HEALTH CARE IN NEPAL
AN ASSESSMENT OF A.I.D.'s PROGRAM

A.I.D. SPECIAL STUDY NO. 70
by

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PREFACE

The purpose of this study is twofold: first, to assess the progress Nepal has made in improving health conditions, examine the causal factors which seem to contribute to that progress, and come to some conclusions about the contribution the Agency for International Development (A.I.D.) has made to Nepal's efforts in this sector; second, to look into the future and ask whether progress can be sustained by Nepal given its resource constraints and administrative organization, whether A.I.D. can make a significant contribution in the future, and if so, what is the best strategy to follow.

To collect the information needed to prepare this report, we visited Nepal during March 1990. After a few days conducting interviews in Kathmandu with a number of health care officials in the Government of Nepal, USAID Nepal, and other donor agencies, we split into two groups for field reconnaissance and fact finding. Ann Van Dusen and Julie Johnson went to the Terai, visiting several districts and interviewing local people and officials. Richard Blue and Judith Justice went to Dhading district in the middle hills. There they walked into the countryside to visit a health post Judith had known 10 years before when doing research for her book, Policies, Plans, and People: Foreign Aid and Development in Nepal.

Upon return we interviewed more officials, checked out our facts and emerging interpretations, and began to write. A draft report was presented to the USAID Mission before our departure. The final version reflects their corrections and comments. We are, of course, responsible for the facts, interpretations and conclusions presented in the report.

Reports of this kind depend upon the experience, knowledge and generosity of others. At the USAID Mission in Kathmandu we want to thank especially Mission Director Kelly Kammerer and the Director of the Health Office, Dr. David Calder, along with his U.S. and Nepali staff. We benefited from their support, guidance, and criticisms. Next we want to thank the many Nepali health professionals who took the time to explain once again how they were trying to cope with the difficult conditions of Nepal. Last, we thank the citizens of the Terai and the Hills who so willingly and eloquently told us of their difficulties in

securing adequate health care for themselves and their families. We regret that a report like this must make abstract the rich variety and texture of their lives and aspirations.

Nepal is entering a new phase in its development process. Its people are demanding the right to compete for power and responsibility of self-governance. If this effort succeeds, we believe it will eventually open new opportunities for improving health standards and care in Nepal.

SUMMARY

This report reviews a variety of indicators of health status for Nepal, examines the major policy and institutional themes which have helped determine the evolution of the Nepal health care system, assesses broadly the contribution of Agency for International Development (A.I.D.) programs to Nepal's healthcare care system over a 20-year period, and concludes with an analysis of health system impact. The major conclusions of the team are the following:

1. Health status has improved as reflected by increasing life expectancy, declining infant mortality, and by the substantial control and reduction of malaria.

2. A.I.D.-supported programs have made a major contribution to these improvements. The most important examples are the malaria control program, the diarrheal disease control program, technical and managerial training of health workers, and in collaboration with UNICEF, the Expanded Program of Immunization focused on the communicable diseases of children.

3. The family planning program which has received significant support from A.I.D. in the past has not been a success. Only 15 percent of eligible Nepalese practice any form of modern contraception. Until recently, the program remained overly focused on sterilization, rather than offering a broad menu of family planning choices for individuals.

4. Persistence of high female morbidity, maternal mortality, neonatal disorders, and high incidence of diarrhea, respiratory infections, worms, and skin diseases suggest a cluster of problems which do not respond well to either vertical campaigns or passive curative treatment. The causes of this cluster of MCH problems appear to be difficult to address, rooted as they may be in conditions associated with low levels of female education and poverty, including extremely poor hygiene and polluted water supply.

5. The Nepalese health system has been dominated by the Government's effort to live up to its promise of providing a reasonable level of health care to all

citizens. The gains from this approach are undeniable, particularly in the form of the spread of health posts and small hospitals.

6. Institutional weaknesses in the health system persist, including lack of a clear organizational philosophy, bureaucratic rigidity, excessive attention on quantitative targets and reporting, staffing problems, and maintaining adequate and consistent medical supplies. Most important is the finding that demand for health care has outstripped the Government's ability to supply needed services, an ability severely limited by inadequate financial resources.

7. The role of private sector health care is poorly defined, in spite of the willingness of many Nepalese to use private, fee-for-service sources, including traditional medicine. While government programs are experimenting with some cost recovery, experience with health insurance or prepaid drug schemes is limited mainly to nongovernmental organizations, and there is little evidence of these experiments being adopted by the Government.

8. In general, there is little indication that the government has drawn on the experiences of nongovernmental groups, either by replicating successful programs, or by learning from unsuccessful ones.

9. Until now, Government efforts to improve health delivery have focused on regionalization and decentralization of bureaucratic decision-making in the health ministry. Little evidence exists that these efforts are more than formal changes in the organizational chart. A.I.D. efforts to strengthen decentralization is a positive step.

10. The very recent establishment of a corps of women community health volunteers offers some hope that some expression of local demand for improved medical care will be felt by the system. There is a danger that this corps will be incorporated into the system as a new "bottom rung" of the health bureaucracy. A.I.D. support of women's involvement should focus on improving their effectiveness and promotion throughout the health bureaucracy.

The advent of a new, potentially democratic government affords an opportunity for Nepal to undertake a reexamination of its health care policies, programs, and organization. Sufficient progress has been made in laying down a basic infrastructure that now may be an excellent time to focus on the quality, efficiency, and financial sustainability of both public and private health care. As a still respected development institution in Nepal, A.I.D. has a unique opportunity to help the new Government chart

a fresh approach to health care. The opportunity should not be lost.

GLOSSARY

A.I.D. - U.S. Agency for International Development

ARI - acute respiratory infection

AVSC - Association for Voluntary Surgical Contraception

Ayurvedic - System of Hindu medicine based on classic religious texts

CDD - control of diarrheal diseases

CHV - community health volunteers (female)

EPI - Expanded Program of Immunization

FPAN - Family Planning Association of Nepal

GDP - gross domestic product

ICHSDP - Integrated Community Health Service Development Project

ilaka - district subdivisions

IMR - infant mortality rate

IRS/FPS - Integrated Rural Health and Family Planning Services project

JICA - Japan International Cooperation Agency

MCHW - maternity/child health worker

NGO - nongovernment organization

panchayat - a) primary political unit in Nepal averaging 3,000 to 5,000 people
b) multilevel system of elected government councils

PVO - private voluntary organization

RAPID/IMPACT - Resources for Awareness of Population Impacts on Development

REACH - Technology for Primary Health Care

GLOSSARY

S&T/P - Bureau for Science and Technology/Office of Population

S&T/H - Bureau for Science and Technology/Office of Health

SOMARC - Social Marketing of Contraceptives

SSNCC - Social Service National Coordination Council

TFR - total fertility rate

UNFPA - United Nations Fund for Population Activities

UNICEF - United Nations Children's Fund

VBC - Vector Biology and Control project

VSC - Voluntary Surgical Contraception

WHO - World Health Organization

1. INTRODUCTION TO NEPAL

The basic topographical, demographic, and economic features of Nepal are well known to most members of the development community. Land locked between India and China, Nepal is a mountainous country in which travel north and south has traditionally been easier than east and west. Nepal's 19 million people are spread throughout its 140,400 square miles, an area about the size of Arkansas, but are concentrated in the Kathmandu Valley, the relatively flat Terai bordering India, and in the middle hills, which make up much of the Nepalese land mass. Nepal's population is predominantly rural, with nearly 90 percent of the people engaging in some form of agriculture, although only 27 percent of the land can be farmed.

