thus requiring the selection of certain growth foci, and a recognition of the importance of linking infrastructure investment with activities directly productive of increases in GNP.

At the present time, three rural development efforts are getting underway. The Canadians are financing an effort in the far west, the IBRD is financing an effort in the

districts northwest of Kathmandu (Nawakot and Rasuwa) and the United Kingdom an effort in the east. It is expected that as of June 30, 1977 some \$9 million will be committed to these activities. At the time of the Strategy Team's visit none of these activities was sufficiently underway to provide an indication of problems likely to be encountered or successes likely to be achieved.

Transportation

All of the currently existing road network in Nepal was financed by external donors. While several road projects are projected for the immediate future (including completion of the East-West Highway) it is expected that road construction will comprise a declining proportion of external assistance over the next few years. Further, an attempt will be made to link those roads that are constructed to productive activities. This results from a recognition on the part of the donors and the Government of Nepal that many roads have not been directly productive while imposing ever increasing maintenance costs on the Government's recurrent budget.

Given the costs and benefits of road construction in Nepal, the efforts of the donors to improve access to transport via the upgrading of trails and the construction of suspension bridges seems highly appropriate. In addition to USAID, the Swiss, the IBRD (IDA) and the United Kingdom will be involved in such efforts over the immediate future.

World Food Program

It has already been noted that Nepal, while a net exporter of food, contains pockets of food scarcity and malnutrition as a result of its geographic fragmentation. There is also a need for food to sustain villagers engaged in resettlement and public works activities. In response to these two needs, the World Food Program is currently making substantial amounts of food available for the following activities:

- 1) Supplementary foods for mothers and children (100,000 beneficiaries in current program);
- 2) Dairy Development (provision of dry milk and butter oil for reconstitution and sale with the proceeds going to dairy development);
- 3) Food for Work (distribution of wheat, pulses, oils and dry milk to some 2000 workers engaged

in the construction of four hill trails);

- 4) Food Sales: Lamosangu - Jiri Road (road is being constructed with Swiss assistance. WFP is providing food for sale at concessionary prices to some 5,000 workers over 5 years);
- 5) Food for Resettlement (provision of food to meet entire food need of settlers for 18 months. Will involve 12,000 settler families over next five years.);

It is estimated that approximately \$30 million will be provided for these activities over the next five years.

The World Food Program has found that its activities have had little, if any, effect upon prices and producer incentives. The chief problem encountered has been a tendency for settlers to become overly dependent on WFP food. Steps have been taken to overcome this problem however.

Overall, Nepal's needs and the experience of the WFP indicate considerable scope for food sales and distribution along the lines of the WFP's current program. Problems of food shortages and malnutrition in selected areas of the country are likely to persist particularly as Nepal's population continues to increase. Given the low income level and the subsistence nature of Nepal's rural economy, a food input will be a continuing requirement if a substantial amount of rural labor is to be released for the construction of basic infrastructure such as trails and suspension bridges. Carefully monitored and managed, such programs should have little disincentive effects on production.

Gurkha Reintegration Scheme

This activity is supported by the United Kingdom as a means of assisting ex-Gurkha soldiers in their return to life in rural Nepal via the provision of training, extension services and improved agricultural inputs. Though it is directed towards the ex-soldier, the project also provides assistance to non-soldiers residing in target villages.

Of particular interest in connection with this activity is its finding that bringing a selected farmer to a central point for training will not lead to significant changes in

his home village. Rather, what is required is the development of a critical mass of progressive farmers in each village who can, by example, bring along the less progressive. Given this conclusion, the project has shifted its emphasis away from central training at its two centers and towards extension and demonstration at the village level.

Manpower Development

Since Nepal was opened to the west in 1951, the external donors, including the U.S., have made substantial inputs into human resource development both in terms of assisting in the development of Nepali educational institutions and in terms of sending Nepalis abroad for training. As of June 30, 1977, members of the Nepal Aid Group will have outstanding assistance commitments to the education sector amounting to some \$17 million. Over the financial year 1975-1976, all donors (multilateral, bilateral and volag) provided participant training in a wide variety of fields.