The people of Nepal form a large number of communities, which, because of the isolation of valleys and hills, have evolved their own unique cultural expression and identity. As a trading people, Nepalese have constantly moved north and south between Tibet, China, and India; consequently, Nepal's uniqueness has been modified by the influence of both Buddhism and Hindu religion and their corresponding social structures. The ability of the Nepalese to accommodate and to some degree integrate these influences into their own way of life is one of the special features of this society.

Nepal is a monarchy, and Hinduism is the state religion. His Majesty's Government is centered in Kathmandu, from which the 5 regions, 14 zones, 75 districts, 675 ilakas (district subdivisions), 4,100 panchayats (primary political unit averaging 3,000 to 5,000 people), and 36,900 wards are governed. A parallel political system exists, starting with

nonpartisan elections at the panchayat level up through districts to the Rastra Panchayat, the highest elected body in Nepal.

The poverty of Nepal is well-known, and to those engaged in modern development programs, poverty is Nepal's most important characteristic. With an annual per capita income of $160, Nepal ranks among the least developed countries. For the citizens of Nepal this figure translates into a constant struggle for economic survival, long periods of seasonal separation while men, and frequently women, go off to find jobs in India and elsewhere. Poverty expresses itself most dramatically in health statistics, particularly among women and children. The following excerpts from the U.S. Agency for International Development (USAID)/Nepal "Country Development Strategy Statement" poignantly illustrates the general situation: "...diet is often lacking in needed nutrients...nutrition is chronically deficient...rates of neonatal tetanus are high...the average young child has more than six significant episodes of diarrhea per year..." (USAID/Nepal 1989, 41).

Cursory as this introduction to Nepal is, it would be incomplete without some discussion of what has been achieved. Roads and air transport have been established to better link the country east and west, which is necessary for the development development of an integrated economy. The substantial control of malaria in the Terai in the 1950s allowed agriculture to flourish and new families to move into the region. This region is now the principal source of agricultural surplus and of industrial development. It is also the region most powerfully influenced by the relatively advanced Indian economy.

The development achievements of the Nepalese people and Government, with the assistance of the donor community, have been impressive. But for each positive statistic, there is a caveat. Agricultural production has increased, but productivity remains low and inputs, marketing, and research are not sufficiently responsive to farmers' requirements. The pressure to bring more land into production in the Terai and middle hills has had a powerful impact on the environment. Dwindling wood supplies, land slides, loss of top soil, and loss of habitat are the cost, and these will become increasingly important as the population grows. Gross domestic product (GDP) has increased at a rate of 3 percent in recent years, but per capita GDP has increased very little. The development budget continues to be largely financed by donors, with serious implications for long-term financial sustainability of service delivery. In the health sector, very dramatic achievements in malaria control, immunization, and smallpox eradication are undermined by persistently high rates of fertility, very limited sanitation, and poor hygiene. Gains in food availability do not seem to have translated into improved nutritional status for the most at risk section of the population: infants, children, and mothers.

In spite of these accomplishments many observers,

Nepalese and foreign, now question whether the topdown, centrally led, and supply-driven approach to development can or should continue. Has a centrally led approach accomplished all it can, with future investments yielding only marginal results in impact or improved quality of life for the people of Nepal? In the health sector, is it now time to raise some fundamental questions about how much more the central Government can do, and what should be the responsibilities of local Government, the private sector, and the people themselves?

2. CHANGING HEALTH TRENDS IN NEPAL

Health conditions in Nepal are among the worst in Asia. Large numbers of babies and young children die, and many who survive are burdened by illness and malnutrition. Deprivation during the vulnerable years of childhood has life-long consequences, and children grow to adulthood with their health already compromised. For the predominantly rural population, adult life is physically grueling and life expectancy is one of the lowest in the region (Population Reference Bureau 1988).

Basic sanitation and hygiene for all is such a distant prospect that USAID/Nepal predicts no decrease in the incidence of diarrhea in the next 15 years. If a family owns animals -- cows, goats, buffalos, or pigs -- there is rarely a separate building for them, and the proximity encourages the spread of disease through feces and insect vectors. Improvements in health are difficult to sustain without improvements in hygiene.

Nutritional status is poor: the National Nutrition Survey of 1975 (Government of Nepal 1975) found that two-thirds of children under 5 years suffered from moderate to severe malnutrition. More recent studies suggest that local conditions may now be worse in areas of the Terai, although that area enjoys better food availability and higher incomes (Sisler 1988). While 85 percent of mothers breastfeed their babies, exclusive breastfeeding may be as low as 10 percent. Appropriate weaning foods may be unavailable, or their importance not known: among some people living in the Terai region, a baby is given supplemental foods only after the baby has tried to feed itself. Nutritional health is further weakened by the lack of various micronutrients in the diet. Iodine is deficient in landlocked Nepal, and goiter and cretinism are consequently common. Vitamin A deficiency and related visual disabilities or systemic problems may, in contrast, have their origin in the traditional diets of various ethnic groups.

All these barriers to better health seem higher for females. Girls and women suffer disproportionately, even where they should have a natural advantage. After the first year of life, mortality for females is higher than for males, and life expectancy is shorter by 3 years (National Commission on Population 1988). According to one estimate, over the period 1980-1987, for every 100,000 live births 850 women died

as a result of pregnancy or childbirth (UNICEF 1989).

A striking feature of Nepal's social poverty is the low level of literacy among women. The low level of female literacy and the widening gap between male and female literacy are major cross-cutting constraints to the effectiveness of both economic and social development programs (see Table 1).

Table 1. Literacy Rates in Nepal
(percent)

	l951	l961	l971	l981	l986
Men	9.5	l6.3	24.7	34.9	52
Women	0.7	1.8	3.7	11.5	18

SOURCE: Central Bureau of Statistics (1978).

Against this backdrop, is it possible to measure the health of the Nepalese people, document any changes which have been made in recent years, and find reasons for those changes? The first two points can be attempted with caution, but the third is more difficult.

Censuses and surveys of the people of Nepal began early this century, and there is certainly an abundance of data, projections, and publications available on fertility and mortality. However, doubts have been expressed about the quality of the census data for 1952, 1961, and 1971; the 1981 census was feared to be "no better" (Central Bureau of Statistics 1987). It seems that some of the same factors which make improvements in health difficult -- inaccessibility, lack of education, the weak infrastructure -- may make the documentation of health change difficult as well. Many illiterate women cannot report their date of birth, or that of their children. There is underreporting of births and deaths of children, and this tends to be more serious the further back in time a respondent is asked to recall (see A.I.D. 1977 and FP/MCH 1977). At present, there is no reliable system for registering births and deaths in Nepal.

Ironically, all these factors cast doubt on the most commonly quoted statistic used to gauge the overall condition of a country's health, the infant mortality rate (IMR). IMR takes on enormous significance as a magnet for foreign assistance and a baseline against which health programs are evaluated. In Nepal rates have fallen from approximately 152 per 1,000 live births in the 1970s to an estimated 112, although the exact magnitude of the change is not clear. Likewise, it can be said (with the same cautions) that life expectancy at birth has risen, and is now around 52 years (see Table 2).

Table 2. Adult Life Expectancy From Birth

Date	Men	Women	Both	Source
1952-1954	25.6	25.7		(Central Bureau of Statistics 1957)
1953-1961	35.2	37.4		(Central Bureau of Statistics 1977)
1961-1971	42.9	38.9		(Gubhaju 1974)
1970	41.2	38.5	39.9	(U.S. Bureau of the Census 1970)
1974-1975	46.0	42.5		(Central Bureau of Statistics (1977)
1976	43.4	41.1		(Central Bureau of Statistics 1978)
1981	50.9	48.1	49.5	(National Commission on Population 1988)
1988	54.7	51.9	53.3	(National Commission on Population 1988)
1988	49.6	48.7	49.2	(U.S. Bureau of Census 1988)
1988			52	(Population Reference Bureau 1988)

There are no national records of cause of death which might allow us to trace the exact causes of these changes in mortality. However, health workers with whom this team spoke identified important changes, which coincide with the period in question. The first was the control of malaria in the Terai. Second was the eradication of smallpox in the l970s and the subsequent development of the Expanded Program of Immunization (EPI). The World Health Organization (WHO) reports the following immunization coverage for 1989:

BCG	88 percent
Polio III	71 percent
DPT III	71 percent
Measles	58 percent

There is some concern that these figures may be optimistic, or not nationally applicable, but our team certainly noticed widespread awareness and reported utilization of immunization services in villages we visited in the Central Region.

Fertility rates are high: a Nepalese woman, on average, bears six children in her lifetime (FP/MCH 1977, FP/MCH 1986, RAPID 1990), and this figure has remained virtually unchanged for two decades. An ambitious family planning program which emphasizes sterilization has had very little impact on family size. Nepal today experiences population growth rates of 2.6 percent per year.

The population age structure is the broad-based pyramid typical of many developing nations experiencing rapid growth. Children under the age of 15 make up around 42 percent of the population (see Table 3).

Table 3. Age Structure of the Population
(percent)

Age group		1971	1981	1988
A	0-14	39.5	41.3	43.6
B	15-64	56.5	55.7	53.6
C	65+	3.0	3.1	2.8
Dependency ratio $\frac{A+C}{B}$		75.2	79.7	86.6

SOURCE: 1971 = Central Bureau of Statistics (1975).
1981 = Central Bureau of Statistics (1984).
1988 = U.S. Bureau of the Census (1988).

The population will continue to grow, because of the large cohort now under age 15 who will enter the child-bearing years in the next two decades. In planning to meet the goals of the Government's Basic Minimum Needs Initiative, most Government ministries are assuming a total fertility rate (TFR) of 4.3, which would raise the population of Nepal to 23.6 million by the year 2001. However, the Ministry of Health's projections are all based on a TFR of 2.5 (a Ministry goal), and a population of 2l million by the year 2001. No other country has achieved a fertility reduction of such magnitude, and Nepal is not likely to either. It appears inevitable that this already densely populated country will become more so in the years ahead.

3. EVOLUTION OF A.I.D.'s HEALTH PROGRAM

A.I.D. has been engaged in collaborative efforts with the Government of Nepal to improve individual access to health and family planning services for the past three decades. In the

l950s and l960s, A.I.D. provided support for single-focus vertical programs, mainly in the areas of malaria control and family planning as well as infrastructure and manpower development. During these early decades, the United States was the single largest donor in health and is largely credited with supporting the Nepalese to control malaria in the Terai, which opened up this previously largely uninhabitable region to agriculture. Today, almost 50 percent of Nepal's population, much of its food production, and most of its industrial activities are concentrated in the Terai.

In the l970s, the focus of A.I.D.'s assistance began to shift toward integrating the various vertical programs under a single service delivery model. In the mid-l980s, as the Government of Nepal began to discuss the need to decentralize programs, A.I.D. encouraged and supported efforts in this area as well. All three elements of the Government of Nepal's evolving approach to health promotion -- vertical programming, integrated service delivery, and decentralized management -- are evidenced in USAID/Nepal's current health strategy.

In the decade of the l980s, the total U.S. contribution to improvements in health service delivery in Nepal (including family planning) was approximately $50 million, most of which (approximately $40 million) was obligated under the 10-year Integrated Rural Health and Family Planning Services project (IRH/FPS). From l980-1985, the bulk of A.I.D.'s health assistance supported (l) malaria insecticides, (2) the Government of Nepal's sterilization program, and (3) general operating expenses of the Ministry of Health. With the adoption of a Basic Needs Initiative by the Government of Nepal in l985, and the adoption in l986 of a child survival strategy by A.I.D., the Mission seized the opportunity to redirect its project support. A.I.D. experimented with new, targeted, and small-scale approaches to:

-- Improving immunization coverage

-- Expanding efforts to reduce deaths from diarrhea diseases through use of oral rehydration therapy

-- Identifying and treating childhood pneumonia

-- Testing Vitamin A as a child survival intervention and alternative methods for improving Vitamin A nutritional status

-- Shifting from a family planning program focused almost exclusively on sterilization to one in which a variety of temporary methods were also encouraged and available

-- Continuing support for malaria control

A 1988 evaluation of the then 8-year A.I.D. project endorsed the soundness of Ministry of Health policies, which focused on balanced family planning services, health interventions targeted to improve child survival, and decentralization of health services

management. The evaluation recommended A.I.D.'s continued support, with emphasis on improving service delivery and management in one region and on continuing support to selected interventions (malaria, family planning, EPI, control of diarrheal diseases, and acute respiratory infection (ARI)). This has become the focus of the new 5-year, $20 million Child Survival/Family Planning Services project (l990-1995).