External Assistance and Absorptive Capacity

In the course of the three and a half weeks it spent in Nepal, the Strategy Review Team met with all the major donors. While the bulk of these discussions concerned Nepal's development problems and the donors' programmatic response thereto, there was also considerable discussion of absorptive capacity. Several donors expressed the view that Nepal's capacity to absorb assistance is restricted by insufficient staffing in the Foreign Aid Division of the Ministry of Finance (a particular problem for the other donors who do not maintain large in-country staffs to assist with the paperwork and engage in follow-up), lack of a sufficient number of well prepared projects and limitations upon the budgetary resources of Nepal. The Government of Nepal is clearly aware of the latter two problems.

In the case of project preparation it has supported the efforts of institutions such as APROSC and encouraged the donors to provide more technical assistance directed toward supplementing the project preparation capacity of HMG. There is evidence that the donors (particularly the UNDP and the IBRD) are responding to this encouragement.

HMG is also concerned about the pressures upon its development budget that are created by the local and recurrent costs associated with donor assisted projects. The recent paper prepared by HMG and the IBRD for the upcoming meeting of local representatives of the Nepal Aid Group notes that currently, after local cost commitments to externally assisted projects are met, only 15% of public savings will be available for activities financed entirely from Nepalese sources. It also notes that at the present time, members of the Nepal Aid Group pay only 14% of the local costs of their capital projects and insignificant amounts of recurrent costs. HMG would like an improved donor performance on both counts and this may well be justified given Nepal's needs and financial capabilities.

Coordination of Assistance Activities

At the request of HMG, the first meeting of the Nepal Aid Group was held, under IBRD auspices, in Tokyo on December 2, 1976. Out of this initial meeting came a decision to hold future meetings on two levels. At the first level, involving senior representatives of HMG and the donors, development performance and strategy would be reviewed and future assistance needs assessed. At the second level, involving donor representatives based in Kathmandu, efforts would be made to insure that donor programs undertaken are fully responsive to Nepalese priorities, integrated with HMG programs and in harmony with each other. The first such meeting was scheduled to be held in Kathmandu in May, 1977.

In the report prepared for this meeting, HMG states that the requisite amount of coordination to attain these objectives has been achieved. It further states that, with the exception of a failure to become involved in industry and mining, donor programs have been largely in harmony with its own priorities. Overlapping of energies and investments have been avoided and where several donors have been involved in the same sector, their efforts have been complementary or geographically separated.

The Strategy Review Team would generally agree with this assessment. The various donors are in frequent contact and there appears to be a frank and open dialogue underway among the various donors themselves and between the donors and HMG. Despite the fact that India is not a member of the Nepal Aid Group, it still participates fully in informal discussions between donors.

Under the auspices of the Foreign Aid Division, HMG has developed some effective mechanisms for coordinating the operations of individual projects. While the Development Board concept has proven too costly in terms of limited manpower to be applicable to any but the largest projects, the Project Coordination Committee concept (drawing on project officers from all concerned Ministries and chaired by the Secretary of the Ministry most concerned) has worked well for multisectoral projects such as the IBRD's rural development project. Such a committee approach has an advantage in that it can serve several projects of a similar type and serve as a focus for institutional memory and experience.

At the same time, there does, as already noted, appear to be a need for increased staffing in the Foreign Aid Division of the Ministry of Finance. The staff of this unit is quite small in view of the number of donors and projects involved. An increased staff here would allow improvement in the coordination and utilization of donor financed training opportunities, an area that does appear to be somewhat of a problem at the present time with training approved on an ad-hoc basis in the absence of a manpower plan.