In addition to this major bilateral project, A.I.D. has provided support to several international and national nongovernmental organizations (NGOs) working in Nepal. Support for family planning activities has been given mainly to the Family Planning Association of Nepal (FPAN); the Nepal Red Cross Society, Mother's Clubs, and Ex-Servicemen's Organization to promote temporary methods of contraception; and to New Era and Integrated Development Systems for research on population, family planning, and other health-related activities. Support also is given to several NGOs for health and community outreach programs, including Freedom From Hunger Foundation and Save the Children. The total budget for these two 3-year child-survival-oriented program is approximately $l million.

Finally, support from centrally funded health and population projects has provided an additional $1 million annually to U.S. health assistance to Nepal through such programs as Bureau for Science and Technology's Office of Health's (S&T/H) Technology for Primary Health Care (REACH) and Vector Biology and Control (VBC) project, and through S&T/Population's projects with Association for Voluntary Surgical Contraception (AVSC), the Population Council, Resources for Awareness of Population Impacts on Development (RAPID)/IMPACT, Enterprise, social marketing of contraceptives project (SOMARC), and Public Communication Service.

The new l990-l995 project embodies five themes, which have been accepted by the Ministry of Health as the basis for A.I.D. support. They are, as follows:

Services for and by women. Given the importance of mothers for the success of child survival and family planning programs, women will be the principal clients of Maternal and Child Health (MCH) services. The best way to get services to women in a society where interaction between the sexes is culturally limited is to provide them through women.

Beyond the Health Post. To counter a persistent preoccupation with staffing fixed facilities which rural people (over 90 percent of the population) find it difficult to visit, the project will emphasize village-level health services, especially control of diarrheal diseases, control of ARI-associated mortality, immunization, and family planning.

Full-Service Family Planning/MCH Services. To overcome what has been a nearly exclusive emphasis on sterilization and make Nepal's family planning program more effective in terms of both contraceptive services and improved maternal and child health, the project will emphasize balanced motivation for and provision

of temporary (IUD, injectable and oral contraceptives, and condoms) and permanent contraception at static, year-round facilities rather than seasonal sterilization camps.

Decentralization and Regionalization. Promoting decentralization and regionalization has been a policy focus of the Ministry of Health, but it has yet to be operationalized. Major efforts will be directed at operationalizing the decentralization and regionalization policies in the Central Region. Indeed, as a condition for beginning assistance to the Central Region, the Ministry of Health must agree to allow A.I.D. funding for local costs to go directly to the Region by year 2 of project implementation, and not through central Ministry of Health offices.

Malaria. Given the long-term nature of the malaria problem, USAID/Nepal has encouraged Ministry of Health procurement of insecticide (Ministry of Health has depended on donor-granted supplies for 35 years), and has indicated that it will not procure insecticides for the Government after FY l989. U.S. support will be directed at improved training capability for malaria control, decentralization of case detection and treatment, review of the changing entomology of malaria transmission, and service expansion to include other vector-borne diseases.

These five themes not only reflect the Mission's experience with a wide range of programs and program mechanisms to support health improvements in Nepal, but also its judgment about what is most needed and most likely to succeed. Based on the team's interviews and field observations, we concur that a focus on women, decentralization, and full-service family planning are three important themes on which A.I.D. has the opportunity to show real leadership in Nepal.

4. ASSESSMENT AND ANALYSIS OF IMPACT

This discussion will be in three parts. First, what general conclusions may we derive about improvements in health over the past 30 years, based on our assessment of health statistics as well as from our review of the evolution of the Nepal health system? Second, what conclusions can be stated about the development of a health care system in Nepal? And third, what has been A.I.D.'s role in these developments and where do future opportunities lie?

4.1 Health Impact

Most data sets, interviews with Nepalese and foreign officials, and the field observations of the team lead us to conclude the following:

1. While overall life expectancy has increased from 42 to 52 years over the past 15 years, there is great regional and economic variation in longevity. Some have benefited a great deal, more have benefited somewhat, while many have benefited little if at all from the extension of the public health system.

2. Reduction in IMR from 152 per 1,000 live births in the l970s to somewhere between 125 and 106 per 1,000 live births in l985 is significant. Recognizing the uncertainty about the exact ratio, if one accepts the 112/1,000 figure for IMR, Nepal ranks ahead of Pakistan but behind India in this measure of health status. Given Nepal's low per capita GDP at $160, well below India's $270 and Pakistan's $350, it is reasonable to assume that Nepal's health interventionist programs have had independent impact on reductions in infant mortality. That they are still far too high will be contested by no one.

3. The malaria control program has been a major accomplishment. It has permitted the settlement of the Terai to productive agriculture, without which Nepal would be unable to keep pace with its food requirements, given the lack of any significant manufactured or service exports. The recent increase in malaria cases in several districts does not seem to have spread and the most recent data show that the situation is stabilized. Malaria must remain a long-term worry for two reasons: diminishing efficacy of chemical applications against resistant strains and threats to institutional capacity to develop and sustain effective control.

4. Sterilization programs alone have not been a success, either in reducing fertility or in improving health status of mothers and infants. The program has used financial incentives across the board to motivate health and medical personnel and clients to meet specific targets. Critics contend that the emphasis on sterilization is an ineffective means for achieving reductions in fertility, and the emphasis on seasonal sterilization camps misdirected energy, personnel, and educational efforts away from the expansion of temporary methods, MCH services, and year-round access to services. In Nepal a contraceptive prevalence rate of 15 percent places it above Pakistan but well below India and Sri Lanka. As a result, the rate of increase in the Nepali population remains high, at 2.6 percent per year, especially in view of the high mortality levels.

5. EPI has been a success in most of its features. EPI coverage, while probably not as high as the Government of Nepal reports, is remarkably high for a country with the social, economic, and topographical conditions of Nepal. Mothers' awareness of the need to immunize their children is high, based on the team's field observations in the Terai and the Middle Hills. However, in at least one interview, the team found evidence that the use of the portable cold chain containers was routinely extended beyond the 2-day limit. This would suggest substantially reduced efficacy for some vaccines, a concern expressed by other donor health officials. A.I.D.'s early support for EPI made a significant contribution and now UNICEF provides the major assistance for Nepal's immunization program.

6. Although much newer and less well entrenched in vertical structures, the diarrheal disease control program is launched as

well. With support primarily from UNICEF and A.I.D., oral rehydration therapy is known and being taught in village health centers throughout the country, and oral rehydration solution is available commercially and in health clinics.

7. Persistence of high female morbidity, maternal mortality, neonatal disorders, and high incidence of diarrhea, respiratory infections, worms, and skin diseases suggest a cluster of problems which do not respond well to either vertical campaigns or passive curative treatment. The causes of this cluster of MCH problems appear to be difficult to address, rooted as they may be in conditions associated with low levels of female education and poverty, including extremely poor hygiene and polluted water supply.

4.2 Development of a Health Care System

1. Nepal's health care system has been guided by a public commitment to providing an adequate level of health care free of charge to all citizens. To its credit, the Government of Nepal has in little over one generation extended some measure of health care to all 75 districts in Nepal, trained thousands of doctors, health assistants, assistant nurse midwives, and village health workers. The Government continues to build, staff, and equip hospitals at the district level, and it has produced a large number (upward 30,000) of employees with some specialized skills in malaria, tuberculosis, leprosy, immunization, ARI and other major health problems.

2. Some consensus on policy, organizational structure, and implementation approaches seems to be emerging, after long debate over issues of vertical versus horizontal programs. However, in Nepal major changes are introduced by highest authority followed by long periods of stasis in which earlier policies and programs absorb, or successfully resist, the new policy directives. Shifts from vertical to integrated programming, centralized to decentralized management, professional health cadres to a variety of semiprofessional and volunteer workers have resulted in a confusing array of bureaucratic vestiges, competing power centers, and overlapping responsibilities. This situation has left A.I.D. and other donors with the dilemma of which of the many, competing policy initiatives to support and reinforce.

3. The system strives to accommodate all of its members once they are on the payroll. The best examples are the absorption of the vertical staff into the formally integrated districts, and the shifting of redundant village health workers to other districts some distance from their home base. Almost no one loses a job.

4. Although not a major part of official health policy, fee-for-service has been allowed to flourish. The team found ample evidence of rising demand for health services, from the "medical shop" near some health posts to private fee-for-services practices by Government doctors. Maintenance of free medical supplies through the health post system, however, continues to

demonstrate major weaknesses. Health posts routinely receive supplies late, run out of supplies fast, and then have to refer patients to nearby private shops. Allegations of collusion between public health system officers and private shop owners abound. Whether true or not, the existence of unregulated private medical supply shops alongside a free and unreliable public supply system, appears to perpetuate the worst of both.

5. Although physical facilities have been established in districts, ilakas, and some panchayats, adequate staffing of these posts with competent personnel remains a serious problem. Highly trained clinicians are almost exclusively located in Kathmandu; health post workers with less training are frequently absent from district and rural health facilities for training or other reasons.

6. The system shows a remarkable ability to add new forms and structures nationwide in a very short period of time. The rapid expansion of the community health volunteer cadre is an example of this. The ability to operationalize these new structures is much more limited. In this regard, Government policy agreement on the integrated approach to health delivery seems firm. However, an agreement has not been reached yet on the "organogram" for determining how the integrated approach will be structured, which Ministry of Health department will have what kind of budget and personnel control at the district level, and who will report to whom. The introduction of the decentralized programming and budgeting approaches creates further conceptual confusion.

7. Decentralization and regionalization are new (or resurrected) Government of Nepal policies based on the recognition that as Nepal develops, it becomes increasingly difficult to manage programs from the center. This is conceptually a sound conclusion. Nevertheless, evidence abounds that decentralization is more formal than real. Very little authority over budget or personnel has been given to the district technical or political level. To the extent that the new health care philosophy depends on such decentralization, it is unlikely to succeed. As for regionalization, it is uncertain that regionalization is a necessary component of decentralization, and unlikely that the authorities necessary to make the Regional Directorate concept operational (e.g., budget, staffing, supervision) will be forthcoming. The team encourages the Mission to continue to insist that A.I.D. support in the new project go directly to the region, and not through the central Ministry of Health offices, if regionalization is to have any hope of success.

8. The system is highly centralized and control-oriented. That the centralized system is not efficient or responsive to local conditions is recognized in the Decentralization Law of 1985 and in various policy announcements. Nevertheless, continued centralized control is justified by officials in Kathmandu in the name of program quality and accountability. In the absence of meaningful countervailing pressure from the districts, central authorities are reluctant to reduce the scope of their

authority over budgets and personnel.

9. The system is excessively concerned with unrealistic targets and quotas. This is not a blanket condemnation of the targets; targets and quotas can be useful when a problem is serious and widespread, the purposes of the intervention are clearly understood, and technologies used are proven to be effective. However when all bureaucratic rewards and punishments become tied to achievement of targets rather than actual results, the possibilities for abuse become massive and endemic. In such systems, targets and quotas become instruments of centralized control and can severely undermine the responsiveness and veracity of the system. In Nepal, the best examples of successful, targeted programs of this type have been the malaria control program and the EPI. The sterilization program is an example of a program where targets and quotas are used extensively but where technology has not been appropriate to the goal (i.e., reduced fertility). Although sterilization alone is widely regarded as an unsuccessful method for reducing the crude birth rate or improving maternal and child health, it persists as the predominant family planning program in Nepal.

10. The system is also excessively concerned with enumerating and reporting. While accurate information about program conditions and progress is a necessary component of all public bureaucracies, in Nepal the system of reporting appears designed to control and motivate performance rather than to obtain information on conditions and program results. A district public health official complained that the bulk of his time is spent in amassing, collating, and forwarding data to the center for purposes which seemed at best only remotely related to his job. In Kathmandu an impressive array of statistical reports are issued based on this reporting system. Yet many observers have fundamental reservations about the quality and reliability of these data. For example, although Nepal does not have a functioning system for the registration of births and deaths, many of the health reports, including IMR, are based on these figures.

11. Finally, the establishment of a corps of women community health volunteers in the Central Region in the last year is testimony to the Government and the National Women's Organization's ability to respond quickly to a new idea. All field visits indicated widespread knowledge of the community health volunteer, although on closer examination the team discovered a number of weaknesses. The training, enthusiasm, and commitment of the community health volunteers seemed higher in certain Terai districts (associated perhaps with higher female literacy) than in the middle hills. The weaknesses and potential pitfalls of the community health volunteer concept include the following:

-- Illiterate women cannot be reasonably expected to maintain extensive records.

-- Many volunteers did not make wide-ranging household visits, instead they usually limited their visits to close neighbors and social peers.

-- Women felt uncomfortable working with the male village health worker who, while not necessarily their formal supervisor, was essential to the record-keeping function.

-- Provision of drugs, which the community health volunteers are expected to sell, was sporadic and frequently undermined by free drug supply at the health post (while supplies lasted) or from NGOs working in the area.

-- The system for supervising health workers, especially women, is extremely weak and ineffective.