There also appears to be a need to increase coordination between the HMG/donors and the intended beneficiaries of projects. While both the HMG and the donors have both attached a good deal of importance to determining what the beneficiaries feel they need, there is evidence that too often the beneficiaries are not sufficiently consulted as to how these needs could best be met. The Strategy Team found one large project (nameless here) where the benefits could have been delivered in a much more cost effective manner had such coordination taken place.

APPENDIX

Individuals Contacted by Members
of Nepal Program Strategy Team

4/15/77 - 5/10/77

His Majesty's Government of Nepal

The Palace:

Mr. Chiran Thapa, Joint Press Secretary

Ministry of Finance:

Dr. Bhekh B. Thapa, Minister for Finance and General
Administration

Nara Kanta Adhikary, Secretary, Ministry of Finance
Heet Singh Shrestha, Joint Secretary, Ministry of Finance
Devendra Raj Panday, Additional Secretary, Ministry of
Finance

National Planning Commission:

Dr. Badri Prasad Shrestha, Vice Chairman, National
Planning Commission

Dr. Ratna Shumshere Rana, Member, National Planning
Commission

Mr. Govind Prasad Lohani, Member, National Planning
Commission

Dr. Mohan Man Sainju, Member, National Planning
Commission

Dr. Shiva Narayan Das, Member Secretary, National
Planning Commission

Ministry of Home and Panchayat Affairs:

Mr. Hari Mohan Shrestha, Joint Secretary, Ministry of
Home-Panchayat

Mr. Yakh Bahadur Karki, CDO Musikot, Rukum Dist.

Mr. Devendra Bhakta Shrestha, Panchayat Development
Officer, Jilla Panchayat Office, Nuwakot District (and staff)

Mr. Damber Bahadur Khadga, Panchayat Development Officer
(Jajarkot)

Nepal Rastra Bank:

Mr. Kul Shekher Sharma, Governor, Nepal Rastra Bank

Ministry of Agriculture and Related Institutions:

Mr. Dirgha R. Koirala, Secretary, Ministry of Food,
Agriculture, Irrigation and Land Reform

Mr. Netra B. Basnyat, Dean, Institute of Agriculture and
Animal Sciences, (Rampur)

Mr. Dor Bahadur Bista, Director, Resettlement Board
Mr. Krishna B. Malla, Acting Director, Soil and Water
Conservation Department
Dr. Ram P. Yadev, Research Specialist, Agricultural
Project Services Center
Dr. Bajrakanta Jha, Acting Chief, Agriculture Research
Station (Rampur) (and staff)
Mr. Rajeshwar Nath Mullick, Parwanipur Agricultural
Research Station, (Parwanipur) (and staff)
Mr. Jay Narsing Rana, Farm Manager, Kakani Maize and
Horticulture Research Center, Nuwakot District
Mr. Suraj B. Thapa, Manager, Trisuli Horticulture
Farm, Nuwakot District
Mr. Bimal Kumar Baniya, Assistant Botanist, Kakani
Maize & Horticulture Research Center, Nuwakot District
Mr. Dharam Bir Sakya, In-Charge: Chaur-Jahari Irrigation
Mr. Keshab B. Rajbhandary, Project Manager

Ministry of Health and Related Institutions:

Dr. Badri R. Pandey, Project Chief, Family Planning &
MCH Project
Dr. Rita Thapa, Acting Senior Public Health Administrator,
Community Health and Integration Division, Department
of Health

Ministry of Education and Related Institutions:

Mr. Krishna B. Manandhar, Secretary, Ministry of
Education (Keshar Mahal)
Dr. Prem Kasaju, Research Officer, National Education
Committee, (Panipokhari)

Ministry of Industry and Commerce:

Mr. Damodar Prasad Gautam, Director, Cottage and Rural
Industries, Ministry of Industry and Commerce
Mr. Madukhar Rana, Deputy General, Manager of Industry
and Commerce, Ministry of Industry and Commerce

Other Institutions and Organizations:

Dr. Khem Bahadur Bista, Executive Director, CEDA
Mr. Bhawani Bhakta Joshi, Manager, Hetaura Industrial Estate
Mr. Gauri Man Kadaria, Resident Executive Engineer, Trisuli
Hydel Project, Nuwakot District
Mr. Yadu Nath Khanal, Chairman, Public Service Commission
Mr. Chhetra Pratap Adhikary, Member Secretary; SAJHA Cooperative

U.S. Government

American Embassy Kathmandu:

Mr. John Eaves, Jr., Charge d' Affaires a.i.
Mr. David Fischer, Political Officer

Mr. Dennis Murphy, Econ/Commercial Officer

USAID/Nepal:

Mr. Samuel H. Butterfield, Director
Mr. Julius E. Coles, Assistant Director
Mr. David Tiedt, Chief, Office of Capital Inputs
Mr. John Bishop, Engineer, Office of Capital Inputs
Mr. Damodar N. Suwal, Special Assistant, Office of
Capital Inputs
Dr. Burton C. Newbry, Chief, Office of Human Resources
Development
Mr. Leslie Dean, Office of Human Resources Development
Mr. Uday P. Chhetri, Special Assistant, Human Resources
Development
Mr. John R. Wilson, Chief, Office of Agriculture
Dr. Wyne Freeman, Cereal Grain Project
Dr. George H. Axinn, Field Team Leader, MUCIA Contract,
Institute of Agriculture and Animal Science (Rampur)
Ms. Nancy W. Axinn, Instructor, Family Ecology, Michigan
State University (Rampur)
Mr. Don Schmidt, Maize Research Specialist (Rampur)
Mr. Narain S. Gurung, Special Assistant, Office of
Agriculture
Dr. William D. Oldham, Chief, Office of Health
Mr. John R. Burdick, Chief, Office of Population
Mr. Alan Steffen, Malaria Specialist, Office of Health
Dr. Raymond Carlow, Chief, Berkeley Contract
Mr. John R. Babylon, Assistant Program Officer
Mr. Richard B. Scott, (TDY from USAID/Afghanistan)
Assisted Team with social and cultural analysis

Peace Corps:

Mr. Douglas R. Pickett, Director
Mr. John Daurio, Program Officer
Mr. Richard Marinshaw, Volunteer, Rapti Zone (Rukum)

American Embassy, New Delhi:

Mr. Alfred Bisset, AID Affairs Officer
Mr. Natale H. Belocchi, Economic Counsellor
Mr. Stephen Block, Labor Attache

Other Donors (interviewed in Kathmandu)

Mr. David Thomas, Representative, IBRD
Dr. Andreas Schild, Director, SATA
Lt. Col. Jimmy Lys, Director, GRS (and staff)
Mr. Simon Davay, Second Secretary, (British Aid Representative),
British Embassy

Mr. B. Balbernie, British Technical Assistance
Dr. Klaus Wild, Charge d' Affaires, German Embassy
Mr. Manfred Kulesa, Resident Representative, UNDP
Mr. Hal Kuloy, Representative UNICEF
Mr. S. B. Barma, Director, Indian Cooperation Mission
Mr. A. K. Childs, World Food Program
Mr. B. Hausner, Asst. Res. Rep. UNDP

Non-Official Nepalese and Americans

Mr. Pashupati Shumshere J. B. Rana, Member, Rastriya Panchayat
Mr. Sagar Rana, President, Handicraft Association of Nepal
Mr. Mahesh C. Regmi, Regmi Research Center
Ms. Stella Saint, Director for Nepal, Dr. Thomas, Dooley
Foundation
Dr. Lynn Bennett Campbell (Cultural Anthropology)
Dr. Gabriel Campbell (Cultural Anthropology)
Dr. William Bateson, Agricultural Development Council
Mr. Alan Dieffenbach, Program Officer, New Education
Reform Associates