-- Organization of mothers' groups to discuss health care, nutrition, and hygiene (an element of the community health volunteer's work scope) appeared sporadic. In one ward the red-covered training books (designed to train illiterate mothers about oral rehydration therapy, EPI, sanitation, and family planning) sat on a shelf at the health post; in others, mothers' group meetings were held for 10 or 15 minutes, thumb prints applied for an attendance roster, but little transpired.

Although the Community Health Volunteer Program has been designed to reach women and children, it appears to build upon the same assumptions that have contributed to the failure of earlier community health volunteer programs, particularly the absence of a system to provide support and supervision, restocking of drugs and supplies, and the unrealistic expectation that most women will be able or willing to walk several hours distance from their own home to make house visits. At present the community health volunteers are being "supervised" by male village health workers who themselves are dependent upon minimum support and supervision from health post workers.

12. In addition to the Community Health Volunteer Program, maternal and child health workers (MCHW) are being created to provide services from the health posts to women. Two female MCHWs are to be selected from each ilaka to serve at the health post. UNFPA and WHO are providing the major external assistance for this program. The MCHWs will in turn be dependent on the same weak system of supervision from assistant nurse midwives, who are often not at the health post, and district public health nurses of which only 10 have yet to be assigned to the 75 districts. Although each new scheme developed to meet the needs of women and children is well-intentioned and is actually working in some areas, it appears to have little chance to improve MCH services nationally until the structural, cultural, and supervisory problems are first addressed.

4.3 A.I.D.'s Impact on Health Programs and Service Delivery in Nepal

From our interviews with Mission staff, Government of Nepal officials, other donors, private voluntary organization (PVO)

representatives, and others, the team reached a number of conclusions about the evolution of A.I.D.'s health assistance in Nepal, and A.I.D.'s unique role in the emergence of a child survival focus in the latter part of the l980s. A.I.D. appears to have played a leadership role in three critical areas: donor coordination, support for program experimentation, and recognition of a client perspective. Highlights of USAID Mission leadership in these four areas are identified below, as are the team's assessment of where additional efforts should be made.

4.3.1 Donor Coordination

In the l950s and l960s, the United States was the largest health donor in Nepal. In the l970s and 1980s, other donors began to play a larger role in Nepal's health programs.

The Government of Nepal is extremely adept at courting donors. It is well prepared with statistics, flow charts, organograms, and budgets, all of which fit well with donor mind sets and vocabulary. Today, as much as 70-80 percent of Nepal's development budget in health is donor-funded, with largest contributions coming from multilateral organizations such as UNICEF, WHO, and UNFPA. The World Bank and Japan International Cooperation Agency (JICA) are both eager to invest in Nepal's health and family planning programs, and the considerable resources these two "newcomers" could bring to the effort could both overwhelm the system's absorptive capacity and undermine the policy reforms currently being pursued by the historical donors.

Today, the U.S. health program in Nepal is relatively small compared with those of other donors, but because of its historical position as chief donor, the United States continues to play a more prominent role than the level of funding might warrant. It appears that strong technical leadership, a forceful personality, and exceptional diplomatic skills can do more to ensure donor coordination on critical policy issues than sheer size of budget. Here A.I.D. has had an important advantage, with its resident technical field staff, its ancillary contract technical resources, and its flexibility in working within and outside the formal government structure in health. And, in fact, there have been a number of policy issues on which A.I.D. has taken the lead among the donor community, such as the following:

-- The push to institutionalize family planning services in year-round facilities, as opposed to total reliance on seasonal camps, and the insistence on the provision of full range of temporary and permanent contraceptive methods and linkages with MCH services.

-- Recognition that the delay in operationalizing the Government of Nepal's policy of health service integration was undermining health service delivery; strong encouragement (via the new 5-year project) for devolution of real authorities to the regional and local levels.

-- Encouragement for the Government to budget for the

recurrent costs of its programs and to decrease its dependence on donors for these costs. For example, A.I.D. has indicated that it will not purchase malaria insecticides after FY l989. A.I.D. no longer tops off salaries, although other donors (e.g., UNFPA and WHO) are still willing to pick up significant recurrent costs through salaries and salary supplements.

For the future, if the Government of Nepal moves away from project grants to sector support, as one official in the Ministry of Finance indicated was likely, A.I.D. should and undoubtedly will play a major role in negotiating very tight conditionality and reliable systems of oversight on behalf of the entire donor community.

4.3.2 Experimentation

The Government of Nepal does not and perhaps cannot experiment on a small scale. Each new policy initiative results in a paroxysm of revised staffing patterns, flow charts, and acronyms. Bilateral and multilateral donors can play an important role in supporting risk-taking and experimentation on a small scale, and this USAID/Nepal has done. The initiative the Mission has taken within Nepal, and indeed within A.I.D.'s worldwide child survival program, to explore the linkages between Vitamin A and child survival and to test simple diagnosis and treatment of childhood pneumonia is truly commendable.

Similarly, the Mission has been involved in detailed negotiations with the Ministry of Health regarding privatization of the Contraceptive Retail Sales Company (social marketing for sale of contraceptives and oral rehydration salts). The Company's potential has been limited by a parastatal management style inappropriate for a company that can only succeed by aggressive marketing and innovation. The Mission has aggressively pursued privatization of this effort, and success or failure in this area will give strong indication of the potential for further private sector initiatives in Nepal in the l990s. The Mission has also tapped centrally funded project support to initiate Nepal's first private sector workplace-based family planning service; to establish private family planning clinics run run by women's organizations; and to contract out repair and maintenance of voluntary surgical contraception (VSC) equipment to a private concern.

However, the team was struck by how infrequently apparently successful experiments (e.g., in drug supply, in integration of child survival services, in use of women volunteers) have been replicated on a larger scale, and the lessons of unsuccessful experiments analyzed and "learned." For example, there is evidence that people can and do pay for health services and drugs, including traditional medicines and treatments, and that partial cost recovery is possible (Daly 1987). There is considerable evidence that private supply of medicines does exist in Nepal. Experiments by the British Nepal Medical Trust in the Eastern Region provide a wealth of experience on what can work and what difficulties need to be faced in developing fee-based systems for

supply of medicines.

USAID/Nepal has been associated with some of the efforts to recover costs through drug schemes and fee-for-service experiments. While much needs to be done to improve the cost-effectiveness and efficiency of the curative programs which constitute 40 percent of the Government's health budget, USAID/Nepal has a real opportunity to show leadership in experimentation with alternative financing of MCH and family planning services. A goal of the new 5-year project should be not only to pursue health financing aggressively, but also to ensure that the financing schemes adopted are consistent throughout the Central Region.

4.3.3 Demand Creation

A hallmark of A.I.D.'s child survival strategy is the attention given to creating demand among beneficiaries and to the "client's perspective," and this has been true of the USAID/Nepal health efforts as well. Indeed, the real promise of the Community Health Volunteer Program, which USAID/Nepal has aggressively promoted and supported, may well be not as yet another, lower level in the service delivery chain, but rather as an attempt "from the ground up" to educate and motivate beneficiaries and to create demand among them to force the system (be it public or private) to respond. In that regard, the team believes that there are important additional opportunities (e.g., literacy training, giving the community health volunteers an explicit role and recognition within the panchayat committee structure, recruiting women as supervisors and mentors for the community health volunteers) to make these local women community health volunteers a meaningful part of future health improvements. The team urges the Mission to give greater attention and support to operationalizing the theme of "services for and by women."

5. FUTURE DIRECTIONS

There is no question that A.I.D. has taken a strong lead in in engaging the Government of Nepal in discussions about its policy options and has had some impact on the choices that have been made. Indeed, although the Mission has supported many small-scale PVO activities and some limited work with commercial groups, the focus of the A.I.D. program has been on the Government of Nepal. To date, the policy agenda has largely been that proposed by the Government of Nepal -- verticalization, integration, decentralization, regionalization, and the Mission has played a major role in encouraging the current policy directions.

For the future, the Mission has the opportunity to pursue an important if difficult area of policy dialogue with the Government, namely a reassessment of the appropriate role of government, donors, and the private sector in health care delivery in Nepal. Because Nepal relies so heavily on the public health system to bring health care to its citizens, it is important to ask whether the system as presently structured can become more

effective, or whether it should be reoriented and restructured. To be more specific, do the incentives in place to reward performance actually encourage program results, efficiency, or cost-effectiveness?

Does extensive enumeration and data collection produce the type and quality of data actually needed by decision-makers? Do decision-makers make use of available data to make major policy changes and monitor results? Are there more effective and efficient methods for measuring actual health status and program results? Are there more effective ways to make local health officials directly responsible to local authorities and to consumers without unduly sacrificing technical quality? Who uses information and who benefits from its collection? These are but a few of the structural questions which must be asked by all concerned with improving the health care available to the citizens of Nepal.

For example, the team was told of numerous instances of government controlled activities (e.g., drug schemes, contraceptive, and oral rehydration salts social marketing), which could better be done outside the Government structure. And it identified a number of activities which are uniquely appropriate for the Government, but which the Government of Nepal was not doing or doing very sporadically -- for example, setting standards for treatment, certification of health personnel, regulation of pharmaceuticals, epidemiological surveillance. These are areas which Mission personnel have pursued with the Government in recent years. To make the most of the upcoming 5-year program of U.S. health assistance in Nepal, it will be essential for the Mission to have the staff with the skills, interest, and persuasive powers to continue to engage the Government of Nepal in a dialogue on a basic reexamination of the roles of central and regional public agencies, voluntary and commercial private organizations, consumer groups, and donors in health improvements in Nepal over the next decade.

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APPENDIX A

EVOLUTION OF NEPAL's HEALTH SERVICES SYSTEM

1. INTRODUCTION

In four decades the Government of Nepal has created an extensive health service system. Before 1951, Nepal was closed to external influences including foreign health systems. In the early 1950s, health care depended on traditional practitioners and family care, except for very limited services and drugs provided by Government and a few mission groups. The Government of Nepal established the Ministry of Health with technical advice and assistance from external donors, with the United States among the first to give health-related assistance in 1954. The Government's planned development of health services began with the First Five-Year Development Plan in 1956 and has been expanded through the current proposed Eighth Five-Year Development Plan in 1990 to include a series of hospitals, health posts, and community outreach services staffed by cadres of trained medical professionals and paramedical health workers and volunteers.

2. VERTICAL HEALTH SERVICES

In addition to a system of hospital-based curative care, public health services have been offered through a system of disease-specific programs and vertical projects. The major vertical projects included the Nepal Malaria Eradication Organization established in 1954, the Leprosy and Tuberculosis Control project in 1964-1965, the Smallpox Eradication project in 1967-1968, which, following the eradication of smallpox in 1970, evolved into the current Expanded Program of Immunization (EPI), and Family Planning and Maternal Child Health Project (FP/MCH) established in 1968.

The vertical programs were designed to be semiautonomous within the Ministry of Health, administered and supervised by special personnel, and staffed by trained paramedical workers. These vertical projects initially were defined as short-term programs, designed to train and employ temporary staff. The vertical programs are still functioning, however, including the Malaria Eradication Organization, which is the longest running and most successful of the earlier health programs. All of the vertical programs have received significant donor support, which helps explain the persistance of these programs.

3. INTEGRATED HEALTH SERVICES

The concept of integrating curative and preventive health services was introduced in the early 1970s, in recognition of the long-term nature and high cost of attacking health problems from a disease-specific approach and because vertical programs did not adequately address underlying causes of poor health, such as poor nutrition, polluted water, poor hygiene, and inadequate preventive care. Integration also was seen as a way to more efficiently utilize limited health manpower resources to increase services

to Nepal's underserved rural population. Proposals to integrate Nepal's health services coincided with the international donors' shift to providing support for rural development and basic health services, and the Nepal Government's stated policy of spreading social benefits to all parts of the country as outlined in the Fourth Five-Year Development Plan for 1971-1975.

Following the Government's creation of the Division of Integrated Basic Health Services within the Department of Health Services in 1971, a variety of pilot projects and innovative approaches were tried in an attempt to integrate the vertical projects and curative services. Supported with external donor funds and technical assistance, rural health services expanded to include district health offices, construction of health posts to be staffed by various categories of health assistants, and community outreach workers. Integration focused on the newly created paramedical or multipurpose worker who would incorporate the specialized tasks of the former vertical health workers, and a system of community volunteers (called community health leaders) was subsequently introduced.

Although these efforts succeeded in increasing the number of health posts and paramedical staff, and also establishing several health training facilities and programs, the health services were not successfully integrated. The resistance from the well-established vertical programs, the inability to absorb many of the specialized vertical workers, a weak infrastructure, administrative and logistics supply system, inadequate support and supervision for paramedical and voluntary workers -- all contributed to the failure to integrate services. Through much of the 1980s, health services were fully integrated in only 6 districts, partially integrated in 16 of 75 districts, and the vertical programs continued to function alone in 53 districts.

4. DECENTRALIZATION AND REGIONALIZATION OF HEALTH SERVICES

In 1987, the Government announced its plan to reorganize the health services once again. All public health activities (as distinct from curative services), including the five vertical projects and the Integrated Community Health Services Development Project (ICHSDP), were to be integrated under the newly created Public Health Division. The timeframe for disbanding the vertical projects has been revised to sometime in the 1990s. The reorganization plan also proposed restructuring and decentralizing the planning, budgeting, and management of health services to five regional directorates and to 75 districts.

As part of the reorganization plan, health posts in the districts have been systematized on an ilaka basis, with nine standard health posts per district. The ilaka health posts are to be staffed with a health assistant (Health Post In Charge), two assistant health workers, and several helpers; some will also have assistant nurse midwives. A new category of health workers, maternal and child health workers, is being created to supplement the assistant nurse midwives. In an attempt to increase the

provision of services to women by women, the Ministry has created the female Community Health Volunteer Program. The primary role of the community health volunteer is to provide important information about health maintenance and to direct individuals in need of more specific, specialized services to other levels in the health structure. These volunteers are to coordinate activities with those of the village health worker. They are given a small supply of simple drugs and materials for treating wounds, and the village health worker is to receive a stipend of 100 Rupees a month.

5. FAMILY PLANNING AND MATERNAL CHILD HEALTH SERVICES

Nepal's Family Planning and Maternal Child Health project (FP/MCH) was established in 1968. In spite of the Government's stated policy giving high priority to family planning and the control of population growth, and a higher allocation of the health budget to family planning (15.5 percent) (UNICEF 1987) than to any other project, the population growth rate in Nepal remains at 2.6 percent per year (1986). Women in Nepal traditionally marry early and continue having children throughout their fertile years. Because sons are strongly preferred, couples have many children, an average of 5.8 per married woman, in the hope that at least one or two sons will survive until adulthood.

The FP/MCH project functions as a semiautonomous organization under the Ministry of Health. Early project services were limited to clinics in the urban areas (mainly in Kathmandu), but as more staff were trained and gained experience, services were extended to other areas of the country. Family planning services are currently provided by four main agencies:

- -- The FP/MCH project provides the majority of the family planning services through its clinics and panchayat-based health workers.

- -- The ICHSDP provides services through village health workers and community health leaders, and through health workers located in district health posts.

- -- The Family Planning Association of Nepal, a private nongovernmental organization founded in 1958, has 18 branches throughout the country.

- -- The Nepal Contraceptive Retail Sales Company also distributes birth-control pills and condoms through more than 9,000 pharmacies and shops in most of Nepal's 75 districts.

Although many governmental and nongovernmental programs have promoted family planning, studies indicate that knowledge and use of contraceptive methods other than sterilization is not widespread among couples in Nepal. The emphasis of Nepal's family planning program has been on sterilization, provided mainly through seasonal camps. The policy of assigning sterilization targets, in addition to providing monetary rewards to providers, recruiters,

and acceptors of sterilization, appears to have influenced fieldworkers and clinic staff to promote sterilization as the only family planning method (Thapa 1989).

6. PATTERNS OF HEALTH BEHAVIOR

Nepalese use both traditional and modern medicine. For most illnesses they first use home care, including herbal remedies and dietary regimes. If illnesses persist, the next resort is usually traditional healers -- jhankris, dhamis, fuknes. Health posts and hospitals are often the last resort and sought more for serious or persistent illnesses. Ayurvedic (practitioners of Hindu herbal medicine) practitioners also are consulted where available. Frequently, if a health facility is unable to treat a patient successfully, traditional healers are consulted again or herbal remedies continued. Except for diseases believed to be caused by spirits, patients appear to be comfortable mixing their treatments and using whatever they perceive to be effective.

Patients do use Government and private health facilities if accessible and if staff and medicines are available. Health facilities are chosen because of location and the quality of care. The attitude of health workers toward patients, in addition to caste and ethnic background, language group, and social status, all influence the relationship between patients and health workers. When available, patients are willing to use modern curative medicine, especially drugs, injections, and treatment for wounds. Although people utilize modern medicine, there is less understanding and less willingness to use modern preventive health measures.

7. THE ROLE OF NONGOVERNMENTAL ORGANIZATIONS IN NEPAL

International and national nongovernmental organizations (NGO) also support health-related activities in Nepal. International religious missions were among the first to provide curative health care and more recently have experimented with approaches to community health care. The recent growth in the number of both national and international NGOs working in health in Nepal parallels the increasing interest of the larger international donor organizations in NGOs and their approaches to smallscale, grass-roots development. The Social Services National Coordination Council, under patronage of Her Majesty the Queen, was established to coordinate the NGOs in Nepal.

APPENDIX B

HEALTH FINANCE IN NEPAL

1. PUBLIC HEALTH FINANCE

In 1989 the World Bank completed a comprehensive analysis of public spending for health in Nepal. Most of the data for that

analysis are drawn from the planned budgets of the Government of Nepal for FY 1986/1987. Public expenditures on health have been constant at about 6 percent of the Government budget over the last 10 years. Per capita Government health expenditures are roughly $2.00 annually, making Nepal's public health expenditures the lowest in South Asia. Seventy-five percent of the FY 1986/1987 budget was allocated to primary health care, but of that only 35 percent supports district-level health systems. Using more rigorous World Health Organization (WHO) standards for judging primary health care, Nepal spends only 15-20 percent of its budget or $.40 per capita for "beyond the health post" primary care.

The emphasis on vertical programs in the FY 1986/1987 budget was also evident. Fifty percent of the Ministry of Health budget went to six programs, including malaria, Expanded Program of Immunization, tuberculosis, and the 22 then integrated districts. Most of the vertical programs obtain more than 50 percent of their financing from external donors, including such items as training, transport to training, and related items, which normally would be considered part of the recurrent expenditures of any organization. A serious concern for all donors, apart from the efficiency and effectiveness of the programs they support is the ability of the Government of Nepal to financially sustain the health system which has evolved with donor support.

2. PRIVATE SPENDING ON HEALTH

Private health care of a wide variety is available to Nepalese. Practitioners include traditional healers, traditional birth attendants, as well as more formal ayurvedic and homeopathic clinics. Village "pharmacies" have emerged in the Central Region and generally have a steady supply of medicines commonly prescribed at nearby health posts as well as popular tonics. In Kathmandu and one or two other cities, private nursing homes and clinics have grown in number, with Government blessing. Most public health service doctors appear to maintain some fee-for-service practice as well.

The annual expenditure by citizens on private care of all types is difficult to calculate. Estimates vary from $1.00 to almost $2.00 per capita including medicines, doctor fees, and inkind payments to traditional healers. These figures do not include the opportunity cost of travel time or the actual expense of bus fare, food, and lodging for family members who bring their relatives to hospitals and clinics for treatment. There is clearly effective demand for alternative health care in Nepal, and while the depth of that demand is difficult to determine, it is fair to suggest that a large percentage of the Nepalese population will and do pay for health care in the nongovernmental sector. Indeed, by the crude calculations presented in this section, private citizens appear to spend as much or more on health care as does the Government on their behalf. However, much of the agriculture for "private care" is for traditional practioners and rituals. It is not clear if people would use

this expenditure for modern medical care.